



# Mission Critical Server Solutions

Supporting 3rd Gen Intel® Xeon® Scalable Processors (Ice Lake)



## X12 BigTwin®

High-performance Multi-Node 2U Servers



**SYS-220BT-H**

- Highly configurable 2U 4-node and 2U 2-node systems
- 3rd Gen Intel® Xeon® Scalable processors, 2 per node, up to 270W TDP
- All-hybrid hot-swappable drive bays - NVMe, SAS or SATA (2.5" or 3.5" drives) - Up to 12 NVMe drives per node.
- 16 DIMMs + 4 Intel Optane Persistent Memory 200 series per node
- PCIe-E 4.0 AIOM (OCP 3.0 compliant) networking - 1 per node

## X12 GPU HGX

High Performance and Flexibility for AI/ML and HPC Applications



**SYS-420GP-TNAR(+)**

- Dense and scalable multi-GPU powerhouse supports the latest HGX A100 8 SXM4 GPUs
- Next generation of NVIDIA NVLink™, which double the GPU-to-GPU direct bandwidth, almost 10X higher than PCIe Gen 4.
- New NVIDIA NVSwitch that is 2X faster than the previous generation.
- Networking up to 200G, GPUDirect RDMA and GPUDirect Storage.
- Flexible AIOM slots (OCP 3.0 compliant) support
- NVIDIA certified system

## X12 SuperStorage

Application-optimized High-Performance Storage Solution



**SSG-640SP-E1CR90 - 4U 90x Top Loading**

- New generation top-loading server optimized for field serviceability and field replacement.
- PCI-E 4.0 storage controller with Hardware RAID and IT mode
- Tool-less Hot-swappable drive bays supporting 3.5" and 2.5" media
- Flexible mix of hybrid HDD and SSD drive bays for best performance and TCO
- Superior pullout drive drawer design.
- Hot swappable nodes, expanders, drives, power supplies and fans.



# INTRODUCING SUPERMICRO X12 GENERATION



## Better

Better Performance  
Per Watt and Per Dollar

## Faster

40%-60% Better Performance  
on Cloud Workloads

## Greener

Reduced Environmental  
Impact & Lower TCO



### OPTIMIZED SYSTEMS FOR YOUR WORKLOAD

- Over 100 Building Block Optimized Designs
- Maximum Processor, Memory and I/O Performance
- Max Performance, High Volume Cloud, High Efficiency Multi- Node, Mainstream

### OPEN ARCHITECTURES

- OpenBMC, OCP v3.0 SFF Cards
- New Supermicro AIOM Cards Provide I/O Flexibility with OCP Superset

### SECURE

- Enhanced Security with Hardware Root of Trust, Total Memory Encryption, Software Guard Extension

### MANAGEABLE & SERVICEABLE

- New Web Management Interface
- Tool-less Designs
- Global Service & Support
- Performance, High Volume Cloud, High Efficiency Multi- Node, Mainstream

### FIRST-TO-MARKET WITH MAXIMUM PERFORMANCE

- Thermal Capacity Supports Highest Clock Speeds
- Support for Full Memory Configuration and Bandwidth

### CPU & MEMORY

- On Average 62% Better Performance on Network and 5G Workloads
- Web (Crypto) Acceleration
- DDR4-3200MHz
- 1.6x Memory Bandwidth
- 2.66x Memory Capacity

### I/O

- PCI-E 4.0
- 2x I/O Bandwidth

### SUPERBLADE®:

- Advanced Networking with 200G InfiniBand Switch, and up to 4x 25GbE Switches

### BEST-IN-CLASS WORKLOAD PERFORMANCE

- Market-Leading GPU Servers for AI/ML and HPC

### MAXIMUM POWER EFFICIENCY

- Both Free Air and Water Cooled
- Titanium-Level (96%) Power Supplies

### MULTI-NODE SYSTEMS

- 15-20% Lower Power Costs with Optimized Shared Resource Designs

### LONGEVITY

- Multi-Generation Infrastructure for up to 65% CAPEX Savings

### SYSTEM REFRESH

- Modular Upgrades for Maximum Performance and Efficiency
- Select Component Refresh Reduces e-Waste



# X12 BIGTWIN®

## Leading Multi-Node Architecture

Highly configurable 2U 4-node and 2U 2-node systems

3rd Gen Intel® Xeon® Scalable processors, 2 per node, up to 270W TDP

All-hybrid hot-swappable drive bays - NVMe, SAS or SATA (2.5" or 3.5" drives) - Up to 12 NVMe drives per node.

16 DIMMs + 4 Intel Optane Persistent Memory 200 series per node

PCI-E 4.0 AIOM (OCP 3.0 compliant) networking - 1 per node

2U 4-Node



AIOM Ready

(Rear View)  
SYS-220BT-H Series

2U 4-Node BigTwin



SYS-620BT-H Series  
3x 3.5" NVMe/SAS/SATA per node

2U 4-Node BigTwin



SYS-220BT-H Series  
6x 2.5" NVMe/SAS/SATA per node

2U 2-Node BigTwin



SYS-620BT-D Series  
6x 3.5" NVMe/SAS/SATA (per node)

2U 2-Node BigTwin



SYS-220BT-D Series  
12x 2.5" NVMe/SAS/SATA per node

### Highly Modular Multi-Node Systems with Tool-Less Design

Supermicro X12 BigTwin® systems provide superior performance and serviceability with dual 3rd Gen Intel Xeon Scalable processors per node and hot swappable tool-less design.

Superior modular mid-plane design with PCI-E 4.0 Storage Controller Options.

Multi-node BigTwin® systems with shared components can offer more cost effective compute & storage arrays compared to entry-level 1U All-Flash/NVMe Arrays. With security in mind, each node has a dedicated BMC port, requiring unique credentials to access management controls, monitoring capabilities, analytics, and event logs.

#### Key Applications

- HCI
- HPC
- CDN
- Hybrid Cloud, Container-as-a-Service
- Cloud Computing
- Big Data Analytics
- Back-up and recovery
- Scale-Out Storage

# X12 ULTRA AND ULTRA-E

High Performance & Flexible Systems for Enterprise Applications

Optimized for highest processor TDPs

Up to 22 hybrid NVMe

Up to 3 double-width GPUs

PCI-E 4.0 support with 64 lanes per socket;  
Total 128 lanes

Dual 3rd Gen Intel® Xeon® Scalable  
processors up to 270W and 32 DIMM slots  
for maximum memory capacity

**2U Ultra-E**  
Optimized for 5G and Telco



SYS-220U-MTNR

2U Ultra-E



SYS-220U-MTNR  
6x 2.5" NVMe/SAS/SATA

2U Ultra



SYS-220U-TNR  
22x 2.5" NVMe/SAS/SATA +  
2x 2.5" SAS/SATA

2U Ultra



SYS-620U-TNR  
12x 3.5" NVMe/SAS/SATA

1U Ultra



SYS-120U-TNR  
12x 2.5" NVMe/SAS/SATA

1U Ultra



SYS-610U-TNR  
4x 3.5" NVMe/SAS/SATA

## Highest Performance X12 Ultra and Ultra-E Servers

Supermicro X12 Ultra system are designed to deliver the highest performance, flexibility, scalability and serviceability to demanding IT environments, and to power mission-critical Enterprise workloads, including support for 3rd Gen Intel Xeon Scalable processors.

With best-in-class server features including all NVMe, hybrid storage and low latency optimization, Ultra Servers feature an uncompromised performance design with 2 CPU sockets optimized for supporting the highest processor TDPs and 32 DIMMs.

### Key Applications

- Enterprise Server
- Hyper-converged Storage
- Virtualization
- AI Training/Inferencing
- Big Data Analytic
- Cloud Computing
- CDN
- In-memory Database

# X12 CLOUDDC

## All-in-one Rackmount Platform for Cloud Data Centers

Tool-less design, configurable I/O and 16 DDR4-3200MHz DIMMs up to 4TB

Dual AIOM slots (OCP 3.0 compliant) for flexible networking plus 4-12 SATA/SAS drive bays with optional full NVMe support in selected SKUs

Highly versatile and compact 2U system that supports up to two double-width GPUs in a 25.5" (648 mm) chassis

Rich security features with TPM1 1.2/2.0, silicon root of trust, secured boot and Runtime FW Protection

### 2U CloudDC High Density Cloud Storage



SYS-620C-TN12R  
12x 3.5" NVMe/SAS/SATA

**AIOM**  
Ready

High Density Cloud Storage



SYS-620C-TN12R  
2U CloudDC with  
12x 3.5" NVMe/SAS/SATA drives

Compact Cloud Compute



SYS-120C-TN10R  
1U CloudDC with  
10x 2.5" NVMe/SAS/SATA drives

General Purpose Balanced



SYS-120C-TR  
1U CloudDC with  
8x 2.5" SAS/SATA drives

Compact Storage Optimized



SYS-610C-TR  
1U CloudDC with  
4x 3.5" SAS/SATA drives

### Tool-less Mechanical Design for Rapid Cloud Deployment and Easy Maintenance

Featuring flexible I/O and storage with 2 or 4 PCI-E 4.0 x16 slots and dual AIOM (OCP 3.0 compliant) slots for maximum data throughput, X12 CloudDC is designed for easy serviceability with tool-less brackets, hot-swap drive trays and redundant power supplies that help enable rapid deployment and more efficient maintenance in data centers.

Redundant high-efficiency Platinum/Titanium Level power supplies ensure resiliency and a lower carbon footprint.

Rich Security Features include: TPM 1.2/2.0, signed firmware, Silicon Root of Trust, Secure Boot, System Erase, Runtime FW protection, FIPS Compliance, and Trusted Execution Environment.

#### Key Applications

- Cloud Computing
- Web Servers
- Hyper-converged Storage
- Virtualization
- File Servers
- Head-node Computing
- 5G Telco AI Inferencing

# X12 SUPERBLADE®

Highest Density x86 Multi-Node Server for Enterprise, Cloud, HPC Applications

## 8U SuperBlade®



SBE-820H/C/J/L-822/622/422

- Up to 20 hot-pluggable nodes in 8U
- Optimized for performance and advanced networking
- Integrated 200G HDR InfiniBand with non-blocking switch

## 6U SuperBlade®



SBE-610J-822/622/422

- Up to 10 hot-pluggable nodes in 6U
- Performance and memory optimized architecture

## 4U SuperBlade®



SBE-414J-422/222

- Up to 14 hot-pluggable nodes in 4U
- Optimized for performance, density and value

### 8U SuperBlade® / 20 DP Nodes in 8U



SBI-420P-1C2N

2 SAS/NVMe

SBI-420P-1T3N

3 SATA or 2 NVMe

OEM SKU\*

with liquid cooling option

2 SATA/NVMe

### 6U SuperBlade® / 10 UP or DP Nodes in 6U



SBI-610P-1C2N

2 SAS/NVMe

SBI-610P-1T2N

2 SATA/NVMe

SBI-620P-1C3N

3 SAS or 2 NVMe

SBI-620P-1T3N

3 SATA/NVMe

### 4U SuperBlade® / 14 DP Nodes in 4U



SBI-420P-4T2N

2 SATA/NVMe

## Resource Saving Architecture

A shared cooling, power and networking infrastructure is key to the high density and server efficiency offered by blade solutions. Supermicro's high performance, density optimized, and energy-efficient SuperBlade® can significantly reduce initial capital and operational expenses for many organizations.

In particular, Supermicro's new generation blade product portfolio has been designed to optimize the TCO of key components for today's data centers, such as free-air cooling, power efficiency, node density and networking management.

### Key Applications

- HPC
- Hybrid Cloud
- EDA
- Virtualization
- Health
- Financial Services

\* Contact Supermicro for more information

# X12 GPU WITH PCI-E

High Performance and Flexibility for AI/ML and HPC Applications

High performance AI/ML and HPC-optimized solution

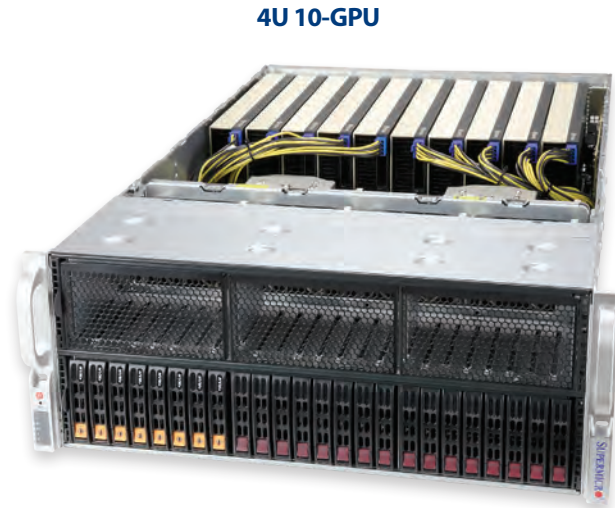
Optimized for graphics and rendering applications

Double the CPU to GPU throughput with PCI-E 4.0

Dual socket Intel® Xeon® Scalable processors up to 270W

NVIDIA GPUs supported

NVIDIA certified system



SYS-420GP-TNR

**AIOM**  
Ready

1U 4-GPU



SYS-120GQ-TNRT  
Highest Density, PCI-E GPU

2U 6-GPU



SYS-220GP-TNR  
Balanced Solution, PCI-E GPU

4U 4-GPU



SYS-740GP-TNRT  
Flexible Solution, PCI-E GPU

4U 10-GPU



SYS-420GP-TNR  
Dual Root Configuration, PCI-E GPU

## High density systems for double-width, full length PCI-E GPUs

Supermicro offers a comprehensive range of GPU servers featuring NVMe for lower latency with higher throughput and 3rd Gen Intel® Xeon® Scalable processors including:

- 1U: supporting up to four PCI-E GPUs
- 2U: supporting up to six PCI-E GPUs
- 4U: supporting up to ten PCI-E GPUs

### Key Applications

- AI/ML
- Deep Learning Training and Inference
- High-performance Computing (HPC)
- Rendering Platform for High-end Professional Graphics
- Best-in-Class VDI Infrastructure Platform

# X12 GPU WITH HGX

High Performance and Flexibility for AI/ML and HPC Applications

**4U HGX A100 8-GPU  
Integrated Performance**

Dense and scalable multi-GPU powerhouse supports the latest HGX A100 8 SXM4 GPUs

Next generation of NVIDIA NVLink™, with double the GPU-to-GPU direct bandwidth, almost 10X higher than PCI-E 4.0

New NVIDIA NVSwitch that is 2X faster than the previous generation

Networking up to 200G, GPUDirect RDMA and GPUDirect Storage

AIOM slot (OCP 3.0 compliant) support

NVIDIA certified system



SYS-420GP-TNAR(+)

**AIOM  
Ready**



Up to 640 GB Total GPU Memory



600 GB/s GPU-to-GPU Bi-directional Bandwidth

*Coming Soon!*



**SYS-220GQ-TNAR+**  
2U Dual Processor GPU System  
with NVIDIA HGX A100 4-GPU, NVLink

## Maximum Acceleration X12 GPU System

With Supermicro's advanced architecture and thermal design, including liquid cooling and custom heatsinks, our 4U GPU system drive NVIDIA's latest HGX A100 4-GPU or 8-GPU respectively, can deliver up to 6x AI Training Performance and 7x Inference Workload Capacity and Highest Density in a Flexible 2U or 4U system respectively.

Supermicro's unique AIOM slots (OCP 3.0 compliant in 4U option only) and a slew of PCI-E 4.0 slots of these systems enhance the multi-GPU communication and high-speed data flow between systems at a large scale.

The X12 GPU systems feature the latest technology stacks such as 200G networking, NVIDIA NVLink and NVSwitch, 1:1 GPUDirect RDMA, GPUDirect Storage, and NVMe-oF on InfiniBand.

### Key Applications

- AI/ML
- Deep Learning Training and Inference
- High-performance Computing (HPC)
- Building Block for Scalable AI Infrastructure



# X12 SUPERSTORAGE

## Application-optimized High-Performance Storage Solution

New generation top-loading server optimized for field serviceability and field replacement

PCI-E 4.0 storage controller with hardware RAID and IT mode

Tool-less hot-swappable drive bays supporting 3.5 and 2.5" media

Flexible mix of hybrid HDD and SSD drive bays for best performance and TCO

Superior pullout drive drawer design

Hot swappable nodes, expanders, drives, power supplies and fans

### Adaptable Dense Storage Architectures for Cloud



### Three Families of Storage Servers

#### Enterprise Optimized:

- Open standards based x86 systems

#### Cloud Density:

- Highest density 3.5" servers with up to 90x HDDs and dual server nodes

#### Petascale:

- All Flash servers with up to 32 NVMe supporting U.2 and EDSFF form factor media

These powerful yet cost-effective systems provide excellent flexibility and value at entry-level price points. Designed for ease of deployment maintenance with data center operations in mind, X12 server are optimized for data availability with a new drawer design and hot swappable drivers, power supplies and fans.

#### Key Applications

- Object Storage
- Data Intensive HPC/AI
- Private & Hybrid Cloud
- Backup & Active Archive

# X12 MAINSTREAM

## Versatile Entry Level and Volume Servers for Enterprise Applications

Highly versatile servers to enable a wide variety of enterprise server applications

Choices of multiple form factors including rackmount and tower

A rich selection of storage and memory speed support

4 PCI-E 4.0 x16 and 2 PCI-E 4.0 x8 expansion slots

Dual 3rd Gen Intel® Xeon® Scalable processors up to 270W and Up to 16 DIMM slots

### 4U/Tower High Density Cloud Storage



SYS-740P-TR(T)

### 2U Mainstream 2.5" General Purpose Server & Storage



SYS-220P-C9R(T)  
8x 2.5" SAS3, 8x 2.5" SATA3, 5x PCI-E slots

### 2U Mainstream 3.5" Entry Level, Cost Optimized Storage



SYS-620P-TR(T)  
8x 3.5" SATA, 6x PCI-E slots

### 4U/Tower High Density Cloud Storage



SYS-740P-TR(T)  
8x 3.5" SATA3, 6x PCI-E slots

## Mainstream Application Optimized

The X12 Mainstream Application Optimized product family from Supermicro is a series of servers designed for entry level or volume selections. Enterprise IT managers can choose the exact model for their applications, with a precise set of integrated features needed for their applications.

These powerful yet cost-effective systems provide excellent flexibility and value at entry-level price points.

### Key Applications

- SMB
- Virtualization
- Web Server
- AI - Inferencing
- Cloud Computing
- Head-node Computing

# X12 HYPER-E AND HYPER

## Best-in-class Performance and Flexibility Rackmount Server

High performance 1U & 2U systems with rear I/O and front I/O configurations to meet today's data center requirements

Dual 3rd Gen Intel® Xeon® Scalable processors up to 270W and 32 DIMM slots for maximum memory capacity

Lightning-fast storage with the latest generation PCI-E 4.0 NVMe SSDs and networking flexibility with AIOM (OCP 3.0 compliant) NIC support

Tool-less system design features intended to simplify field serviceability and lower maintenance time

**2U Hyper-E**  
Optimized for 5G and Telco



SYS-220HE-FTNRD

**AIOM**  
Ready

*2U Hyper-E  
Optimized for 5G and Telco*



SYS-220HE-FTNRD

6x 2.5" NVMe/SAS/SATA drives,  
Short-Depth, Front I/O,  
NEBS Level 3,  
DC -48V redundant power

*2U Hyper-E  
Optimized for 5G and Telco*



SYS-220HE-FTNR

6x 2.5" NVMe/SAS/SATA drives,  
Short-Depth, Front I/O,  
with redundant AC power, and  
NEBS Level 3

*2U Hyper  
Optimized for Storage Performance*



SYS-220H-TN24R

24x 2.5" NVMe/SAS/SATA drives

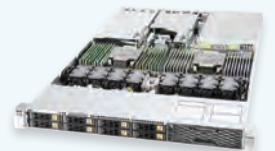
*2U Hyper  
Optimized for Storage Capacity*



SYS-620H-TN12R

12x 3.5" NVMe/SAS/SATA drives

*1U Hyper  
Compute & Storage Powerhouse*



SYS-120H-TNR

12x 2.5" NVMe/SAS/SATA drives

### Ultimate Configurability for Enterprise and Telco Applications

The all-new Hyper series represents the latest generation of Supermicro rackmount servers built with the highest performance features to take on the most demanding workloads along with the storage & I/O flexibility that provide a custom fit to your application needs.

Telco optimized configurations include short depth, carrier grade (NEBS Level 3) Hyper-E servers with AC & DC power options.

Maintenance-friendly design innovations eliminate the need for tools when servicing the system.

#### Key Applications

- 5G Core and Edge
- Telecom Micro Data Center
- Enterprise Server
- Cloud Computing
- Big Data Analytics
- Hyperconverged Storage
- AI Inference and Machine Learning
- Network Function Virtualization

# X12 FATTWIN®

## Advanced Multi-node 4U Twin Architecture with 8 and 4 Nodes

Highly configurable 4U 8-node and 4-node systems

Front accessible service design for cold-aisle serviceability

Hot-swappable drive bays – interchangeable NVMe, SAS or SATA

Better thermal with new optimized airflow designs for up to 165W processors

Dual 3rd Gen Intel® Xeon® Scalable processors up to 270W and 16 DIMM slots

### 4U 8-Node Optimized for High Density Compute



SYS-F610P2-RTN

AIOM  
Ready

### 4U 8-Node Optimized for High Density Compute



SYS-F610P2-RTN

### 4U 4-Node Optimized for High Density Compute



SYS-F620P3-RTBN

### Innovative Twin Architecture to Maximize Serviceability and Reliability

The FatTwin® architecture provides flexibility and system accessibility for unique data center requirements.

Unique one-half width nodes provide for 2 nodes per rack unit, which allows for modularized left and right nodes with redundant power supplies for maximum reliability.

These highly modular multi-node systems feature a tool-less design and each node supports dual 3rd Gen Intel Xeon Scalable processors for improved performance.

### Key Applications

- Hyperscale / Hyperconverged
- Cloud Optimized Servers
- Data Center Enterprise Applications
- Scale out of Storage expansion
- Telco Data Center & ETSI certified
- Virtualization Server

# X12 TWINPRO®

## Cost-effective 2U Multi-node Platforms

Dual socket supported with TDP up to 185W

16 DIMM slots for up to 4TB ECC RDIMM/ LRDIMM DDR4-3200MHz

Up to 6 hot-swappable SAS/SATA and 2 internal M.2 NVMe SSDs per node

Onboard dual 10GbE RJ45 ports with Intel® X710-AT2 controller

2 PCI-E 4.0 x16 LP expansion slots and 1 PCI-E 4.0 x8 (M.2)

Redundant 2200W Titanium Level (96%) power supplies

### 4 DP Nodes in 2U



2U 4-Node



SYS-220TP-HTTR / HCOTR / HC1TR

6x 2.5" SAS/SATA and 2x M.2 NVMe drive bays per node

2U 4-Node



SYS-620TP-HTTR / HCOTR / HC1TR

3x 3.5" SAS/SATA and 2x M.2 NVMe drive bays per node

### Cost-Effective 2U 4-Node Rackmount Server

TwinPro® systems are designed for simplified deployment and maintenance, and are assembled with the highest quality to ensure continuous operation even at maximum capacity.

In addition, these 4-node systems feature an optimized thermal design for maximum power efficiency.

#### Key Applications

- Enterprise Mission-critical Applications
- Data Center Cloud Computing
- HPC
- Virtualization
- Big Data
- Financial Analysis

# X12 MP 4-WAY SERVER

Highest Performance and Flexibility for Enterprise Applications

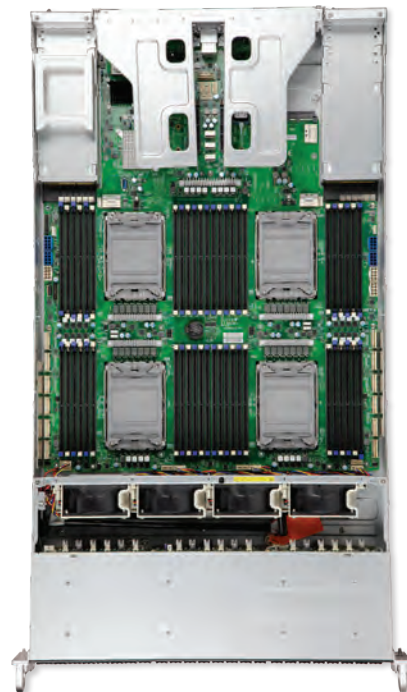
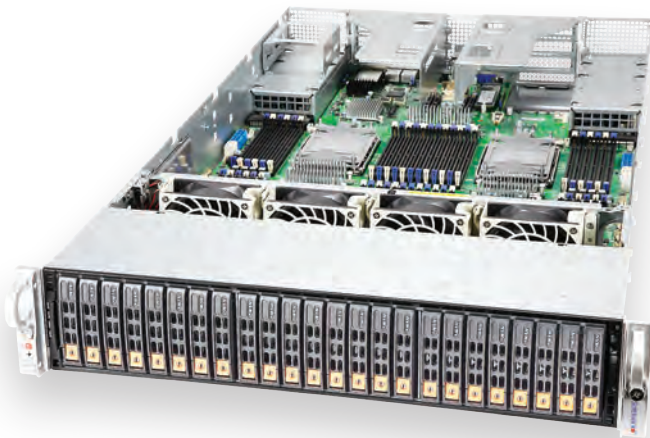
Large memory footprint for up to 18TB

All hybrid hot-swappable drive bays - NVMe, SAS, or SATA

Supports 3rd Gen Intel® Xeon® Scalable (Cooper Lake) processors

Supports OCP3.0 and AIOM form factor networking cards

SAP HANA Certified System – SAP HANA 1.0 SPS 12,  
SAP HANA 2.0



SYS-240P-TNRT

24x 2.5" NVMe/SAS3/SATA3 drive bays, 48 DIMM slots, up to 18TB

## Highest Performance and Flexibility

This new 2U server delivers new levels of compute performance and flexibility with support for 3rd Gen Intel® Xeon® Scalable processors.

This dynamic storage platform supports direct-attached full-hybrid all NVMe for lower latency with higher throughput and IOPS with up to 24x 2.5" hybrid NVMe/SAS3/SATA3 drive bays.

In addition, the flexible on-board networking with up to dual 10GBase-T and dual SFP+ ports enables cost-effective data communications.

### Key Applications

- Artificial Intelligence (AI)
- Business Intelligence
- ERP
- CRM
- Scientific Virtualization
- In-Memory Database
- HCI
- SAP HANA

# X12 SUPERWORKSTATIONS

## Workstations for High Performance Workloads

Mid-tower and 4U tower with support for 3rd Gen Intel® Xeon® Scalable processors

Mid-tower with up to 4 internal 3.5" SATA drives and 2 onboard M.2 slots, optional 4x 2.5" drive carrier (for total of 8 drives) and optional NVMe drive support

4U tower with 8 hot-swappable 3.5"/2.5" SATA drive bays and 2 onboard M.2 slots, optional SAS and NVMe drive support

**4U Tower**



**SYS-740A-T**  
8x 3.5"/2.5" SATA drives

**Mid-Tower Compact Powerhouse**



**SYS-730A-i**  
4x 3.5" drives

### Server-grade workstations for high-performance workloads

Supermicro's SuperWorkstations are optimized for applications requiring powerful compute and graphics capabilities.

These systems support the latest Intel® Xeon® Scalable processors and multiple NVIDIA GPUs to boost productivity and creativity for professional artists, designers, and engineers across industries such as manufacturing, media and entertainment, and energy.

SuperWorkstation server-grade features include hot-swap storage bays, IPMI, and redundant Titanium-level power supplies.

#### Key Applications

- Rendering
- CAD
- Multimedia Digital Content Creation
- Engineering/Scientific Research

# X12 WIO

## Industry's Widest Variety of I/O Optimized Servers

Cost-effective systems supporting up to 6 PCI-E 4.0 devices

Hot-swappable 2.5" or 3.5" SATA3 storage

Onboard dual 10 Gigabit Ethernet

Optional support up to 4 NVMe storage drives

3rd Gen Intel® Xeon® Scalable processors up to 270W and 8 DIMM slots

### 2U UP WIO



2U UP WIO



SYS-520P-WTR

2U 8x 3.5" SATA / option for 2 NVMe drives / Redundant power

1U UP WIO



SYS-110P-WTR

1U 10x 2.5" SATA / option for NVMe drives

1U UP WIO



SYS-510P-WT

1U 4x 3.5" SATA / option for 4 NVMe drives

1U UP WIO



SYS-510P-WTR

1U 4x 3.5" SATA / option for 4 NVMe drives / Redundant power

## Supermicro WIO SuperServer®

Supermicro WIO systems offer a wide range of I/O options to deliver truly optimized systems for specific requirements. Users can optimize the storage and networking alternatives to accelerate performance, increase efficiency and find the perfect fit for their applications.

In addition to enabling customizable configurations and optimization for multiple application requirements, Supermicro WIO SuperServers® also provide attractive cost advantages and investment protection.

### Key Applications

- Enterprise Applications
- Networking Appliance
- Firewall / Security Appliances
- General Purpose Computing
- Cloud Computing
- Media Entertainment



# X12 IOT/EMBEDDED

High-efficiency, High-performance Portfolio with Compact Form Factors and Long Life Cycle

High-density processing power at the Edge

Connecting the intelligent world from devices to the cloud

Low-power high-efficiency computing

Long life cycle

Compact form factors

**UP Short-Depth, Front I/O**



2U Compact



**SYS-210P-FRDN6T**  
Ultra short depth,  
2U Front I/O,  
2x 2.5" drives

1U Embedded



**SYS-110P-FDWTR**  
1U Front I/O,  
Front DC PSU,  
2x Internal 2.5" drives,  
2 PCI-E 4.0 x16 FHFL, 1 PCIe 4.0 x16 LP

1U Embedded



**SYS-110P-FRDN2T**  
1U Front I/O,  
Rear DC PSU,  
2x Internal 2.5" drives,  
2 PCI-E 4.0 x16 FHFL

1U Embedded



**SYS-110P-FRN2T**  
1U Front I/O,  
Rear AC PSU,  
2x Internal 2.5" drives  
2 PCI-E 4.0 x16 FHFL

## Expanding our Product Portfolio to address 5G, Edge Computing, and Emerging IoT Systems

Supermicro provides innovative and first-to-market technologies that are the building blocks for today's embedded computing platforms. Rapid growth in embedded markets and open standards are driving the need for higher levels of product integration and optimization through virtualization, AI inferencing, network connectivity, remote management, mobile communication, expanded I/O, and device-to-device communications using space and power efficient configurations.

Supermicro's family of high-performance embedded products are optimized for a wide range of applications and solutions.

Supermicro offers many flexible and customized solutions for critical OEM projects, as well as advanced designs for stringent environments, firmware customization, BOM enhancements, and a wide range of legacy IO support.

### Key Applications

- Cloud Computing
- 5G Core and Edge
- Network Function Virtualization

# SUPERCLOUD COMPOSER

Your Gateway to Compose Disaggregated Infrastructure Quickly and Effortlessly

SuperCloud Composer is a composable cloud management platform that provides a unified dashboard to administer software-defined data centers.

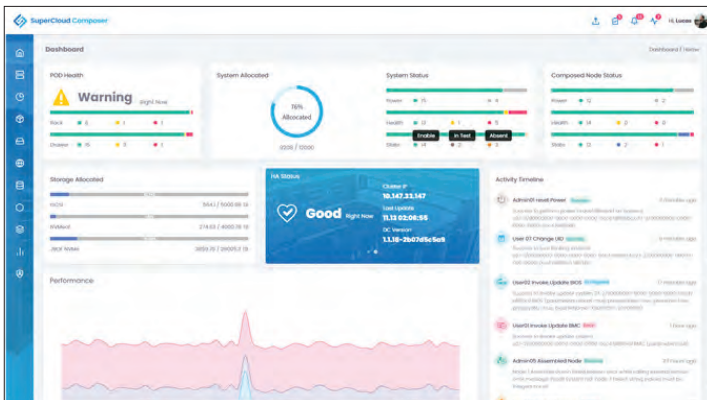
Supermicro's cloud infrastructure management software brings speed, agility, and simplicity to IT administration by integrating data center tasks into a single intelligent management solution.

Our robust composer engine can orchestrate cloud workloads through a streamlined industry standard Redfish API.

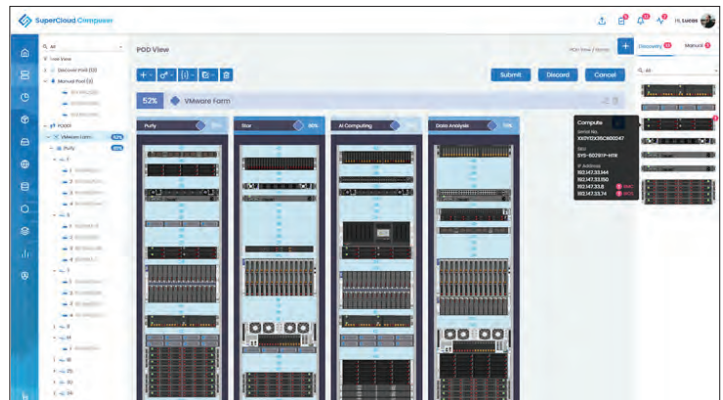
SuperCloud Composer monitors and manages the broad portfolio of multi-generation Supermicro servers and third-party systems through its data center lifecycle management feature set from a single unified console.



Benefits	Features
Cost Savings - Capital Expenditure (CapEx), Operating Expense (OPEX)	<ul style="list-style-type: none"> <li>Expands on optimized Supermicro building block solutions</li> <li>Third Party Vendor Support</li> </ul>
Intelligent Data Center Management	<ul style="list-style-type: none"> <li>Call Home Management</li> <li>POD &amp; Rack-level Management (including ToR switch)</li> <li>Asset Management (Monitoring, Updates)</li> </ul>
Frictionless Deployments	<ul style="list-style-type: none"> <li>Zero Touch Provisioning for Network Configuration</li> <li>Hardware Life Cycle Management for Software Define Data Center</li> <li>Northbound Redfish APIs provides seamless Integration</li> </ul>
Dynamically Configured Servers	<ul style="list-style-type: none"> <li>Zero Touch OS Deployment in Seconds</li> </ul>
Device Scaling of Resources	<ul style="list-style-type: none"> <li>Monitor/Manage Resource Pools in a Composable Disaggregated Infrastructure</li> <li>Software Defined Node Composer</li> <li>Expands storage and accelerators capacities to existing compute nodes</li> <li>Support for 3rd party devices expands available resource selection</li> </ul>
Unified End User Experience Data Driven Decisions	<ul style="list-style-type: none"> <li>Single Pane of Glass for Data Center Deployment</li> <li>Rich Analytics &amp; Telemetry</li> </ul>
Compliance & Governance	<ul style="list-style-type: none"> <li>(SoT) Manage Silicon Root of Trust</li> <li>SSL Security Compliance</li> <li>User Define Role Based Access Control</li> </ul>



Dashboard aggregates the view of POD health, visualized system data analytics, activity event timeline tracking, providing at-a-glance awareness of data center operations, as well as detailed system status, composed node status, and allocated storage



The POD View's rack management solution provides flexibility to organize data center requirements based on common workloads assigned to a rack deployment either at the edge or physical appliances with a Data Center that are miles away

# Supermicro X12 Comprehensive Server, Storage and Networking Product Lines Optimized for IT, Data Center, Embedded, HPC and Cloud Computing



## X12 BigTwin®

Overview .....	3
Specifications .....	20



## X12 Ultra

Overview .....	4
Specifications .....	61



## X12 CloudDC

Overview .....	5
Specifications .....	83



## X12 SuperBlade®

Overview .....	6
Specifications .....	98



## X12 GPU

Overview .....	7-8
Specifications .....	101



## X12 SuperStorage®

Overview .....	9
DP Storage .....	113
UP Storage .....	164



## X12 Mainstream

Overview .....	10
DP Mainstream .....	86
UP Mainstream .....	152



## X12 Hyper & Hyper-E

Overview .....	11
Specifications .....	92



## X12 FatTwin®

Overview .....	12
Specifications .....	30



## X12 TwinPro®

Overview .....	13
Specifications .....	46



## X12 MP

Overview .....	14
Specifications .....	142



## X12 SuperWorkstations

Overview .....	15
Specifications .....	94



## X12 WIO

Overview .....	16
DP WIO .....	70
UP WIO .....	160



## UP Servers IoT/Embedded

Overview .....	17
UP Servers .....	152
IoT/Embedded .....	169



## SuperCloud Composer / X12 AIOM / Accessories

SuperCloud Composer .....	18
X12 AIOM .....	201
Accessories .....	202

# X12 BIGTWIN®

(For Complete System Only)



6x 2.5" drives/node x 4 Nodes



6x 2.5" drives/node x 4 Nodes



6x 2.5" drives/node x 4 Nodes



MODEL	SYS-220BT-HNC8R	SYS-220BT-HNC9R	SYS-220BT-HNTR
Processor Support	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA 4189 (Socket P+) supported TDP up to 205W;	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA 4189 (Socket P+) supported TDP up to 205W;	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA 4189 (Socket P+) supported TDP up to 205W;
Key Applications	<ul style="list-style-type: none"> <li>• Container-as-a-Service; Application Accelerator</li> <li>• Diskless HPC Clusters</li> <li>• All-Flash Hyperconverged Infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>• Mission Critical HPC</li> <li>• Virtualized Big Data Analytics</li> <li>• High-Density Storage RAID Array</li> </ul>	<ul style="list-style-type: none"> <li>• All-Flash NVMe Hyperconverged Infrastructure</li> <li>• Container-as-a-Service; Application Accelerator</li> <li>• High-Performance File System</li> <li>• Diskless HPC Clusters</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 20 Memory slots (16 DIMM + 4 Intel® Optane™ Persistent Memory)</li> <li>• Supports NVMe/SATA/SAS storage devices</li> <li>• 1 AIOM card support (PCI-E 4.0)</li> <li>• Tool-less support for swapping AOC cards</li> <li>• HW Boot Controller for NVMe M.2 drives</li> <li>• Liquid Cooling Support</li> <li>• Up to 2 Nvidia T4 GPU support, with limited CPU selection</li> <li>• 4 Hot-Swap Nodes in 2U</li> <li>• 2 low-profile PCI-E 4.0 slots</li> </ul>	<ul style="list-style-type: none"> <li>• 20 Memory slots (16 DIMM + 4 Intel® Optane™ Persistent Memory)</li> <li>• Supports NVMe/SATA/SAS storage devices</li> <li>• 1 AIOM card support (PCI-E 4.0)</li> <li>• Tool-less support for swapping AOC cards</li> <li>• HW Boot Controller for NVMe M.2 drives</li> <li>• Liquid Cooling Support</li> <li>• HW RAID Support for Hot-Swappable SAS/SATA Drives</li> <li>• 4 Hot-Swap Nodes in 2U, Shared Power and Cooling Design</li> <li>• 2 low-profile PCI-E 4.0 slots</li> </ul>	<ul style="list-style-type: none"> <li>• 20 Memory slots (16 DIMM + 4 Intel® Optane™ Persistent Memory)</li> <li>• 1 AIOM card support (PCI-E 4.0)</li> <li>• Tool-less support for swapping AOC cards</li> <li>• HW Boot Controller for NVMe M.2 drives</li> <li>• Liquid Cooling Support</li> <li>• Up to 2 Nvidia T4 GPU support, with limited CPU selection</li> <li>• 4 Hot-Swap Nodes in 2U, Shared Power and Cooling Design</li> <li>• 2 low-profile PCI-E 4.0 slots</li> </ul>
Serverboard	SUPER® X12DPT-B6	SUPER® X12DPT-B6	SUPER® X12DPT-B6
Chipset	Intel® C621A	Intel® C621A	Intel® C621A
System Memory (Max.)	16 DIMM slots Up to 4TB ECC RDIMM, DDR4-3200MHz Up to 4TB Intel® Optane™ Persistent Memory, DDR4-3200MHz	16 DIMM slots Up to 4TB ECC RDIMM, DDR4-3200MHz Up to 4TB Intel® Optane™ Persistent Memory, DDR4-3200MHz	16 DIMM slots Up to 4TB ECC RDIMM, DDR4-3200MHz Up to 4TB Intel® Optane™ Persistent Memory, DDR4-3200MHz
Expansion Slots	M.2 slot(s) 2 PCI-E 4.0 x16 LP slot(s)	M.2 slot(s) PCI-E 4.0 x16 LP slot(s)	M.2 slot(s) 2 PCI-E 4.0 x16 LP slot(s)
Onboard Storage Controller	Intel® SATA Broadcom® 3808	Intel® SATA Broadcom® 3908	Intel® SATA
Connectivity			
VGA/Audio	1 onboard VGA port	1 onboard VGA port	1 onboard VGA port
Management	SuperDoctor® 5; Watch Dog; SUM; IPMI 2.0; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; SuperCloud Composer	SuperDoctor® 5; Watch Dog; SUM; IPMI 2.0; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; SuperCloud Composer	SuperDoctor® 5; Watch Dog; SUM; IPMI 2.0; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; SuperCloud Composer
Drive Bays	6x 2.5" hot-swap NVMe/SATA/SAS drive bays; 6x 2.5" NVMe hybrid; Optional HBA support via SAS3808 Adapter	6x 2.5" hot-swap NVMe/SATA/SAS drive bays; 6x 2.5" NVMe hybrid; Optional RAID support via Broadcom® 3908 AOC	6x 2.5" hot-swap NVMe/SATA drive bays; 6x 2.5" NVMe hybrid; Optional RAID support via Intel® PCH
Peripheral Bays	None	None	None
Power Supply	Redundant 2600W Titanium level (96%)	Redundant 2600W Titanium level (96%)	Redundant 2600W Titanium level (96%)
Cooling System	4 cooling fans per 2U enclosure, 16.5K RPM; Shared cooling design	4 cooling fans per 2U enclosure, 16.5K RPM; Shared cooling design	4 cooling fans per 2U enclosure, 16.5K RPM; Shared cooling design
Form Factor	2U rackmount Enclosure: 449 x 88 x 730mm (17.68" x 3.47" x 28.75") Package: 626 x 248 x 1150mm (24.65" x 9.76" x 45.28")	2U rackmount Enclosure: 449 x 88 x 730mm (17.68" x 3.47" x 28.75") Package: 626 x 248 x 1150mm (24.65" x 9.76" x 45.28")	2U rackmount Enclosure: 449 x 88 x 730mm (17.68" x 3.47" x 28.75") Package: 626 x 248 x 1150mm (24.65" x 9.76" x 45.28")

# X12 BIGTWIN®

(For Complete System Only)



3x 3.5" drives/node x 4 Nodes



3x 3.5" drives/node x 4 Nodes



12x 2.5" drives/node x 2 Nodes



MODEL	SYS-620BT-HNC8R	SYS-620BT-HNTR	SYS-220BT-DNC8R
Processor Support	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA 4189 (Socket P+) supported TDP up to 185W;	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA 4189 (Socket P+) supported TDP up to 185W;	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA 4189 (Socket P+) supported TDP up to 270W;
Key Applications	<ul style="list-style-type: none"> <li>Hyperconverged Infrastructure</li> <li>Scale-Out File Storage</li> <li>Container Storage</li> </ul>	<ul style="list-style-type: none"> <li>Hyperconverged Infrastructure</li> <li>Container Storage</li> <li>Scale-Out File Server</li> </ul>	<ul style="list-style-type: none"> <li>All-Flash Hyperconverged Infrastructure</li> <li>All-Flash Storage Area Network</li> <li>All-Flash Object Storage</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>20 Memory slots (16 DIMM + 4 Intel® Optane™ Persistent Memory)</li> <li>Supports NVMe/SATA/SAS storage devices</li> <li>1 AIOM card support (PCI-E 4.0)</li> <li>Tool-less support for swapping AOC cards</li> <li>HW Boot Controller for NVMe M.2 drives</li> <li>Liquid Cooling Support</li> <li>4 Hot-Swap Nodes in 2U, Shared Power and Cooling Design</li> <li>2 low-profile PCI-E 4.0 slots</li> </ul>	<ul style="list-style-type: none"> <li>20 Memory slots (16 DIMM + 4 Intel® Optane™ Persistent Memory)</li> <li>1 AIOM card support (PCI-E 4.0)</li> <li>Tool-less support for swapping AOC cards</li> <li>HW Boot Controller for NVMe M.2 drives</li> <li>Liquid Cooling Support</li> <li>4 Hot-Swap Nodes in 2U, Shared Power and Cooling Design</li> <li>2 low-profile PCI-E 4.0 slots</li> </ul>	<ul style="list-style-type: none"> <li>20 Memory slots (16 DIMM + 4 Intel® Optane™ Persistent Memory)</li> <li>Supports NVMe/SATA/SAS storage devices</li> <li>1 AIOM card support (PCI-E 4.0)</li> <li>Tool-less support for swapping AOC cards</li> <li>HW Boot Controller for NVMe M.2 drives</li> <li>Liquid Cooling Support</li> <li>Balanced IO performance for up to 12 NVMe Gen4 drives</li> <li>2 Hot-Swap Nodes in 2U, Shared Power and Dedicated Cooling Per Node</li> <li>3 low-profile PCI-E 4.0 slots</li> </ul>
Serverboard	SUPERMICR® X12DPT-B6	SUPERMICR® X12DPT-B6	SUPERMICR® X12DPT-B6
Chipset	Intel® C621A	Intel® C621A	Intel® C621A
System Memory (Max.)	16 DIMM slots Up to 4TB ECC RDIMM, DDR4-3200MHz Up to 4TB Intel® Optane™ Persistent Memory, DDR4-3200MHz	16 DIMM slots Up to 4TB ECC RDIMM, DDR4-3200MHz Up to 4TB Intel® Optane™ Persistent Memory, DDR4-3200MHz	16 DIMM slots Up to 4TB ECC RDIMM, DDR4-3200MHz Up to 4TB Intel® Optane™ Persistent Memory, DDR4-3200MHz
Expansion Slots	M.2 slot(s) 2 PCI-E 4.0 x16 LP slot(s)	M.2 slot(s) 2 PCI-E 4.0 x16 LP slot(s)	M.2 slot(s) PCI-E 4.0 x16 LP slot(s) PCI-E 4.0 x8 LP slot(s)
Onboard Storage Controller	Intel® SATA Broadcom® 3808	Intel® SATA	Intel® SATA Broadcom® 3816
Connectivity			
VGA/Audio	1 onboard VGA port	1 onboard VGA port	1 onboard VGA port
Management	SuperDoctor® 5; Watch Dog; SUM; IPMI 2.0; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; SuperCloud Composer	SuperDoctor® 5; Watch Dog; SUM; IPMI 2.0; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; SuperCloud Composer	SuperDoctor® 5; Watch Dog; SUM; IPMI 2.0; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; SuperCloud Composer
Drive Bays	3x 3.5" hot-swap NVMe/SATA/SAS drive bays; 3x 3.5" NVMe hybrid; 3x 2.5" NVMe hybrid; Optional HBA support via SAS3808 Adapter	3x 3.5" hot-swap NVMe/SATA drive bays; 3x 3.5" NVMe hybrid; 3x 2.5" NVMe hybrid; Optional RAID support via Intel® PCH	12x 2.5" hot-swap NVMe/SATA/SAS drive bays; 12x 2.5" NVMe hybrid; Optional HBA support via SAS3816 AOC
Peripheral Bays	None	None	None
Power Supply	Redundant 2600W Titanium level (96%)	Redundant 2600W Titanium level (96%)	Redundant 2200W Titanium level (96%)
Cooling System	4 cooling fans per 2U enclosure, 16.5K RPM; Shared cooling design	4 cooling fans per 2U enclosure, 16.5K RPM; Shared cooling design	2 cooling fans per 2U enclosure, 16.5K RPM
Form Factor	2U rackmount Enclosure: 449 x 88 x 774mm (17.68" x 3.47" x 30.5") Package: 626 x 248 x 1150mm (24.65" x 9.76" x 45.28")	2U rackmount Enclosure: 449 x 88 x 774mm (17.68" x 3.47" x 30.5") Package: 626 x 248 x 1150mm (24.65" x 9.76" x 45.28")	2U rackmount Enclosure: 449 x 88 x 730mm (17.68" x 3.47" x 28.75") Package: 626 x 248 x 1150mm (24.65" x 9.76" x 45.28")

# X12 BIGTWIN®

(For Complete System Only)

**NEW!**

3rd Gen Intel® Xeon® Scalable processors Supported



12x 2.5" Drives/Node x 2 Nodes



6x 3.5" Drives/Node x 2 Nodes



6x 3.5" Drives/Node x 2 Nodes



MODEL	SYS-220BT-DNTR	SYS-620BT-DNTR	SYS-620BT-DNC8R
Processor Support	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA 4189 (Socket P+) supported TDP up to 270W;	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA 4189 (Socket P+) supported TDP up to 250W;	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA 4189 (Socket P+) supported TDP up to 250W;
Key Applications	<ul style="list-style-type: none"> <li>High-Performance File System</li> <li>Diskless HPC Clusters</li> <li>Scale Out All-Flash NVMe Storage</li> <li>Big Data Analytics and AI</li> </ul>	<ul style="list-style-type: none"> <li>Hyperconverged Infrastructure</li> <li>Scale-Out Object Storage</li> <li>Back-up &amp; Recovery</li> </ul>	<ul style="list-style-type: none"> <li>Hyperconverged Infrastructure</li> <li>Scale-Out Object Storage</li> <li>Back-up &amp; Recovery</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>20 Memory slots (16 DIMM + 4 Intel® Optane™ Persistent Memory)</li> <li>Supports NVMe/SATA/SAS storage devices</li> <li>1 AIOM card support (PCI-E 4.0)</li> <li>Tool-less support for swapping AOC cards</li> <li>HW Boot Controller for NVMe M.2 drives</li> <li>Liquid Cooling Support</li> <li>Up to 2 Nvidia T4 GPU support, with limited CPU selection</li> <li>Balanced IO performance for up to 12 NVMe Gen4 drives</li> <li>2 Hot-Swap Nodes in 2U, Shared Power and Dedicated Cooling Per Node</li> <li>3 low-profile PCI-E 4.0 slots</li> </ul>	<ul style="list-style-type: none"> <li>20 Memory slots (16 DIMM + 4 Intel® Optane™ Persistent Memory)</li> <li>1 AIOM card support (PCI-E 4.0)</li> <li>Tool-less support for swapping AOC cards</li> <li>HW Boot Controller for NVMe M.2 drives</li> <li>Liquid Cooling Support</li> <li>2 Hot-Swap Nodes in 2U, Shared Power and Dedicated Cooling Per Node</li> <li>3 low-profile PCI-E 4.0 slots</li> </ul>	<ul style="list-style-type: none"> <li>20 Memory slots (16 DIMM + 4 Intel® Optane™ Persistent Memory)</li> <li>1 AIOM card support (PCI-E 4.0)</li> <li>Tool-less support for swapping AOC cards</li> <li>HW Boot Controller for NVMe M.2 drives</li> <li>Liquid Cooling Support</li> <li>2 Hot-Swap Nodes in 2U, Shared Power and Dedicated Cooling Per Node</li> <li>3 low-profile PCI-E 4.0 slots</li> </ul>
Serverboard	SUPER® X12DPT-B6	SUPER® X12DPT-B6	SUPER® X12DPT-B6
Chipset	Intel® C621A	Intel® C621A	Intel® C621A
System Memory (Max.)	16 DIMM slots Up to 4TB ECC RDIMM, DDR4-3200MHz Up to 4TB Intel® Optane™ Persistent Memory, DDR4-3200MHz	16 DIMM slots Up to 4TB ECC RDIMM, DDR4-3200MHz Up to 4TB Intel® Optane™ Persistent Memory, DDR4-3200MHz	16 DIMM slots Up to 4TB ECC RDIMM, DDR4-3200MHz Up to 4TB Intel® Optane™ Persistent Memory, DDR4-3200MHz
Expansion Slots	M.2 slot(s) PCI-E 4.0 x16 LP slot(s) 2 PCI-E 4.0 x8 LP slot(s)	M.2 slot(s) PCI-E 4.0 x16 LP slot(s) 2 PCI-E 4.0 x8 LP slot(s)	M.2 slot(s) PCI-E 4.0 x16 LP slot(s) 2 PCI-E 4.0 x8 LP slot(s)
Onboard Storage Controller	Intel® SATA	Intel® SATA	Intel® SATA Broadcom® 3808
Connectivity			
VGA/Audio	1 onboard VGA port	1 onboard VGA port	1 onboard VGA port
Management	SuperDoctor® 5; Watch Dog; SUM; IPMI 2.0; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; SuperCloud Composer	SuperDoctor® 5; Watch Dog; SUM; IPMI 2.0; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; SuperCloud Composer	SuperDoctor® 5; Watch Dog; SUM; IPMI 2.0; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; SuperCloud Composer
Drive Bays	12x 2.5" hot-swap NVMe/SATA drive bays; 12x 2.5" NVMe hybrid; Optional RAID support via Intel® PCH	6x 3.5" hot-swap NVMe/SATA drive bays; 6x 3.5" NVMe hybrid; 6x 2.5" NVMe hybrid; Optional RAID support via Intel® PCH	6x 3.5" hot-swap NVMe/SATA/SAS drive bays; 6x 3.5" NVMe hybrid; 6x 2.5" NVMe hybrid; Optional HBA support via SAS3808 Adapter
Peripheral Bays	None	None	None
Power Supply	Redundant 2200W Titanium level (96%)	Redundant 2200W Titanium level (96%)	Redundant 2200W Titanium level (96%)
Cooling System	2 cooling fans per 2U enclosure, 16.5K RPM	2 cooling fans per 2U enclosure, 14.9K RPM	2 cooling fans per 2U enclosure, 14.9K RPM
Form Factor	2U rackmount Enclosure: 449 x 88 x 730mm (17.68" x 3.47" x 28.75") Package: 626 x 248 x 1150mm (24.65" x 9.76" x 45.28")	2U rackmount Enclosure: 449 x 88 x 774mm (17.68" x 3.47" x 30.5") Package: 626 x 248 x 1150mm (24.65" x 9.76" x 45.28")	2U rackmount Enclosure: 449 x 88 x 774mm (17.68" x 3.47" x 30.5") Package: 626 x 248 x 1150mm (24.65" x 9.76" x 45.28")

# BIGTWIN<sup>®</sup>

(For Complete System Only)

X11 BigTwin™ EDSFF  
Dual DP Nodes, 40 EDSFF Drive Bays

X11 BigTwin™  
Dual DP Nodes,  
24 Hybrid SAS3/NVMe Drive Bays

X11 BigTwin™  
Dual DP Nodes,  
24 Hybrid NVMe/SAS3 Drive Bays



MODEL	SYS-2029BT-HER	SYS-2029BT-DNC0R	SYS-2029BT-DNR
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).
Key Applications	<ul style="list-style-type: none"> <li>Hyperscale and Hyperconverged Solutions</li> <li>Compute Intensive Application</li> <li>Enterprise Server</li> <li>High Density Hot Storage</li> </ul>	<ul style="list-style-type: none"> <li>Hyperscale and Hyperconverged Solutions</li> <li>Compute Intensive Application</li> <li>Enterprise Server</li> <li>Data Center</li> <li>HPC</li> </ul>	<ul style="list-style-type: none"> <li>Hyperscale and Hyperconverged Solutions</li> <li>Compute Intensive Application</li> <li>Enterprise Server</li> <li>Data Center</li> <li>HPC</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Support 40 Intel EDSFF (E1.S) Devices in 2U form factor system</li> <li>Easy-access SATA M.2 device support</li> <li>24 DIMMs per node</li> <li>2600W Redundant Power Supply</li> <li>1 SIOM card support</li> </ul>	<ul style="list-style-type: none"> <li>2 Nodes in 2U</li> <li>24 DIMMs per node</li> <li>NVMe Support</li> <li>2 M.2 SATA3 or NVMe support</li> <li>3 PCI-E Add-on cards</li> <li>1 SIOM card support</li> </ul>	<ul style="list-style-type: none"> <li>2 Nodes in 2U</li> <li>24 DIMMs per node</li> <li>NVMe Support</li> <li>2 M.2 SATA3 or NVMe support</li> <li>3 PCI-E Add-on cards</li> <li>1 SIOM card support</li> </ul>
Serverboard	SUPER● X11DPT-BR	SUPER● X11DPT-B	SUPER● X11DPT-B
Chipset	Intel® C621 chipset	Intel® C621 chipset	Intel® C621 chipset
System Memory (Max.)*	Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots; Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only)	24 DIMM slots; Up to 6TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)	24 DIMM slots; Up to 6TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)
Expansion Slots	2 PCI-E 3.0 (x16) Low-profile slots; 1 SIOM card support Note: Must bundle with Network Card	2 PCI-E 3.0 x8; 1 PCI-E 3.0 x16; 1 SIOM card support Note: Must bundle with Network Card	2 PCI-E 3.0 x8; 1 PCI-E 3.0 x16; 1 SIOM card support Note: Must bundle with Network Card
Onboard Storage Controller	Intel® C621 controller	Broadcom 3216 SAS3 (12 Gbps) controller; IT mode	NVMe
Connectivity	SIOM Networking Card For Flexible Networking Options	SIOM Networking Card For Flexible Networking Options	SIOM Networking Card For Flexible Networking Options
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; SPM; SSM; SUM; SuperDoctor® 5; Watchdog	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; SPM; SSM; SUM; SuperDoctor® 5; Watchdog	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; SPM; SSM; SUM; SuperDoctor® 5; Watchdog
Drive Bays	Support up to 40* Intel EDSFF (E1.S) Devices per system	4 Hot-swap 2.5" NVMe/SAS drive bays + 8 Hot-swap 2.5" SAS drive bays per node	12 Hot-swap 2.5" NVMe drive bays per node
Peripheral Bays	N/A	N/A	N/A
Power Supply	Redundant 2600W Titanium Level high-efficiency power supplies	Redundant 2200W Titanium Level high-efficiency power supplies with I2C&PMbus	Redundant 2200W Titanium Level high-efficiency power supplies with I2C&PMbus
Cooling System	4x 8cm heavy duty PWM fans with air shroud	4x 8cm heavy duty PWM fans with air shroud	4x 8cm heavy duty PWM fans with air shroud
Form Factor	447 x 88 x 730mm (17.6" x 3.47" x 28.75")	2U (2-node) Rackmount; Enclosure: 432 x 88 x 711mm (17.6" x 3.47" x 28.75") Package: NaN x NaN x NaNmm (NaNkg) (NaNkg)	2U (2-node) Rackmount; Enclosure: 447 x 76 x 730mm (17.6" x 3.47" x 28.75") Package: 626 x 248 x 1150mm (24.65" x 9.76" x 45.28") Gross Weight: 85lbs (38.56kg) Net Weight: 54.5lbs

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

<sup>†</sup> 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

<sup>††</sup> For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.

# BIGTWIN®

(For Complete System Only)

X11 BigTwin™  
Quad DP Nodes,  
24 Hybrid NVMe/SAS3 Drive Bays

X11 BigTwin™  
Quad DP Nodes,  
24 Hybrid NVMe/SAS3 HW RAID Drive Bays

X11 BigTwin™  
Quad DP Nodes,  
24 NVMe Drive Bays



MODEL	SYS-2029BT-HNC0R	SYS-2029BT-HNC1R	SYS-2029BT-HNR
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).
Key Applications	<ul style="list-style-type: none"> <li>Hyperscale and Hyperconverged Solutions</li> <li>Compute Intensive Application</li> <li>Enterprise Server</li> <li>Data Center</li> <li>HPC</li> </ul>	<ul style="list-style-type: none"> <li>Hyperscale and Hyperconverged Solutions</li> <li>Compute Intensive Application</li> <li>Enterprise Server</li> <li>Data Center</li> <li>HPC</li> </ul>	<ul style="list-style-type: none"> <li>Hyperscale and Hyperconverged Solutions</li> <li>Compute Intensive Application</li> <li>Enterprise Server</li> <li>Data Center</li> <li>HPC</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>4 Nodes in 2U</li> <li>24 DIMMs per node</li> <li>NVMe Support</li> <li>2 M.2 SATA3 or NVMe support</li> <li>2 Low -profile PCI-E X16 slot</li> <li>1 SIOM card support</li> </ul>	<ul style="list-style-type: none"> <li>4 Nodes in 2U</li> <li>24 DIMMs per node</li> <li>12Gb/s SAS HW RAID &amp; NVMe</li> <li>2 M.2 SATA3 or NVMe support</li> <li>1 Low Profile PCI-E x16 slot</li> <li>1 SIOM card support</li> </ul>	<ul style="list-style-type: none"> <li>4 Nodes in 2U</li> <li>24 DIMMs per node</li> <li>NVMe Support</li> <li>2 M.2 SATA3 or NVMe support</li> <li>2 Low -profile PCI-E X16 slot</li> <li>1 SIOM card support</li> </ul>
Serverboard	SUPER● X11DPT-B	SUPER● X11DPT-B	SUPER● X11DPT-B
Chipset	Intel® C621 chipset	Intel® C621 chipset	Intel® C621 chipset
System Memory (Max.)*	24 DIMM slots; Up to 6TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)	24 DIMM slots; Up to 6TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)	24 DIMM slots; Up to 6TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)
Expansion Slots	2 PCI-E 3.0 X16(LP), 1 SIOM card support Note: Must bundle with Network Card	1 PCI-E 3.0 X16(LP), 1 SIOM card support Note: Must bundle with Network Card	2 PCI-E 3.0 X16(LP), 1 SIOM card support Note: Must bundle with Network Card
Onboard Storage Controller	Broadcom 3008 SAS3 (12Gbps) controller; IT mode	Broadcom 3108 SAS3 (12Gbps) RAID controller; RAID 0, 1, 5, 6, 10, 50, 60	NVMe
Connectivity	SIOM Networking Card For Flexible Networking Options	SIOM Networking Card For Flexible Networking Options	SIOM Networking Card For Flexible Networking Options
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; SPM; SSM; SUM; SuperDoctor® 5; Watchdog	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; SPM; SSM; SUM; SuperDoctor® 5; Watchdog	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; SPM; SSM; SUM; SuperDoctor® 5; Watchdog
Drive Bays	4 Hot-swap 2.5" NVMe/SAS drive bays + 2 Hot-swap 2.5" SAS drive bays per node	4 Hot-swap 2.5" NVMe/SAS drive bays + 2 Hot-swap 2.5" SAS drive bays per node	6 Hot-swap 2.5" NVMe drive bays per node
Peripheral Bays	N/A	N/A	N/A
Power Supply	Redundant 2200W Titanium Level high-efficiency power supplies with I2C&PMBus	Redundant 2200W Titanium Level high-efficiency power supplies with I2C&PMBus	Redundant 2200W Titanium Level high-efficiency power supplies with I2C&PMBus
Cooling System	4x 8cm heavy duty PWM fans with air shroud	4x 8cm heavy duty PWM fans with air shroud	4x 8cm heavy duty PWM fans with air shroud
Form Factor	2U (4-node) Rackmount; Enclosure: 447 x 88 x 730mm (17.6" x 3.47" x 28.75") Package: 248 x 626 x 1150mm (9.76" x 24.65" x 45.28") Gross Weight: 85lbs (38.56kg) Net Weight: 54.5lbs (24.72kg)	2U (4-node) Rackmount; Enclosure: 447 x 88 x 730mm (17.6" x 3.47" x 28.75") Package: NaN x NaN x NaNmm Gross Weight: 85lbs (NaNkg)	2U (4-node) Rackmount; Enclosure: 447 x 88 x 730mm (17.6" x 3.47" x 28.75") Package: NaN x NaN x NaNmm (NaNkg) (NaNkg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

<sup>†</sup> 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

<sup>††</sup> For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.



X11 BigTwin™  
Quad DP Nodes,  
24 Hybrid NVMe/SATA3 Drive Bays

X11 BigTwin™  
Quad DP Nodes,  
24 SATA Drive Bays

X11 BigTwin 3 UPI  
Quad DP Nodes,  
24 NVMe Drive Bays



MODEL	SYS-2029BT-HNTR	SYS-2029BT-HTR	SYS-2029BZ-HNR
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).
Key Applications	<ul style="list-style-type: none"> <li>Hyperscale and Hyperconverged Solutions</li> <li>Compute Intensive Application</li> <li>Enterprise Server</li> <li>Data Center</li> <li>HPC</li> </ul>	<ul style="list-style-type: none"> <li>Hyperscale and Hyperconverged Solutions</li> <li>Compute Intensive Application</li> <li>Enterprise Server</li> <li>Data Center</li> <li>HPC</li> </ul>	<ul style="list-style-type: none"> <li>Hyperscale and Hyperconverged Solutions</li> <li>Compute Intensive Application</li> <li>Enterprise Server</li> <li>Data Center</li> <li>HPC</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>4 Nodes in 2U</li> <li>24 DIMMs per node</li> <li>NVMe Support</li> <li>1 M.2 SATA3 or NVMe support</li> <li>2 Low -profile PCI-E X16 slot</li> <li>1 SIOM card support</li> </ul>	<ul style="list-style-type: none"> <li>4 Nodes in 2U</li> <li>24 DIMMs per node</li> <li>SATA 3.0 (6Gbps) support</li> <li>2 Low-profile PCI-E slots</li> <li>1 SIOM card support</li> </ul>	<ul style="list-style-type: none"> <li>4 Nodes in 2U</li> <li>24 DIMMs per node</li> <li>NVMe Support</li> <li>2 M.2 SATA3 or NVMe support</li> <li>2 Low -profile PCI-E X16 slot</li> <li>1 SIOM card support</li> </ul>
Serverboard	SUPER● X11DPT-B	SUPER● X11DPT-B	SUPER● X11DPT-BH
Chipset	Intel® C621 chipset	Intel® C621 chipset	Intel® C621 chipset
System Memory (Max.)*	24 DIMM slots; Up to 6TB DDR4-2933 MHz† with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM†† (128/256/512GB)	24 DIMM slots; Up to 6TB DDR4-2933 MHz† with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM†† (128/256/512GB)	24 DIMM slots; Up to 6TB DDR4-2933 MHz† with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM†† (128/256/512GB)
Expansion Slots	2 PCI-E 3.0 X16(LP), 1 SIOM card support Note: Must bundle with Network Card	2 PCI-E 3.0 X16(LP) 1 SIOM card support Note: Must bundle with Network Card	2 PCI-E 3.0 X16(LP), 1 SIOM card support Note: Must bundle with Network Card
Onboard Storage Controller	Intel® C621 controller for SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel C621 SATA (6 Gbps) controller; RAID 0,1,5,10	NVMe
Connectivity	SIOM Networking Card For Flexible Networking Options	SIOM Networking Card For Flexible Networking Options	SIOM Networking Card For Flexible Networking Options
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; SPM; SSM; SUM; SuperDoctor® 5; Watchdog	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; SPM; SSM; SUM; SuperDoctor® 5; Watchdog	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; SPM; SSM; SUM; SuperDoctor® 5; Watchdog
Drive Bays	4 Hot-swap 2.5" NVMe/SATA3 drive bays + 2 Hot-swap 2.5" SATA3 drive bays per node	6 Hot-swap 2.5" SATA drive bays per node	6 Hot-swap 2.5" NVMe drive bays per node
Peripheral Bays	N/A	N/A	N/A
Power Supply	Redundant 2200W Titanium Level high-efficiency power supplies with 12C&PMBus	Redundant 2200W Titanium Level high-efficiency power supplies with 12C&PMBus	Redundant 2600W Titanium Level high-efficiency power supplies with 12C&PMBus
Cooling System	4x 8cm heavy duty PWM fans with air shroud	4x 8cm heavy duty PWM fans with air shroud	4x 40x56mm heavy duty PWM fans per node with air shroud
Form Factor	2U (4-node) Rackmount; Enclosure: 447 x 88 x 730mm (17.6" x 3.47" x 28.75") Package: NaN x NaN x NaNmm (NaNkg) (NaNkg)	2U (4-node) Rackmount; Enclosure: 447 x 88 x 730mm (17.6" x 3.47" x 28.75") Package: NaN x NaN x NaNmm (NaNkg) (NaNkg)	2U (4-node) Rackmount; Enclosure: 447 x 88 x 730mm (17.6" x 3.47" x 28.75") Package: NaN x NaN x NaNmm (NaNkg) (NaNkg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

† 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

†† For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.

X11 BigTwin™  
 Dual DP Nodes,  
 12 Hybrid SAS3/NVMe Drive Bays

 X11 BigTwin™  
 Quad DP Nodes,  
 12 Hybrid SAS3/NVMe Drive Bays


MODEL	SYS-6029BT-DNC0R	SYS-6029BT-HNC0R
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s. <i>Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).</i>	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s. <i>Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).</i>
Key Applications	<ul style="list-style-type: none"> <li>Hyperscale and Hyperconverged Solutions</li> <li>Compute Intensive Application</li> <li>Enterprise Server</li> <li>Data Center</li> <li>HPC</li> </ul>	<ul style="list-style-type: none"> <li>Hyperscale and Hyperconverged Solutions</li> <li>Compute Intensive Application</li> <li>Enterprise Server</li> <li>Data Center</li> <li>HPC</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>2 Nodes in 2U</li> <li>24 DIMMs per node</li> <li>NVMe Support</li> <li>2 M.2 SATA3 or NVMe support</li> <li>3 PCI-E Add-on cards</li> <li>1 SIOM card support</li> </ul>	<ul style="list-style-type: none"> <li>4 Nodes in 2U</li> <li>24 DIMMs per node</li> <li>NVMe Support</li> <li>2 M.2 SATA3 or NVMe support</li> <li>2 Low -profile PCI-E 3.0 x16 slot</li> <li>1 SIOM card support</li> </ul>
Serverboard	SUPER● X11DPT-B	SUPER● X11DPT-B
Chipset	Intel® C621 chipset	Intel® C621 chipset
System Memory (Max.)*	24 DIMM slots; Up to 6TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)	24 DIMM slots; Up to 6TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)
Expansion Slots	2 PCI-E 3.0 x8; 1 PCI-E 3.0 x16; 1 SIOM card support Note: Must bundle with Network Card	2 PCI-E 3.0 x16(LP), 1 SIOM card support Note: Must bundle with Network Card
Onboard Storage Controller	Broadcom 3008 SAS3 (12 Gbps) controller; IT mode	Broadcom 3008 SAS3 (12Gbps) controller; IT mode
Connectivity	SIOM Networking Card For Flexible Networking Options	SIOM Networking Card For Flexible Networking Options
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; SPM; SSM; SUM; SuperDoctor® 5; Watchdog	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; SPM; SSM; SUM; SuperDoctor® 5; Watchdog
Drive Bays	3 Hot-swap 3.5" NVMe/SAS drive bays + 3 Hot-swap 3.5" SAS drive bays per node	3 Hot-swap 3.5" NVMe/SAS drive bays per node
Peripheral Bays	N/A	N/A
Power Supply	Redundant 2200W Titanium Level high-efficiency power supplies with I2C&PMBus	Redundant 2200W Titanium Level high-efficiency power supplies with I2C&PMBus
Cooling System	4x 8cm heavy duty PWM fans with air shroud	4x 8cm heavy duty PWM fans with air shroud
Form Factor	2U (2-node) Rackmount; Enclosure: 447 x 88 x 765mm (17.6" x 3.47" x 30.11")	2U (4-node) Rackmount; Enclosure: 447 x 88 x 765mm (17.6" x 3.47" x 30.11") Gross Weight: 86.5lbs (39.24kg) Net Weight: 56lbs (25.4kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

<sup>†</sup> 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

<sup>††</sup> For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.

2U BigTwin™  
4 hot swappable nodes in 2U,  
Redundant Titanium Level power supplies

2U BigTwin™  
4 hot swappable nodes in 2U,  
Redundant Titanium Level power supplies



Rear View



Rear View

MODEL	SYS-2028BT-HNC0R+	SYS-2028BT-HNC1R+
Processor Support	Quad set of Dual Intel® Xeon® Processor E5-2600 V4 product family with UPI up to 9.6 GT/s	Quad set of Dual Intel® Xeon® Processor E5-2600 v4 product family with QPI up to 9.6 GT/s
Key Applications	<ul style="list-style-type: none"> <li>Hyperscale and Hyperconverged Solutions</li> <li>Compute Intensive Application</li> <li>Enterprise Server</li> <li>Data Center</li> <li>HPC</li> </ul>	<ul style="list-style-type: none"> <li>Compute Intensive Application</li> <li>Data Center</li> <li>Enterprise Server</li> <li>Financial Analysis</li> <li>HPC</li> <li>Mission-critical applications</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>SAS3 and NVMe support</li> <li>24 DIMMs per node</li> <li>2 Low -profile PCI-E X16 slot</li> <li>1 SATA DOM support</li> <li>1 SIOM card support</li> <li>4 Nodes in 2U</li> </ul>	<ul style="list-style-type: none"> <li>24x SAS3 Support (16 can be NVMe)</li> <li>4 hot swappable nodes in 2U</li> <li>2 low profile PCI-E x16 slot</li> <li>24 DIMMs per node</li> <li>1 SIOM card support</li> <li>2 low-profile PCI-E x16 slots</li> <li>2200W High-Efficiency (96%) Redundant Power Supplies</li> </ul>
Serverboard	Quad set of SUPER● X10DRT-B+	Quad set of SUPER● X10DRT-B+
Chipset	Quad set of Intel® C612 chipset	Quad set of Intel® C612 chipset
System Memory (Max.)*	Up to 3TB ECC 3DS LRDIMM, 768GB ECC RDIMM 2400MHz, in 24 DIMM slots per Node.	Up to 3TB ECC 3DS LRDIMM, 768GB ECC RDIMM 2400MHz, in 24 DIMM slots per Node
Expansion Slots	Quad set of 2 PCI-E 3.0 X16(LP) 1SIOM card support Note: Must bundle with Network card.	Quad set of 2 PCI-E 3.0 x16 (LP) 1 SIOM card support Note: Must bundle with Network Card
Onboard Storage Controller	Quad set of Broadcom 3008 support RAID 0,1,10 per Node	Quad set of 3008 SAS controller for 6 SAS3 (12 Gbps) ports per node (4 can be NVMe)
Connectivity	Quad set of SIOM Networking AOC Matrix	Quad set of SIOM Networking AOC Matrix
VGA/Audio	Quad set of Aspeed AST2400 BMC	Quad set of Aspeed AST2400 BMC
Management	Quad set of IPMI2.0+KVM with dedicated LAN, Intel Node Manger, SUM, SPM, SSM, SuperDoctor 5, Watchdog	Quad set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor® 5, Watchdog
Drive Bays	Quad set of 6x 2.5" hot-swap SAS drive bays; or 4x NVMe + 2x 2.5" SAS drive bays	Quad set of 6x 2.5" hot-swap SAS3/NVMe drive bays
Peripheral Bays	N/A	N/A
Power Supply	Redundant 2200W Titanium Level high-efficiency power supplies with 12C & PMbus	Redundant 2200W Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMbus
Cooling System	4x8cm heavy duty PWM fans with air shroud, N/A	4x 8cm heavy duty PWM fans with air shroud
Form Factor	2U Rackmount	2U (4-node) Rackmount

\*Please check with your Supermicro sales representative and website for compatibility and configuration details


 2U BigTwin™  
 4 hot swappable nodes in 2U


2U BigTwin™



MODEL	SYS-2028BT-HNR+	SYS-2028BT-HNTR+
Processor Support	Quad set of Dual Intel® Xeon® Processor E5-2600 v4 product family with QPI up to 9.6 GT/s	Quad set of Dual Intel® Xeon® processor E5-2600 v4/v3 family3, Socket R3 (LGA 2011) supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Compute Intensive Application</li> <li>• Data Center</li> <li>• Enterprise Server</li> <li>• Financial Analysis</li> <li>• HPC</li> <li>• Mission-critical applications</li> </ul>	<ul style="list-style-type: none"> <li>• Hyperscale and Hyperconverged Solutions</li> <li>• Compute Intensive Application</li> <li>• Enterprise Server</li> <li>• Data Center</li> <li>• HPC</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 4 hot swappable nodes in 2U</li> <li>• 2 low profile PCI-E x16 slot</li> <li>• 24 DIMMs per node</li> <li>• 1 SIOM card support</li> <li>• 2 low-profile PCI-E x16 slots</li> <li>• 2200W High-Efficiency (96%) Redundant Power Supplies</li> <li>• 24x NVMe Support</li> </ul>	<ul style="list-style-type: none"> <li>• NVMe Support</li> <li>• 24 DIMMs per node</li> <li>• 1 M.2 SATA3 or NVMe support</li> <li>• 2 Low -profile PCI-E 3.0 x16 slot</li> <li>• 1 SIOM card support</li> <li>• 4 Nodes in 2U</li> </ul>
Serverboard	Quad set of SUPER● X10DRT-B+	Quad set of SUPER● X10DRT-B+
Chipset	Quad set of Intel® C612 chipset	Quad set of Intel® C612 chipset
System Memory (Max.)*	Up to 3TB ECC 3DS LRDIMM, 768GB ECC RDIMM 2400MHz, in 24 DIMM slots per Node	Up to 3TB ECC 3DS RDIMM/LRDIMM, DDR4 up to 2400MHz, in 24 DIMM slots per Node
Expansion Slots	Quad set of 2 PCI-E 3.0 x16 (LP) 1 SIOM card support Note: Must bundle with Network Card	Quad set of 2 PCI-E 3.0 X16(LP), 1 SIOM card support. Note: Must bundle with Network Card
Onboard Storage Controller	Quad set of Intel® C612 controller for M.2, NVMe from CPU	Quad set of Intel® C612 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,10
Connectivity	Quad set of SIOM Networking AOC Matrix	Quad set of SIOM Networking Card For Flexible Networking Options
VGA/Audio	Quad set of Aspeed AST2400 BMC	Quad set of Aspeed AST2400 BMC
Management	Quad set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor® 5, Watchdog	Quad set of Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; SPM; SSM; SUM; SuperDoctor® 5; Watchdog
Drive Bays	Quad set of 6x 2.5" hot-swap NVMe drive bays	Quad set of 6 SATA3 or 4 NVMe + 2 SATA3 Hot-swap 2.5" drive bays
Peripheral Bays	N/A	N/A
Power Supply	Redundant 2200W Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMbus	Redundant 2200W Titanium Level high-efficiency power supplies with I2C & PMbus
Cooling System	4x 8cm heavy duty PWM fans with air shroud	4x 8cm heavy duty PWM fans with air shroud
Form Factor	2U (4-node) Rackmount	2U (4-node) Rackmount; Enclosure: 447 x 88 x 730mm (17.6" x 3.47" x 28.75") Package: 248 x 626 x 1150mm (9.76" x 24.65" x 45.28") Gross Weight: 85lbs (38.56kg) Net Weight: 54.5lbs (24.72kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



2U BigTwin™  
4 hot swappable nodes in 2U



2U BigTwin™  
4 hot swappable nodes in 2U,  
Redundant Titanium Power



MODEL	SYS-2028BT-HTR+	SYS-6028BT-HNC0R+
Processor Support	Quad set of Dual Intel® Xeon® Processor E5-2600 V4 product family with UPI up to 9.6 GT/s	Quad set of Intel® Xeon® processor E5-2600 V3 Intel® Xeon® processor E5-2600 V4 with UPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Hyperscale and Hyperconverged Solutions</li> <li>Compute Intensive Application</li> <li>Enterprise Server</li> <li>Data Center</li> <li>HPC</li> </ul>	<ul style="list-style-type: none"> <li>Hyperscale and Hyperconverged Solutions</li> <li>Compute Intensive Application</li> <li>Enterprise Server</li> <li>Data Center</li> <li>HPC</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>4 hot swappable nodes in 2U</li> <li>24 DIMMs per node</li> <li>1 SIOM card support</li> <li>2 low-profile PCI-E x16 slots</li> <li>2000w High Efficiency (96%) Redundant Power Supplies</li> </ul>	<ul style="list-style-type: none"> <li>SAS3 and NVMe support</li> <li>24 DIMMs per node</li> <li>2 PCI-E 3.0 x16 Low Profile slots</li> <li>1 SIOM card support</li> <li>1 SATA DOM support</li> <li>4 Nodes in 2U</li> </ul>
Serverboard	Quad set of SUPER● X10DRT-B+	Quad set of SUPER● X10DRT-B+
Chipset	Quad set of Intel® C612 chipset	Quad set of Intel® C612 chipset
System Memory (Max.)*	Quad set of Up to 3TB ECC 3DS LRDIMM, 768GB ECC RDIMM 2400MHZ, in 24 DIMM slots per Node.	Quad set of Up to 3TB ECC 3DS LRDIMM, 768GB ECC RDIMM 2400MHZ, in 24 DIMM slots per Node.
Expansion Slots	Quad set of 2 PCI-E 3.0 X16(LP) 1 SIOM card support Note: Must bundle with Network Card	Quad set of 2 PCI-E 3.0 (X16) Low Profile slots 1 SIOM card support Note: Must bundle with Network card.
Onboard Storage Controller	Quad set of Intel C612 controller for 6 SATA3(6 Gbps) ports;RAID 0,1,5,10	Quad set of SAS3 support via Broadcom 3008 ; IT mode
Connectivity	Quad set of SIOM Networking AOC Matrix	Quad set of SIOM Networking AOC Matrix
VGA/Audio	Aspeed AST2400 BMC	Aspeed AST2400 BMC
Management	Quad set of IPMI 2.0+KVM with dedicated LAN, Intel Node Manger, SUM, SPM, SSM, SuperDoctor 5, Watchdog	Quad set of SIOM Networking AOC Matrix
Drive Bays	Quad set of Quad set of 6x 2.5" hot-swap SATA3 drive bays	Quad set of 3x 3.5" hot-swap SAS drive bays or 3x NVMe drive bay
Peripheral Bays	N/A	N/A
Power Supply	Redundant 2200W Titanium Level high-efficiency power supplies with I2C & PMbus	Redundant 2200W Titanium Level high-efficiency power supplies with I2C & PMbus
Cooling System	4x8cm heavy duty PWM fans with air shroud	4x8cm heavy duty PWM fans with air shroud, N/A
Form Factor	2U Rackmount	2U Rackmount; Enclosure: 447 x 88 x 775mm (17.6" x 3.47" x 30.5") Package: 51 x 229 x 1143mm (24.65" x 9.76" x 45.28") Gross Weight: 85lbs (38.56kg) Net Weight: 54.5lbs (24.72kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# X12 FATTWIN®

(For Complete System Only)

**NEW!**

3rd Gen Intel® Xeon® Scalable processors Supported



8 Nodes, Rear IO



4 Nodes, Rear IO



MODEL	SYS-F610P2-RTN	SYS-F620P3-RTBN
Processor Support	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA-4189 (Socket P+) supported TDP up to 165W; 3 UPI	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA-4189 (Socket P+) supported TDP up to 165W; 3 UPI
Key Applications	<ul style="list-style-type: none"> <li>Hyperscale / Hyperconverged</li> <li>HPC and Big Data</li> <li>Data Center Enterprise Applications</li> <li>Telco Data Center and ETSI certified</li> <li>Scale-Out Storage</li> <li>Virtualization Server</li> </ul>	<ul style="list-style-type: none"> <li>Hyperscale / Hyperconverged</li> <li>HPC and Big Data</li> <li>Data Center Enterprise Applications</li> <li>Telco Data Center and ETSI certified</li> <li>High Capacity and Ultra Dense Storage</li> <li>Virtualization Server (VSAN)</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>4U 8-node architecture with front serviceability from cold aisle for all nodes</li> <li>Optimized designs for storage and compute density</li> <li>HDD hot-swap capability</li> <li>Shared power architecture for best efficiency</li> <li>Redundant cooling and power configurations for high availability</li> </ul>	<ul style="list-style-type: none"> <li>4U 4-node architecture with front serviceability from cold aisle for all nodes</li> <li>Optimized designs for storage and compute density</li> <li>HDD hot-swap capability</li> <li>Shared power architecture for best efficiency</li> <li>Redundant cooling and power configurations for high availability</li> <li>Optional 2x Additional Internal SSDs</li> </ul>
Serverboard	SUPER® X12DPFR-AN6	SUPER® X12DPFR-AN6
Chipset	Intel® C621A	Intel® C621A
System Memory (Max.)	16 DIMM slots Up to 4TB Intel® Optane™ Persistent Memory, DDR4-3200MHz Up to 2TB RDIMM/LRDIMM, DDR4-3200MHz	16 DIMM slots Up to 4TB Intel® Optane™ Persistent Memory, DDR4-3200MHz Up to 2TB RDIMM/LRDIMM, DDR4-3200MHz
Expansion Slots	M.2 slot(s) PCI-E 4.0 x8 LP slot(s)	AIOM slot(s) HBA slot(s) PCI-E 4.0 x16 LP slot(s)
Onboard Storage Controller	Intel® SATA	Intel® SATA
Connectivity	1x 1GbE RJ45 (BMC) port(s)	1x 1GbE RJ45 (BMC) port(s)
VGA/Audio	1 VGA port, Aspeed AST2600 BMC	1 VGA port, Aspeed AST2600 BMC
Management	SuperDoctor® 5; Watch Dog; SUM; IPMI 2.0; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM	SuperDoctor® 5; Watch Dog; SUM; IPMI 2.0; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM
Drive Bays	6x 2.5" hot-swap NVMe/SATA/SAS drive bays; 6x 2.5" NVMe hybrid; 6x 2.5" 7mm hot-swap hybrid NVMe/SATA drive bays	8x 3.5" hot-swap SATA/SAS drive bays; 8x 2.5" NVMe hybrid; 8x 2.5" 7mm hot-swap hybrid NVMe/SATA drive bays
Peripheral Bays	None	None
Power Supply	2200W Titanium level (96%)	2200W Titanium level (96%)
Cooling System	3x 4cm heavy duty fan(s)	2x 8cm heavy duty fan(s)
Form Factor	4U rackmount Enclosure: 448 x 177 x 737mm (17.63" x 6.96" x 29") Package: (28.3" x 15" x 42.4")	4U rackmount Enclosure: 448 x 177 x 737mm (17.63" x 6.96" x 29") Package: (28.3" x 15" x 42.4")

# X12TWINPRO®

(For Complete System Only)



6x 2.5" Drives/Node x 4 Nodes

6x 2.5" Drives/Node x 4 Nodes

6x 2.5" Drives/Node x 4 Nodes



MODEL	SYS-220TP-HTTR	SYS-220TP-HC0TR	SYS-220TP-HC1TR
Processor Support	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA-4189 (Socket P+) supported TDP up to 185W; 2 UPI up to 11.2GT/s	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA-4189 (Socket P+) supported TDP up to 185W; 2 UPI up to 11.2GT/s	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA-4189 (Socket P+) supported TDP up to 185W; 2 UPI up to 11.2GT/s
Key Applications	<ul style="list-style-type: none"> <li>High Performance Computing</li> <li>Hyper-Converged Infrastructure</li> <li>Big Data / Big Science</li> <li>Oil immersion, Liquid Cooling</li> </ul>	<ul style="list-style-type: none"> <li>High Performance Computing</li> <li>Hyper-Converged Infrastructure</li> <li>Big Data / Big Science</li> <li>Oil immersion, Liquid Cooling</li> </ul>	<ul style="list-style-type: none"> <li>High Performance Computing</li> <li>Hyper-Converged Infrastructure</li> <li>Big Data / Big Science</li> <li>Oil immersion, Liquid Cooling</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>The most cost optimized 2U, 4 node solution</li> </ul>	<ul style="list-style-type: none"> <li>The most cost optimized 2U, 4 node solution</li> </ul>	<ul style="list-style-type: none"> <li>The most cost optimized 2U, 4 node solution</li> </ul>
Serverboard	SUPER® X12DPT-PT6	SUPER® X12DPT-PT6	SUPER® X12DPT-PT6
Chipset	Intel® C621A	Intel® C621A	Intel® C621A
System Memory (Max.)	16 DIMM slots Up to 4TB ECC RDIMM, DDR4-3200MHz	16 DIMM slots Up to 4TB ECC RDIMM, DDR4-3200MHz	16 DIMM slots Up to 4TB ECC RDIMM, DDR4-3200MHz
Expansion Slots	M.2 slot(s) 2 PCI-E 4.0 x16 LP slot(s)	M.2 slot(s) 2 PCI-E 4.0 x16 LP slot(s)	M.2 slot(s) 2 PCI-E 4.0 x16 LP slot(s)
Onboard Storage Controller	Intel® SATA	Broadcom® 3008	Broadcom® 3108
Connectivity	2x 10GbE RJ45 port(s) with Intel® Ethernet Controller X710-AT2	2x 10GbE RJ45 port(s) with Intel® Ethernet Controller X710-AT2	2x 10GbE RJ45 port(s) with Intel® Ethernet Controller X710-AT2
VGA/Audio	1 VGA port	1 VGA port	1 VGA port
Management	SuperDoctor® 5; Watch Dog; NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; IPMI 2.0; Redfish API; Supermicro Out of Band (OOB) Software License Key	SuperDoctor® 5; Watch Dog; NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; IPMI 2.0; Redfish API; Supermicro Out of Band (OOB) Software License Key	SuperDoctor® 5; Watch Dog; NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; IPMI 2.0; Redfish API; Supermicro Out of Band (OOB) Software License Key
Drive Bays	6x 2.5" hot-swap SATA drive bays;	6x 2.5" hot-swap SATA/SAS drive bays;	6x 2.5" hot-swap SATA/SAS drive bays;
Peripheral Bays	None	None	None
Power Supply	2200W Titanium level (96%)	2200W Titanium level (96%)	2200W Titanium level (96%)
Cooling System	4x 8cm heavy duty fan(s)	4x 8cm heavy duty fan(s)	4x 8cm heavy duty fan(s)
Form Factor	2U rackmount Enclosure: 438 x 88 x 730mm (17.25" x 3.47" x 28.75") Package: 622 x 254 x 1143mm (24.5" x 10" x 45")	2U rackmount Enclosure: 438 x 88 x 730mm (17.25" x 3.47" x 28.75") Package: 622 x 254 x 1143mm (24.5" x 10" x 45")	2U rackmount Enclosure: 438 x 88 x 730mm (17.25" x 3.47" x 28.75") Package: 622 x 254 x 1143mm (24.5" x 10" x 45")

# FAT TWIN®

(For Complete System Only)

X11 FatTwin™  
Xeon® SP CPU with 12x 3.5" HDD



X11 FatTwin™  
DP Intel® Xeon® Scalable processors  
with 2-4x 2.5" SSD/HDD per node



X11 FatTwin™  
4U 8-Node, Rear I/O  
6x 2.5" Drive Bays per Node



MODEL	SYS-F619H6-FT	SYS-F619P2-FT SYS-F619P2-FT+	SYS-F619P2-RC0 SYS-F619P2-RTN
Processor Support	Quad set of 2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 125W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed <i>Cascade Lake Refresh</i> ).	Quad set of 2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 125W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed <i>Cascade Lake Refresh</i> ).	Octal set of 2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed <i>Cascade Lake Refresh</i> ).
Key Applications	<ul style="list-style-type: none"> <li>Hyperscale and Hyperconverged Solutions</li> <li>Cloud Computing</li> <li>Cluster Node</li> <li>Data Center</li> <li>HPC cluster computer nodes</li> <li>Hadoop &amp; Ceph storage solutions</li> </ul>	<ul style="list-style-type: none"> <li>Hyperscale and Hyperconverged Solutions</li> <li>Cloud Computing</li> <li>Cluster Node</li> <li>Data Center</li> <li>HPC cluster computer nodes</li> </ul>	<ul style="list-style-type: none"> <li>Hyperscale and Hyperconverged Solutions</li> <li>Cloud Computing</li> <li>Cluster Node</li> <li>Data Center</li> <li>HPC cluster computer nodes</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>4 Nodes in a 4U System</li> <li>125W CPU support supports up to 28 cores</li> <li>1 Low Profile PCI-E x16 slot; 1 Low Profile PCI-E x8 slot</li> <li>1 SIOM PCI-E x16 slot</li> <li>supports up to 12x 3.5" HDD per node</li> </ul>	<ul style="list-style-type: none"> <li>8 nodes in a 4U system</li> <li>165W CPU support supports up to 28 cores</li> <li>1x LP PCI-e x16 slot; 1x LP PCI-e x8 slot; 1x SIOM PCI-e x16 slot</li> <li>Supports 2-4x 2.5" SATA drives</li> <li>Quad 2200W Titanium Level high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>1 Low-profile PCI-E x16 slot support up to 28 cores</li> <li>6x SATA or 4x SATA &amp; 2 NVMe</li> <li>1 SIOM PCI-E x16 slot</li> <li>2200W Redundant Titanium Level high-efficiency power supplies</li> </ul>
Serverboard	Quad set of SUPER● X11DPFF-SN	Octal set of SUPER● X11DPFF-SN	Octal set of SUPER● X11DPFR-SN
Chipset	Quad set of Intel® C621 chipset	Octal set of Intel® C621 chipset	Octal set of Intel® C621 chipset
System Memory (Max.)*	Quad set of 12 DIMM slots; Up to 3TB DDR4-2933 MHz <sup>1</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)	Octal set of 12 DIMM slots; Up to 3TB DDR4-2933 MHz <sup>1</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)	Octal set of 12 DIMM slots; Up to 3TB DDR4-2933 MHz <sup>1</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)
Expansion Slots	Quad set of 1 PCI-E 3.0 x16(LP); 1 PCI-E 3.0 x8(LP); 1 PCI-E 3.0 x16(SIOM)	Octal set of 1 PCI-E 3.0 x16(SIOM); 1 PCI-E 3.0 x16(LP); 1 PCI-E 3.0 x8(LP)	1 PCI-E 3.0 x16(LP); 1 PCI-E 3.0 x16(SIOM)
Onboard Storage Controller	Quad set of Intel C621 controller with 14 SATA3 ports & Onboard NVMe	Octal set of Intel C621 controller with 14x SATA3 ports and on-board NVMe	-RC0: Octal set of Broadcom 3008 12Gb/s SAS Controller -RTN: Octal set of intel C621 controller with 14 SATA3 ports
Connectivity	Quad set of 1Gb Ethernet Connectivity	Octal set of 1GbE Ethernet Connectivity	Must bundle with at least one SIOM network card
VGA/Audio	Quad set of 1 VGA, Aspeed AST2500 BMC	Octal set of 1 VGA, Aspeed AST2500 BMC	1 VGA, Aspeed AST2500 BMC
Management	Quad set of Intel Node Manager, IPMI2.0, SuperDoctor, Watchdog, Rear UID LED.	Octal set of Intel Node Manager, IPMI2.0, SuperDoctor, Watchdog, Rear UID LED.	Octal set of Intel Node Manager, IPMI2.0, SuperDoctor, Watchdog, Rear UID LED.
Drive Bays	Octal set of 12x 3.5" internal HDD SATA3 per node	Octal set of 2-4x 2.5" SATA3/NVMe	Octal set of 6x 2.5" Hot Swap SAS 3 or 4x 2.5" Hot Swap SAS 3 & 2 x Hot Swap NVMe U.2
Peripheral Bays	N/A	N/A	N/A
Power Supply	Dual set of 2200W high-efficiency Titanium Level power supply w/ PMBus	Four (4x) 2200W high-efficiency Titanium Level power supply w/ PMBus per enclosure	2200W high-efficiency Titanium Level redundant power supply w/ PMBus
Cooling System	8x 8cm rear fans per chassis	Eight (8x) 8cm 13.5k RPM rear fans per enclosure	3x 4cm 20k RPM middle fans per node
Form Factor	Supermicro Fat Twin 4U 4 node; Enclosure: 448 x 177 x 737mm (17.63" x 6.96" x 29") Package: 719 x 381 x 1077mm (28.3" x 15" x 42.4") Gross Weight: 200lbs (90.72kg) Net Weight: 150lbs (68.04kg)	448 x 177 x 737mm (17.63" x 6.96" x 29")	Supermicro Fat Twin 4U 8 node; Enclosure: 448 x 177 x 737mm (17.63" x 6.96" x 29") Package: 719 x 381 x 1077mm (28.3" x 15" x 42.4") Gross Weight: 200lbs (90.72kg) Net Weight: 150lbs (68.04kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

<sup>1</sup> 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

<sup>††</sup> For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.



# FAT TWIN®

(For Complete System Only)

X11 FatTwin™  
4U 8-Node, Rear I/O  
6x 2.5" Drive Bays per Node

X11 FatTwin™  
4U 8-Node, Rear I/O  
6x 2.5" Drive Bays per Node

X11 FatTwin™  
DP Intel® Xeon® Scalable processors,  
2x 3.5" SSD/HDD per node



Twin

MODEL	SYS-F619P2-RC1	SYS-F619P2-RT	SYS-F619P3-FT
Processor Support	Octal set of 2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).	Octal set of 2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).	Octal set of 2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).
Key Applications	<ul style="list-style-type: none"> <li>Hyperscale and Hyperconverged Solutions</li> <li>Cloud Computing</li> <li>Cluster Node</li> <li>Data Center</li> <li>HPC cluster computer nodes</li> </ul>	<ul style="list-style-type: none"> <li>Hyperscale and Hyperconverged Solutions</li> <li>Cloud Computing</li> <li>Cluster Node</li> <li>Data Center</li> <li>HPC cluster computer nodes</li> </ul>	<ul style="list-style-type: none"> <li>Hyperscale and Hyperconverged Solutions</li> <li>Cloud Computing</li> <li>Cluster Node</li> <li>Data Center</li> <li>HPC cluster computer nodes</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>1 Low-profile PCI-E x16 slot support up to 28 cores</li> <li>6x SATA or 4x SATA &amp; 2 NVMe</li> <li>1 SIOM PCI-E x16 slot</li> <li>2200W Redundant Titanium Level high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>1 Low-profile PCI-E x16 slot support up to 28 cores</li> <li>6x SATA or 4x SATA &amp; 2 NVMe</li> <li>1 SIOM PCI-E x16 slot</li> <li>2200W Redundant Titanium Level high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>Octal set of 2x 3.5" SATA drives</li> <li>8 nodes in a 4U system support up to 28 cores</li> <li>2x 3.5" SATA drives</li> <li>165W CPU support supports up to 28 cores</li> <li>1x LP PCI-e x16 slot; 1x LP PCI-e x8 slot; 1x SIOM PCI-e x16 slot</li> </ul>
Serverboard	Octal set of SUPER● X11DPFR-SN	Octal set of SUPER● X11DPFR-S	Octal set of SUPER● X11DPFF-SN
Chipset	Intel® C621 chipset	Intel® C621 chipset	Intel® C621 chipset
System Memory (Max.)*	Octal set of 12 DIMM slots; Up to 3TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)	Octal set of 12 DIMM slots; Up to 3TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)	Octal set of 12 DIMM slots; Up to 3TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)
Expansion Slots	1 PCI-E 3.0 x16(LP); 1 PCI-E 3.0 x16(SIOM)	1 PCI-E 3.0 x16(LP); 1 PCI-E 3.0 x16(SIOM)	Octal set of 1 PCI-E 3.0 x16(LP); 1 PCI-E 3.0 x8(LP); 1 PCI-E 3.0 x16(SIOM)
Onboard Storage Controller	Octal set of Broadcom SAS 3108 12Gb/s HW RAID	Octal set of intel C620 controller with 14 SATA3 ports	Octal set of Intel C621 controller with 14x SATA3 ports and on-board NVMe
Connectivity	Must bundle with at least one SIOM network card	Must bundle with at least one SIOM network card	Octal set of 1GbE Ethernet Connectivity
VGA/Audio	Octal set of 1 VGA, Aspeed AST2500 BMC	Octal set of 1 VGA, Aspeed AST2500 BMC	Octal set of 1 VGA, Aspeed AST2500
Management	Intel Node Manager, IPMI2.0, SuperDoctor, Watchdog, Rear UID LED.	Intel Node Manager, IPMI2.0, SuperDoctor, Watchdog, Rear UID LED.	Octal set of Intel Node Manager, IPMI2.0, SuperDoctor, Watchdog, Rear UID LED.
Drive Bays	Octal set of 6x 2.5" Hot Swap SAS 3 HW RAID or 4x 2.5" Hot Swap SAS 3 HW RAID & 2 Hot Swap NMVe U.2	Octal set of 6x 2.5" Hot Swap SATA 3	Octal set of 2x 3.5" SATA3
Peripheral Bays	N/A	N/A	N/A
Power Supply	2200W high-efficiency Titanium Level redundant power supply w/ PMBus	2200W high-efficiency Titanium Level redundant power supply w/ PMBus	Four (4x) 2200W high-efficiency Titanium Level power supply w/ PMBus per enclosure
Cooling System	3x 4cm 20k RPM middle fans per node	3x 4cm 20k RPM middle fans per node	Eight (8x) 8cm 13.5k RPM rear fans per enclosure
Form Factor	Supermicro Fat Twin 4U 8 node; Enclosure: 448 x 177 x 737mm (17.63" x 6.96" x 29") Package: 719 x 381 x 1077mm (28.3" x 15" x 42.4") Gross Weight: 200lbs (90.72kg) Net Weight: 150lbs (68.04kg)	Supermicro Fat Twin 4U 8 node; Enclosure: 448 x 177 x 737mm (17.63" x 6.96" x 29") Package: 719 x 381 x 1077mm (28.3" x 15" x 42.4") Gross Weight: 200lbs (90.72kg) Net Weight: 150lbs (68.04kg)	Supermicro Fat Twin 4U 8 node; Enclosure: 448 x 177 x 737mm (17.63" x 6.96" x 29") Package: 719 x 381 x 1077mm (28.3" x 15" x 42.4") Gross Weight: 200lbs (90.72kg) Net Weight: 150lbs (68.04kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

<sup>†</sup> 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

<sup>††</sup> For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.

# FAT TWIN®

(For Complete System Only)

X11 FatTwin™  
4U 4-Node, Rear I/O  
8 Hot-swap 3.5" Drive Bays per Node

X11 FatTwin™  
4U 4-Node, Rear I/O  
8 Hot-swap 3.5" Drive Bays per Node

X11 FatTwin™  
4U 4-Node, Rear I/O  
8 Hot-swap 3.5" Drive Bays per Node



MODEL	SYS-F629P3-RC0B SYS-F629P3-RC1B	SYS-F629P3-RTBN	SYS-F629P3-RTB
Processor Support	Quad set of 2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed <i>Cascade Lake Refresh</i> ).	Quad set of 2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed <i>Cascade Lake Refresh</i> ).	Quad set of 2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed <i>Cascade Lake Refresh</i> ).
Key Applications	<ul style="list-style-type: none"> <li>Hyperscale and Hyperconverged Solutions</li> <li>Cloud Computing</li> <li>Cluster Node</li> <li>Data Center</li> <li>HPC cluster computer nodes</li> <li>Hadoop &amp; Ceph storage solutions</li> </ul>	<ul style="list-style-type: none"> <li>Hyperscale and Hyperconverged Solutions</li> <li>Cloud Computing</li> <li>Cluster Node</li> <li>Data Center</li> <li>HPC cluster computer nodes</li> <li>Hadoop &amp; Ceph storage solutions</li> </ul>	<ul style="list-style-type: none"> <li>Hyperscale and Hyperconverged Solutions</li> <li>Cloud Computing</li> <li>Cluster Node</li> <li>Data Center</li> <li>HPC cluster computer nodes</li> <li>Hadoop &amp; Ceph storage solutions</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>6x 3.5" SATA 3 &amp; 2x NVMe U.2 support up to 28 cores</li> <li>1 Low Profile PCI-E x16 slot</li> <li>1 S10M PCI-E x16 slot</li> <li>1200W Redundant Titanium Level high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>6x 3.5" SATA 3 &amp; 2x NVMe U.2 support up to 28 cores</li> <li>1 Low Profile PCI-E x16 slot</li> <li>1 S10M PCI-E x16 slot</li> <li>1200W Redundant Titanium Level high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>8x 3.5" SATA 3</li> <li>support up to 28 cores</li> <li>1200W Redundant Titanium Level high-efficiency power supplies</li> <li>1 Low Profile PCI-E x16 slot</li> <li>1 S10M PCI-E x16 slot</li> </ul>
Serverboard	Quad set of SUPER● X11DPFR-SN	Quad set of SUPER● X11DPFR-SN	Quad set of SUPER● X11DPFR-S
Chipset	Quad set of Intel® C621 chipset	Quad set of Intel® C621 chipset	Quad set of Intel® C621 chipset
System Memory (Max.)*	Quad set of 12 DIMM slots; Up to 3TB DDR4-2933 MHz <sup>1</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)	Quad set of 12 DIMM slots; Up to 3TB DDR4-2933 MHz <sup>1</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)	Quad set of 12 DIMM slots; Up to 3TB DDR4-2933 MHz <sup>1</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)
Expansion Slots	Quad set of 1 PCI-E 3.0 x16(LP); 1 PCI-E 3.0 x16(SIOM)	Quad set of 1 PCI-E 3.0 x16(LP); 1 PCI-E 3.0 x16(SIOM)	Quad set of 1 PCI-E 3.0 x16(LP); 1 PCI-E 3.0 x16(SIOM)
Onboard Storage Controller	-RC0B: Quad set of Broadcom 3008 12Gb/s SAS Controller -RC1B: Quad set of Broadcom SAS 3108 12Gb/s HW RAID	Quad set of intel C621 controller with 14 SATA3 ports & Onboard NVMe	Quad set of intel C621 controller with 14 SATA3 ports & Onboard NVMe
Connectivity	Must bundle with at least one S10M network card	Must bundle with at least one S10M network card	Must bundle with at least one S10M network card
VGA/Audio	Quad set of 1 VGA, Aspeed AST2500 BMC	Quad set of 1 VGA, Aspeed AST2500 BMC	Quad set of 1 VGA, Aspeed AST2500 BMC
Management	Intel Node Manager, IPMI2.0, SuperDoctor, Watchdog, Rear UID LED.	Intel Node Manager, IPMI2.0, SuperDoctor, Watchdog, Rear UID LED.	Intel Node Manager, IPMI2.0, SuperDoctor, Watchdog, Rear UID LED.
Drive Bays	-RC0B: Quad set of 8x 3.5" Hot Swap SAS 3 or 6x 3.5" Hot Swap SAS 3 & 2 Hot Swap NVMe U.2 -RC1B: Quad set of 8x 3.5" SAS 3 HW RAID or 6x 3.5" SAS 3 HW RAID & 2 Hot Swap NVMe U.2	Quad set of 8x 3.5" Hot Swap SATA 3 or 6 Hot Swap SATA 3 and 2x NVMe U.2	Quad set of 8x 3.5" Hot Swap SATA 3
Peripheral Bays	N/A	N/A	N/A
Power Supply	1200W high-efficiency Titanium Level redundant power supply w/ PMBus	1200W high-efficiency Titanium Level redundant power supply w/ PMBus	1200W high-efficiency Titanium Level redundant power supply w/ PMBus
Cooling System	2x 8cm 14k RPM middle fans per node	2x 8cm 14k RPM middle fans per node	2x 8cm 14k RPM middle fans per node
Form Factor	Supermicro Fat Twin 4U 4 node; Enclosure: 448 x 177 x 737mm (17.63" x 6.96" x 29") Package: 719 x 381 x 1077mm (28.3" x 15" x 42.4") Gross Weight: 200lbs (90.72kg) Net Weight: 150lbs (68.04kg)	Supermicro Fat Twin 4U 4 node; Enclosure: 448 x 177 x 737mm (17.63" x 6.96" x 29") Package: 719 x 381 x 1077mm (28.3" x 15" x 42.4") Gross Weight: 200lbs (90.72kg) Net Weight: 150lbs (68.04kg)	Supermicro Fat Twin 4U 4 node; Enclosure: 448 x 177 x 737mm (17.63" x 6.96" x 29") Package: 719 x 381 x 1077mm (28.3" x 15" x 42.4") Gross Weight: 200lbs (90.72kg) Net Weight: 150lbs (68.04kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

<sup>1</sup> 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

<sup>††</sup> For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.

# FAT TWIN<sup>®</sup>

(For Complete System Only)

FatTwin™  
HADOOP, 4-Node, 12x 3.5" HDD per node  
Front I/O, 16 DIMMs



FatTwin™  
HADOOP, 4-Node,  
12x 3.5" HDD per node



FatTwin™  
HADOOP, 4-Node, 12x 3.5" HDD per node  
Front I/O, 16 DIMMs



MODEL	SYS-F618H6-FT+	SYS-F618H6-FTL+	SYS-F618H6-FTPT+ SYS-F618H6-FTPTL+
Processor Support	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Quad set of Dual Intel® Xeon® processor E5-2600 v3, Intel® Xeon® processor E5-2600 v4. Dual Socket R3 (LGA 2011) supported, CPU TDP support Up to 145W, 1 QPI up to 9.6GT/s	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; Dual Socket R3 (LGA 2011) supported, CPU TDP support Up to 145W, QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Hadoop</li> </ul>	<ul style="list-style-type: none"> <li>• Hadoop</li> </ul>	<ul style="list-style-type: none"> <li>• Hadoop</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 4 nodes in 4U</li> <li>• 12x 3.5" drives</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• Tool free drive trays and top cover</li> <li>• Enhance internal chassis airflow</li> <li>• Fan LED indicator</li> </ul>	<ul style="list-style-type: none"> <li>• 4 nodes in 4U</li> <li>• 12x 3.5" drives</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> </ul>	<ul style="list-style-type: none"> <li>• 4 nodes in 4U</li> <li>• 12x 3.5" drives</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• Tool free drive trays and top cover</li> <li>• Enhance internal chassis airflow</li> <li>• Fan LED indicator</li> </ul>
Serverboard	Quad set of SUPER● X10DRFF-CG	Quad set of SUPER● X10DRFF-CG	Quad set of SUPER● X10DRFF-CTG
Chipset	Quad set of Intel® C612 chipset	Quad set of Intel® C612 chipset	Quad set of Intel® C612 chipset
System Memory (Max.)*	Quad set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Quad set of 1TB Registered ECC, DDR3-1866MHz 128GB Unbuffered ECC/non-ECC, DDR3-1866MHz in 16 DIMM slots	Quad set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	Quad set of 2 PCI-E 3.0 x8 LP	Quad set of 2 PCI-E 3.0 x8(LP)	Quad set of 2 PCI-E 3.0 x8 LP
Onboard Storage Controller	Quad set of Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,10; 3008 SW controller for 8 SAS3 (12Gbps) ports; RAID 0,1,10	Quad set of Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,10; Broadcom® 3008 SW controller for 8 SAS3 (12Gbps) ports; RAID 0,1,10	Quad set of Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,10; 3008 SW controller for 8 SAS3 (12Gbps) ports; RAID 0,1,10
Connectivity	Quad set of Dual LAN ports with Intel® i350 Gigabit Ethernet controller	Quad set of Intel® i350 Dual Port Gigabit Ethernet	Quad set of Dual 10GBase-T with Intel® X540 10GbE controller
VGA/Audio	Quad set of AST2400 VGA	Quad set of Aspeed AST2400 BMC	Quad set of AST2400 VGA
Management	Quad set of IPMI 2.0+ KVM with dedicated LAN, SuperDoctor®, Watch Dog	Quad set of IPMI2.0, SPM, SUM, SuperDoctor® 5, Watchdog	Quad set of IPMI 2.0+ KVM with dedicated LAN, SuperDoctor®, Watch Dog
Drive Bays	Quad set of Up to 8 Fixed 3.5" SAS3/SATA3 + 4 Fixed 3.5" SATA3 HDDs per U and optional 2.5" drives mounted in the PCI-e slot	Quad set of up to 8 Fixed 3.5" SAS3/SATA3 + 4 Fixed 3.5" SATA3 HDDs per U and optional 2.5" drives mounted in the PCI-e slot	Quad set of Up to 8 Fixed 3.5" SAS3/SATA3 + 4 Fixed 3.5" SATA3 HDDs per U and optional 2.5" drives mounted in the PCI-e slot
Peripheral Bays	Optional 2.5" drives mounted in the PCI-E slots	Optional 2.5" drives mounted in the PCIe slots	Optional 2.5" drives mounted in the PCI-E slots
Power Supply	2x 2000W Redundant Titanium Level (96%+) power supplies with I <sup>2</sup> C & PMBus	2x 2000W high-efficiency titanium redundant power supply w/ PMBus	2x 2000W Redundant Titanium Level (96%+) power supplies with I <sup>2</sup> C & PMBus
Cooling System	8x 80mm heavy duty fans with air shroud and PWM fan speed control	8x 8cm heavy duty fans with air shroud and PWM fan speed control	8x 80mm heavy duty fans with air shroud and PWM fan speed control
Form Factor	4U Rackmount (Recommend 48" depth rack) 448 x 177 x 889mm (17.63" x 6.96" x 35")	4U, 4 Node system; Enclosure: 448 x 177 x 889mm (17.63" x 6.96" x 35") Package: 650 x 300 x 1219mm (25.6" x 11.8" x 48") Gross Weight: 240lbs (108.86kg) Net Weight: 200lbs (90.72kg)	4U Rackmount (Recommend 48" depth rack) 448 x 177 x 889mm (17.63" x 6.96" x 35")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# FAT TWIN®

(For Complete System Only)

FatTwin™  
8-Node, Front I/O  
2x 2.5" HDD per Node



FatTwin™  
8-Node, Front I/O  
2x 2.5" HDD per Node



FatTwin™  
8-Node, 16 DIMMs, Front I/O  
4x 2.5" HDD per Node



MODEL	SYS-F618R2-FC0	SYS-F618R2-FT SYS-F618R2-F72+	SYS-F618R2-FT+
Processor Support	Octal set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Octal set of Intel® Xeon® processor E5-2600 V4 with UPI up to 9.6GT/s	Octal set of Dual Intel® Xeon® processor E5-2600 V4 with UPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Cluster Node</li> <li>Compute Intensive Application</li> <li>Data Center</li> </ul>	<ul style="list-style-type: none"> <li>Data Center</li> <li>HPC cluster computer nodes</li> <li>Compute Intensive Application</li> </ul>	<ul style="list-style-type: none"> <li>Data Center</li> <li>Compute Intensive Application</li> <li>HPC cluster computer nodes</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>1 Low-profile PCI-E x16 slot</li> <li>1620W Redundant <b>Platinum Level</b> high-efficiency power supplies</li> <li>2 Gigabit Ethernet Ports</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>SAS 3.0 (12 Gbps) support (-FC0)</li> </ul>	<ul style="list-style-type: none"> <li>1 Low-profile PCI-E x16 slot support up to 22 cores</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>SATA 3.0 (6Gbps) support</li> <li>1620W Redundant Platinum Level high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>support up to 22 cores</li> <li>16 DIMM support</li> <li>1 x16, 1 x4, and 2 x8 optional expansion slots</li> <li>RAID 0,1,10 (optional with 4 x 2.5" drive bays installed)</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>2000W Redundant Platinum Level high-efficiency power supplies</li> </ul>
Serverboard	SUPER● X10DRFF-C	SUPER● X10DRFF	SUPER● X10DRFF-iG
Chipset	Intel® C612 Chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Octal set of up to 1TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 8 DIMM slots	Octal set of Up to 512GB, DDR4-2400MHz in 8 DIMM slots	Octal set of 512GB Registered ECC, DDR4-2400MHz in 16 DIMM slots
Expansion Slots	Octal set of 1 PCI-E 3.0 x16 (low-profile)	1 PCI-E 3.0 x16(LP)	Octal set of 1 PCI-E 3.0 x16, 1 PCI-E 2.0 x4, and 2 PCI-E 3.0 x8(optional)
Onboard Storage Controller	Octal set of 3008 controller for 4 SAS 3.0 (12Gbps) ports; RAID 0,1,10;	-FT: Octal set of Intel® C612 chipset supports SATA3 (6Gbps) with RAID 0, 1 -F72+: Octal set of Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10; Broadcom® 2208 SAS2 controller onboard; HW RAID 0, 1, 5, 6, 10, 50 support	Octal set of Intel® C612 chipset supports SATA3 (6Gbps) with RAID 0, 1, 5, 10
Connectivity	Octal set of Dual Intel® i210 single port Gigabit Ethernet LAN	Octal set of 2x 1GigE LAN Ports	Octal set of 2x GbE LAN ports and 1x Dedicated IPMI port
VGA/Audio	Octal set of AST2400 VGA	Octal set of 1x VGA, Matrox® G200eW video controller	Octal set of Asped AST2400 BMC
Management	Octal set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Octal set of IPMI 2.0+ KVM with dedicated LAN, SuperDoctor®, Watch Dog	Octal set of IPMI2.0, SPM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	Octal set of 2x 2.5" hot-swap SAS3 drive bays	Octal set of 2x 2.5"	Octal set of 4x 2.5" HDD
Peripheral Bays	N/A	N/A	N/A
Power Supply	4x Redundant 1620W <b>Platinum Level</b> power supplies with I <sup>2</sup> C & PMBus	1620W high-efficiency redundant power supply with PMBus	4x 2000W Redundant Power Supplies Titanium Level (96%)
Cooling System	8x 80mm heavy duty fans with air shroud & PWM fan speed control	8x 8cm 9.5k RPM rear fans	8x 8cm 9.5k RPM rear fans
Form Factor	4U Rackmount 448 x 177 x 737mm (17.63" x 6.96" x 29")	448 x 177 x 737mm (17.63" x 6.96" x 29")	Fat Twin 4U 8 node; Enclosure: 737 x 177 x 448mm (29" x 6.96" x 17.65") Package: 1076 x 380 x 720mm (42.38" x 14.95" x 28.35") Gross Weight: 200lbs (90.72kg) Net Weight: 150lbs (68.04kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# FATTWIN®

(For Complete System Only)

FatTwin™  
8-Node, 16 DIMMs, Front I/O  
4x 2.5" HDD per Node



FatTwin™  
8-Node, 16 DIMMs, Front I/O  
6x 2.5" HDD per Node



FatTwin™  
8-Node, Rear I/O  
6x 2.5" HDD per Node



MODEL	SYS-F618R2-FTPT+	SYS-F618R2-R72+ SYS-F618R2-RT+	SYS-F618R2-R72PT+ SYS-F618R2-RTPT+
Processor Support	Octal set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Octal set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Octal set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Data Center</li> <li>HPC cluster computer nodes</li> <li>Compute Intensive Application</li> </ul>	<ul style="list-style-type: none"> <li>Cloud and Virtualization</li> <li>Cloud Computing</li> <li>Cluster Node</li> <li>Data Center</li> <li>HPC cluster computer nodes</li> </ul>	<ul style="list-style-type: none"> <li>Cloud and Virtualization</li> <li>Cloud Computing</li> <li>Cluster Node</li> <li>Data Center</li> <li>HPC cluster computer nodes</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>1x8 and 1x4 PCI-E slots</li> <li>4x 2.5" HDD per node</li> <li>16 DIMM slots</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>RAID 0,1 support</li> <li>2000W Titanium Level redundant high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>1 Low-profile PCI-E x16 &amp; 1 MicroLP PCI-E x8 slots</li> <li>1620W Redundant Platinum Level high-efficiency power supplies</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>16 DIMM slots</li> <li>6x 2.5" hot-swap SAS2/SATA drive bays per node</li> </ul>	<ul style="list-style-type: none"> <li>1 Low-profile PCI-E x16 &amp; 1 MicroLP PCI-E x8 slots</li> <li>1620W Redundant Platinum Level high-efficiency power supplies</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>16 DIMM slots</li> <li>6x 2.5" hot-swap SAS2/SATA drive bays per node</li> </ul>
Serverboard	SUPER● X10DRFF-iTG	SUPER● X10DRFR	SUPER● X10DRFR-NT
Chipset	Intel® C612 Chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	Octal set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Octal set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Octal set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	Octal set of 1 PCI-E 3.0 x8 (low-profile) and 1 PCI-E 2.0 x4 or 2 PCI-E 3.0 x8 (optional)	Octal set of 1 PCI-E 3.0 x16 (low-profile) and 1 PCI-E 3.0 x8 (MicroLP)	Octal set of 1 PCI-E 3.0 x16 (low-profile) and 1 PCI-E 3.0 x8 (MicroLP)
Onboard Storage Controller	Octal set of Intel® C612 controller for 10 SATA3 (6Gbps) ports; RAID 0,1,5,10	-R72+: Octal set of 2208 controller for 6 SAS 2.0 (6Gbps) ports; RAID 0,1,5,6,10,50 -RT+: Octal set of Intel® C612 controller for 6 SATA3 (6Gbps) ports; RAID 0,1,5,10	-R72PT+: Octal set of 2208 controller for 6 SAS 2.0 (6Gbps) ports; RAID 0,1,5,6,10,50 -RTPT+: Octal set of Intel® C612 controller for 6 SATA3 (6Gbps) ports; RAID 0,1,5,10
Connectivity	Octal set of Dual LAN with Intel® X540 10GBase-T Ethernet Controller	Octal set of Dual LAN ports with Intel® i350 Gigabit Ethernet controller	Octal set of Dual 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector
VGA/Audio	Octal set of AST2400 VGA	Octal set of AST2400 VGA	Octal set of AST2400 VGA
Management	Octal set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Octal set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Octal set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	Octal set of 4x 2.5" SATA3 fixed drive bays	Octal set of 6x 2.5" hot-swap SAS2/SATA3 drive bays -RT+:	Octal set of 6x 2.5" hot-swap SAS2/SATA3 drive bays
Peripheral Bays	N/A	N/A	N/A
Power Supply	4x Redundant 2000W Titanium Level (96%+) Digital power supplies with I <sup>2</sup> C & PMBus	4x Redundant 1620W Platinum Level (94%+) power supplies with I <sup>2</sup> C & PMBus	4x Redundant 1620W Platinum Level (94%+) power supplies with I <sup>2</sup> C & PMBus
Cooling System	8x 80mm heavy duty fans with air shroud & PWM fan speed control	Octal set of 3x 40mm counter-rotating fans with air shroud & PWM fan speed control	Octal set of 3x 40mm counter-rotating fans with air shroud & PWM fan speed control
Form Factor	4U Rackmount 448 x 177 x 737mm (17.63" x 6.96" x 29")	4U Rackmount 448 x 177 x 737mm (17.63" x 6.96" x 29")	4U Rackmount 448 x 177 x 737mm (17.63" x 6.96" x 29")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

8-Node Rear I/O, 6x 2.5" HDD per Node



Rear View

MODEL	SYS-F618R2-RCO+ SYS-F618R2-RC1+	SYS-F618R2-RTN+	SYS-F618R2-RCOPT+ SYS-F618R2-RC1PT+ SYS-F618R2-RTPTN+
Processor Support	Octal set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Octal set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Octal set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Cloud and Virtualization</li> <li>Cloud Computing</li> <li>Cluster Node</li> <li>Data Center</li> <li>HPC cluster computer nodes</li> </ul>	<ul style="list-style-type: none"> <li>Cloud and Virtualization</li> <li>Cloud Computing</li> <li>Cluster Node</li> <li>Data Center</li> <li>HPC cluster computer nodes</li> </ul>	<ul style="list-style-type: none"> <li>Cloud and Virtualization</li> <li>Cloud Computing</li> <li>Cluster Node</li> <li>Data Center</li> <li>HPC cluster computer nodes</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>145W CPU support</li> <li>Supports 16 DIMM DDR4 up to 2400MHz</li> <li>2000W High-Efficiency (96%) <b>Titanium Level</b> Redundant Power Supplies</li> <li>6 x 2.5" Hot-Swap SAS/SATA drives (Per Node)</li> <li>Optional <b>NVMe</b> support</li> <li>3008 controller onboard</li> </ul>	<ul style="list-style-type: none"> <li>1 Low-profile PCI-E x16 slot</li> <li>145W CPU support</li> <li>16 DIMM slots</li> <li>2000W Redundant <b>Titanium Level</b> (96%+) high-efficiency power supplies</li> <li>2x 1G or 10G Ethernet</li> <li><b>NVMe</b> Support</li> </ul>	<ul style="list-style-type: none"> <li>145W CPU support</li> <li>Supports 16 DIMM DDR4 up to 2400MHz</li> <li>2000W High-Efficiency (96%) <b>Titanium Level</b> Redundant Power Supplies</li> <li>6 x 2.5" Hot-Swap SAS/SATA drives (Per Node)</li> <li>Optional <b>NVMe</b> support</li> </ul>
Serverboard	SUPER● X10DRFR-N	SUPER● X10DRFR-N	SUPER● X10DRFR-NT
Chipset	Intel® C612 Chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	Octal set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Octal set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Octal set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	Octal set of 1 PCI-E 3.0 x16 (LP) and 1 PCI-E 3.0 x8 (MicroLP)	Octal set of 1 PCI-E 3.0 x16 (LP) and 1 PCI-E 3.0 x8 (MicroLP)	Octal set of 1 PCI-E 3.0 x16 (LP) and 1 PCI-E 3.0 x8 (MicroLP)
Onboard Storage Controller	<b>-RCO+:</b> Octal set of 3008 controller for 6 SAS 3.0 (12Gbps) ports; RAID 0,1,10; <b>-RC1+:</b> Octal set of 6 SAS3 (12Gbps) ports; or 4x SAS3 + 2x NVMe optional SSDs; SAS3 support via 3108; RAID 0,1,5,6,10,50	Octal set of Intel® C612 controller for 10 SATA3 (6Gbps) ports; RAID 0,1,5,10	<b>-RCOPT+:</b> Octal set of 3008 controller for 6 SAS 3.0 (12Gbps) ports; RAID 0,1,10; <b>-RC1PT+:</b> Octal set of 6 SAS3 (12Gbps) ports; or 4x SAS3 + 2x NVMe optional SSDs; SAS3 support via 3108; RAID 0,1,5,6,10,50 <b>-RTPTN+:</b> Octal set of Intel® C612 controller for 10 SATA3 (6Gbps) ports; RAID 0,1,5,10
Connectivity	Octal set of Dual LAN ports with Intel® i350 Gigabit Ethernet controller	Octal set of Dual LAN ports with Intel® i350 Gigabit Ethernet controller	Octal set of Dual 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector
VGA/Audio	Octal set of AST2400 VGA	Octal set of AST2400 VGA	Octal set of AST2400 VGA
Management	Octal set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Octal set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Octal set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	Octal set of 6x SAS3/SATA3; or, 4x SAS3/SATA3	Octal set of 6x 2.5" hot-swap SATA3 drive bays; or, 4x SATA3	Octal set of 6x SAS3/SATA3 or 4x SAS3/SATA3
Peripheral Bays	Octal set of 2x NVMe optional	Octal set of 2x NVMe optional	Octal set of 2x NVMe optional
Power Supply	4x Redundant 2000W <b>Titanium Level</b> (96%+) power supplies with I <sup>2</sup> C & PMBus	4x Redundant 2000W <b>Titanium Level</b> (96%+) power supplies with I <sup>2</sup> C & PMBus	4x Redundant 2000W <b>Titanium Level</b> (96%+) power supplies with I <sup>2</sup> C & PMBus
Cooling System	Octal set of 3x 40mm counter-rotating fans with air shroud & PWM fan speed control	Octal set of 3x 40mm counter-rotating fans with air shroud & PWM fan speed control	Octal set of 3x 40mm counter-rotating fans with air shroud & PWM fan speed control
Form Factor	4U Rackmount 448 x 177 x 737mm (17.63" x 6.96" x 29")	4U Rackmount 448 x 177 x 737mm (17.63" x 6.96" x 29")	4U Rackmount 448 x 177 x 737mm (17.63" x 6.96" x 29")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

4 DP Nodes, 3 GPUs per Node, Front I/O, 16 DIMMs



MODEL	SYS-F628G2-FC0+ SYS-F628G2-FC0PT+	SYS-F628G2-FT+ SYS-F628G2-FTPT+
Processor Support	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>• 3D Rendering</li> <li>• CAD/CAM/CAE</li> <li>• Compute Intensive Application</li> <li>• Digital Content Creation</li> <li>• GPU server</li> <li>• High-performance computing</li> <li>• Up to 3 GPUs per node* (*2x K80 per node)</li> </ul>	<ul style="list-style-type: none"> <li>• 3D Rendering</li> <li>• CAD/CAM/CAE</li> <li>• Compute Intensive Application</li> <li>• Digital Content Creation</li> <li>• GPU server</li> <li>• High-performance computing</li> <li>• Up to 3 GPUs per node* (*2x K80 per node)</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 145W CPU support</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• Up to 2 add-on cards</li> <li>• SAS3 (12Gbps) support</li> </ul>	<ul style="list-style-type: none"> <li>• 145W CPU support</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• Up to 2 add-on cards</li> <li>• SAS3 (12Gbps) support</li> </ul>
Serverboard	-FC0+: SUPER● X10DRFF-CG -FC0PT+: SUPER● X10DRFF-CTG	-FT+: SUPER● X10DRFF-iG -FTPT+: SUPER● X10DRFF-iTG
Chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	Quad set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Quad set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	Quad set of 3 PCI-E 3.0 x16 FH/FL Double Width + 2 PCI-E 3.0 x8 LP	Quad set of 3 PCI-E 3.0 x16 FH/FL Double Width + 2 PCI-E 3.0 x8 LP
Onboard Storage Controller	Quad set of 3008 SW controller for 8 SAS3 (12 Gbps) ports; RAID 0,1,10	Quad set of Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	-FC0+: Quad set of Dual LAN with Intel® i350 Gigabit Ethernet Controller; -FC0PT+: Quad set of Dual 10GBase-T with Intel® X540 10GbE Controller	-FT+: Quad set of Dual LAN with Intel® i350 Gigabit Ethernet Controller; -FTPT+: Quad set of Dual 10GBase-T with Intel® X540 10GbE Controller
VGA/Audio	Quad set of AST2400 VGA	Quad set of AST2400 VGA
Management	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	Quad set of 6x 2.5" hot-swap SATA3/SAS3 drive bays	Quad set of 6x 2.5" hot-swap SATA3/SAS3 drive bays
Peripheral Bays	N/A	N/A
Power Supply	4x Redundant 2000W Titanium Level power supplies with I <sup>2</sup> C & PMBus	4x Redundant 2000W Titanium Level power supplies with I <sup>2</sup> C & PMBus
Cooling System	8x 80mm heavy duty fans with air shroud and PWM fan speed control and additional fans available	8x 80mm heavy duty fans with air shroud and PWM fan speed control and additional fans available
Form Factor	4U Rackmount: 448 x 177 x 889mm (17.63" x 6.96" x 35")	4U Rackmount: 448 x 177 x 889mm (17.63" x 6.96" x 35")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

4 DP Nodes, 3 GPUs per Node, Front I/O, 16 DIMMs



MODEL	SYS-F628G3-FC0+ SYS-F628G3-FC0PT+	SYS-F628G3-FT+ SYS-F628G3-FTPT+
Processor Support	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>3D Rendering</li> <li>CAD/CAM/CAE</li> <li>Compute Intensive Application</li> <li>Digital Content Creation</li> <li>GPU server</li> <li>High-performance computing</li> </ul>	<ul style="list-style-type: none"> <li>3D Rendering</li> <li>CAD/CAM/CAE</li> <li>Compute Intensive Application</li> <li>Digital Content Creation</li> <li>GPU server</li> <li>High-performance computing</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Up to 3 GPUs per node* (*2x K80 per node)</li> <li>145W CPU support</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>Up to 2 add-on cards</li> <li>SAS3 (12Gbps) support</li> </ul>	<ul style="list-style-type: none"> <li>Up to 3 GPUs per node* (*2x K80 per node)</li> <li>145W CPU support</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>Up to 2 add-on cards</li> <li>SAS3 (12Gbps) support</li> </ul>
Serverboard	-FC0+: SUPER● X10DRFF-CG -FC0PT+: SUPER● X10DRFF-CTG	-FT+: SUPER● X10DRFF-iG -FTPT+: SUPER● X10DRFF-iTG
Chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	Quad set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Quad set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	Quad set of 3 PCI-E 3.0 x16 FH/FL Double Width + 2 PCI-E 3.0 x8 LP	Quad set of 3 PCI-E 3.0 x16 FH/FL Double Width + 2 PCI-E 3.0 x8 LP
Onboard Storage Controller	Quad set of 3008 SW controller for 8 SAS3 (12 Gbps) ports; RAID 0,1,10	Quad set of Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	-FC0+: Quad set of Dual LAN with Intel® i350 Gigabit Ethernet Controller; -FC0PT+: Quad set of Dual LAN with Intel® X540 10GBase-T Ethernet Controller	-FT+: Quad set of Dual LAN with Intel® i350 Gigabit Ethernet Controller; -FTPT+: Quad set of Dual LAN with Intel® X540 10GBase-T Ethernet Controller
VGA/Audio	Quad set of AST2400 VGA	Quad set of AST2400 VGA
Management	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	Quad set of 2x 3.5" hot-swap SATA3/SAS3 drive bays	Quad set of 2x 3.5" hot-swap SATA3/SAS3 drive bays
Peripheral Bays	N/A	N/A
Power Supply	4x Redundant 2000W Titanium Level power supplies with I <sup>2</sup> C & PMBus	4x Redundant 2000W Titanium Level power supplies with I <sup>2</sup> C & PMBus
Cooling System	8x 80mm heavy duty fans with air shroud and PWM fan speed control and additional fans available	8x 80mm heavy duty fans with air shroud and PWM fan speed control and additional fans available
Form Factor	4U Rackmount : 448 x 177 x 889mm (17.63" x 6.96" x 35")	4U Rackmount : 448 x 177 x 889mm (17.63" x 6.96" x 35")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



8-Node Front I/O, Serviceability & Efficiency!

4 DP Nodes, Front I/O, 16 DIMMs

4 DP Nodes, Front I/O, 16 DIMMs



MODEL	SYS-F628R2-FC0	SYS-F628R2-FC0+ SYS-F628R2-FC0PT+	SYS-F628R2-FT+ SYS-F628R2-FTPT+
Processor Support	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Cluster Node</li> <li>Data Center</li> <li>HPC</li> <li>Internet</li> </ul>	<ul style="list-style-type: none"> <li>Data Center</li> <li>Compute Intensive Application</li> </ul>	<ul style="list-style-type: none"> <li>Data Center</li> <li>Compute Intensive Application</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>1 Low-profile PCI-E x16 slot</li> <li>1280W <b>Platinum Level</b> redundant high-efficiency power supplies</li> <li>2 Gigabit Ethernet Ports</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>3008 SAS 3.0 (12 Gbps) support (-FC0)</li> </ul>	<ul style="list-style-type: none"> <li>2x PCI-E Gen 3.0 x8 (LP)</li> <li>16 DIMM slots</li> <li>1280W <b>Platinum Level</b> redundant high-efficiency power supplies</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>SAS3 (12 Gbps) support</li> </ul>	<ul style="list-style-type: none"> <li>2x PCI-E Gen 3.0 x8 (LP)</li> <li>16 DIMM slots</li> <li>1280W <b>Platinum Level</b> redundant high-efficiency power supplies</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>SAS3 (12 Gbps) support</li> </ul>
Serverboard	SUPER● X10DRFF-C	-FC0+: SUPER● X10DRFF-CG -FC0PT+: SUPER● X10DRFF-CGT	-FT+: SUPER● X10DRFF-iG -FTPT+: SUPER● X10DRFF-iGT
Chipset	Intel® C612 Chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	Quad set of up to 1TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 8 DIMM slots	Quad set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Quad set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	Quad set of 1 PCI-E 3.0 x16 (low-profile)	Quad set of 2 PCI-E 3.0 x8 (low-profile)	Quad set of 2 PCI-E 3.0 x8 (low-profile)
Onboard Storage Controller	Quad set of 3008 controller for 8 SAS 3.0 (12Gbps) ports; RAID 0,1,10	Quad set of 3008 controller for 8 SAS3 (12 Gbps) ports; RAID 0,1,10	Quad set of Intel® C612 controller for 10 SATA3 (6Gbps) ports; RAID 0,1,5,10
Connectivity	Quad set of Dual Intel® i210 single port Gigabit Ethernet LAN	-FC0+: Quad set of Dual 1GbE LAN ports and 1x Dedicated IPMI port -FC0PT+: Quad set of Dual LAN with Intel® X540 10GBase-T Ethernet Controller	-FT+: Quad set of Dual 1GbE LAN ports and 1x Dedicated IPMI port -FTPT+: Quad set of Dual LAN with Intel® X540 10GBase-T Ethernet Controller
VGA/Audio	Quad set of AST2400 VGA	Quad set of AST2400 VGA	Quad set of AST2400 VGA
Management	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	Quad set of 8x 2.5" hot-swap SAS3 drive bays	Quad set of 6x 2.5" SAS3/SATA3 drive bays	Quad set of 6x 2.5" SAS3/SATA3 drive bays
Peripheral Bays	N/A	N/A	N/A
Power Supply	4x Redundant 1280W <b>Platinum Level</b> (95%+) Digital power supplies with I <sup>2</sup> C & PMBus	4x Redundant 1280W <b>Platinum Level</b> (95%+) Digital power supplies with I <sup>2</sup> C & PMBus	4x Redundant 1280W <b>Platinum Level</b> (95%+) Digital power supplies with I <sup>2</sup> C & PMBus
Cooling System	Quad set of 8x 80mm heavy duty fans with air shroud & PWM fan speed control	Quad set of 8x 80mm heavy duty fans with air shroud & PWM fan speed control	Quad set of 8x 80mm heavy duty fans with air shroud & PWM fan speed control
Form Factor	4U Rackmount 448 x 177 x 737mm (17.63" x 6.96" x 29")	4U Rackmount 448 x 177 x 737mm (17.63" x 6.96" x 29")	4U Rackmount 448 x 177 x 737mm (17.63" x 6.96" x 29")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

4 DP Nodes, 12x 2.5" HDD/Node

8-Node Front I/O, Serviceability &amp; Efficiency!

4 DP Nodes, Front I/O, 16 DIMMs



MODEL	SYS-F628R2-RT+ SYS-F628R2-RTB+ SYS-F628R2-RTBPT+	SYS-F628R3-FC0	SYS-F628R3-FC0+ SYS-F628R3-FC0PT+
Processor Support	Quad set of Intel® Xeon® processor E5-2600 V3 with UPI up to 9.6GT/s	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Cluster Node</li> <li>Data Center</li> <li>Storage Nodes</li> </ul>	<ul style="list-style-type: none"> <li>Cluster Node</li> <li>Compute Intensive Application</li> <li>Data Center</li> <li>Email Server</li> <li>Mail Server</li> </ul>	<ul style="list-style-type: none"> <li>Data Center</li> <li>Compute Intensive Application</li> <li>Cluster Node</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>1280W Platinum Level redundant high-efficiency power supplies</li> <li>16 DIMM sockets</li> <li>2 Gigabit Ethernet Ports</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>Broadcom® 2208 controller onboard</li> <li>RAID 0,1,5,6,10,50,60</li> </ul>	<ul style="list-style-type: none"> <li>1 Low-profile PCI-E x16 slot</li> <li>1280W Platinum Level redundant high-efficiency power supplies</li> <li>2 Gigabit Ethernet Ports</li> <li>4x 3.5" SATA or SAS drives per node</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>3008 SAS 3.0 (12 Gbps) support (-FC0)</li> </ul>	<ul style="list-style-type: none"> <li>2x PCI-E Gen 3.0 x8 (LP)</li> <li>RAID 0,1</li> <li>Supports 16 DIMM DDR4 up to 2400MHz</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>1280W Platinum Level redundant high-efficiency power supplies</li> <li>3008 controller</li> </ul>
Serverboard	SUPER® X10DRFR	SUPER® X10DRFF-C	-FC0+: SUPER® X10DRFF-CG -FC0PT+: SUPER® X10DRFF-CGT
Chipset	Intel® C612 chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	Quad set of Up to 1TB Registered ECC, DDR4-2133MHz in 16 DIMM slots	Quad set of up to 1TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 8 DIMM slots	Quad set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	-RT+: Quad set of 1 PCI-E 3.0 x16; 1 PCI-E 3.0 x8 connector for SMC add-on cards; 1 PCI-E 3.0 x8 (Micro Low Profile); -RTB+: Quad set of 1x PCI-E 3.0 x16 (LP) + 1x Micro LP	Quad set of 1 PCI-E 3.0 x16 (low-profile)	Quad set of 2 PCI-E 3.0 x8 (low-profile)
Onboard Storage Controller	Quad set of Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Quad set of 3008 controller for 4 SAS 3.0 (12Gbps) ports; RAID 0,1,10	Quad set of Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10; 3008 SW controller for 8 SAS3 (12Gbps) ports; RAID 0,1,10
Connectivity	Quad set of 2x 1GigE LAN Ports	Quad set of Dual Intel® i210 single port Gigabit Ethernet LAN	-FC0+: Quad set of Dual 1GbE LAN ports and 1x Dedicated IPMI port -FC0PT+: Quad set of Dual 10GBased-T LAN ports and 1x Dedicated IPMI port
VGA/Audio	Quad set of 1 VGA, 1 Aspeed AST2400 BMC;	Quad set of AST2400 VGA	Quad set of AST2400 VGA
Management	Quad set of Intel® Node Manager; IPMI2.0; NMI; SMCBU and SMM; SuperDoctor V; Watch Dog;	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	Quad set of 12x 2.5"	Quad set of 4x 3.5" hot-swap SAS3 drive bays	Quad set of 2x 3.5" SAS3/SATA3 drive bays
Peripheral Bays	N/A	N/A	N/A
Power Supply	1280W Redundant High-efficiency Digital Power Supplies w/ PMBus 1.2	4x Redundant 1280W Platinum Level (95%+) Digital power supplies with I <sup>2</sup> C & PMBus	4x Redundant 1280W Platinum Level (95%+) Digital power supplies with I <sup>2</sup> C & PMBus
Cooling System	Quad set of 2x 8cm 11k RPM middle fans per node	Quad set of 8x 80mm heavy duty hot-swap fans with air shroud & PWM fan speed control	Quad set of 8x 80mm heavy duty fans with air shroud & PWM fan speed control
Form Factor	null	4U Rackmount 448 x 177 x 737mm (17.63" x 6.96" x 29")	4U Rackmount 448 x 177 x 737mm (17.63" x 6.96" x 29")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

8 DP Nodes, Front I/O,  
Serviceability & Efficiency

4 DP Nodes,  
Front I/O, 16 DIMMs

4-Node Rear I/O  
8 Hot-swap 3.5" HDDs per 1U



MODEL	SYS-F628R3-FT	SYS-F628R3-FT+ SYS-F628R3-FTPT+	SYS-F628R3-R72B+ SYS-F628R3-R72BPT+
Processor Support	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Cluster Node</li> <li>Compute Intensive Application</li> <li>Data Center</li> <li>Email Server</li> <li>Mail Server</li> </ul>	<ul style="list-style-type: none"> <li>Data Center</li> <li>Compute Intensive Application</li> <li>Cluster Node</li> </ul>	<ul style="list-style-type: none"> <li>Cloud Computing</li> <li>Cluster Node</li> <li>Compute Intensive Storage Environments</li> <li>Corporate Database</li> <li>Data Center</li> <li>Database Applications</li> <li>Server Appliance</li> <li>Virtualization Server</li> <li>Web/Collocation Services</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>1 Low-profile PCI-E x16 slot</li> <li>1280W <b>Platinum Level</b> redundant high-efficiency power supplies</li> <li>2 Gigabit Ethernet Ports</li> <li>4x 3.5" SATA or SAS drives per node</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>3008 SAS 3.0 (12 Gbps) support (-FC0)</li> </ul>	<ul style="list-style-type: none"> <li>2x PCI-E Gen 3.0 x8 (LP)</li> <li>RAID 0,1</li> <li>16 DIMM slots</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>1280W <b>Platinum Level</b> redundant high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>1 Low-profile PCI-E x16 &amp; 1 MicroLP PCI-E x8 slots</li> <li>145W CPU support</li> <li>16 DIMM slots</li> <li>8 Hot-swap 3.5" SATA/SAS drive bays</li> <li>IPMI 2.0 management with dedicated LAN</li> <li>2208 controller for 8 SAS2 hot-swappable drives</li> </ul>
Serverboard	SUPER● X10DRFF	-FT+: SUPER● X10DRFF-iG -FTPT+: SUPER● X10DRFF-iGT	-R72B+: SUPER● X10DRFR -R72BPT+: SUPER● X10DRFR-NT
Chipset	Intel® C612 Chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	Quad set of up to 1TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 8 DIMM slots	Quad set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Quad set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	Quad set of 1 PCI-E 3.0 x16 (low-profile)	Quad set of 2 PCI-E 3.0 x8 (low-profile)	Quad set of 1 PCI-E 3.0 x16 (low-profile) and 1 Micro LP PCI-E 3.0 x8
Onboard Storage Controller	Quad set of Intel® C612 controller for 4 SATA3 (6Gbps) ports; RAID 0,1,5,10;	Quad set of Intel® C612 controller; RAID 0,1	Quad set of 2208 controller for 8 SAS2 (6Gbps) ports; RAID 0,1,5,6,10,50,60
Connectivity	Quad set of Dual Intel® i210 single port Gigabit Ethernet LAN	-FT+: Quad set of Dual 1GbE LAN ports and 1x Dedicated IPMI port -FTPT+: Quad set of Dual 10GBase-T LAN ports and 1x Dedicated IPMI port	-R72B+: Quad set of Dual LAN ports with Intel® i350 Gigabit Ethernet controller -R72BPT+: Quad set of Dual 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector
VGA/Audio	Quad set of AST2400 VGA	Quad set of AST2400 VGA	Quad set of AST2400 VGA
Management	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	Quad set of 4x 3.5" hot-swap SATA3 drive bays	Quad set of 2x 3.5" SATA3 drive bays	Quad set of 8x 3.5" hot-swap SAS2/SATA drive bays
Peripheral Bays	N/A	N/A	N/A
Power Supply	4x Redundant 1280W <b>Platinum Level</b> (95%+) Digital power supplies with I <sup>2</sup> C & PMBus	4x Redundant 1280W <b>Platinum Level</b> (95%+) Digital power supplies with I <sup>2</sup> C & PMBus	4x Redundant 1280W <b>Platinum Level</b> (95%+) Digital power supplies with I <sup>2</sup> C & PMBus
Cooling System	Quad set of 8x 80mm heavy duty hot-swap fans with air shroud & PWM fan speed control	Quad set of 8x 80mm heavy duty fans with air shroud & PWM fan speed control	Quad set of 2x 80mm heavy duty fans with air shroud & PWM fan speed control
Form Factor	4U Rackmount 448 x 177 x 737mm (17.63" x 6.96" x 29")	4U Rackmount 448 x 177 x 737mm (17.63" x 6.96" x 29")	4U Rackmount 448 x 177 x 737mm (17.63" x 6.96" x 29")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

4-Node Rear I/O, 8 Hot-swap 3.5" HDDs per 1U



Rear View

MODEL	SYS-F628R3-RC0B+ SYS-F628R3-RC1B+	SYS-F628R3-RC0BPT+ SYS-F628R3-RC1BPT+	SYS-F628R3-RTBN+ SYS-F628R3-RTBPTN+
Processor Support	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Cloud Computing</li> <li>Cluster Node</li> <li>Compute Intensive Storage Environments</li> <li>Corporate Database</li> <li>Data Center</li> <li>Database Applications</li> <li>Server Appliance</li> <li>Virtualization Server</li> <li>Web/Collocation Services</li> </ul>	<ul style="list-style-type: none"> <li>Cloud Computing</li> <li>Cluster Node</li> <li>Compute Intensive Storage Environments</li> <li>Corporate Database</li> <li>Data Center</li> <li>Database Applications</li> <li>Server Appliance</li> <li>Virtualization Server</li> <li>Web/Collocation Services</li> </ul>	<ul style="list-style-type: none"> <li>Cloud Computing</li> <li>Cluster Node</li> <li>Compute Intensive Storage Environments</li> <li>Corporate Database</li> <li>Data Center</li> <li>Database Applications</li> <li>Server Appliance</li> <li>Virtualization Server</li> <li>Web/Collocation Services</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>1 Low-profile PCI-E x16 &amp; 1 MicroLP PCI-E x8 slots</li> <li>145W CPU support</li> <li>2 Gigabit Ethernet Ports</li> <li>8 Hot-swap 3.5" SATA/SAS drive bays</li> <li>IPMI 2.0 management with dedicated LAN</li> <li>3108 controller (-RC1B+)</li> <li>3008 controller (-RC0B+)</li> </ul>	<ul style="list-style-type: none"> <li>1 Low-profile PCI-E x16 &amp; 1 MicroLP PCI-E x8 slots</li> <li>145W CPU support</li> <li>2 Gigabit Ethernet Ports</li> <li>8 Hot-swap 3.5" SATA/SAS drive bays</li> <li>IPMI 2.0 management with dedicated LAN</li> <li>3108 controller (-RC1BPT+)</li> <li>3008 controller (-RC0BPT+)</li> </ul>	<ul style="list-style-type: none"> <li>1 Low-profile PCI-E x16 &amp; 1 MicroLP PCI-E x8 slots</li> <li>145W CPU support</li> <li>16 DIMM slots</li> <li>8 Hot-swap 3.5" SATA/SAS drive bays</li> <li>IPMI 2.0 management with dedicated LAN</li> <li>NVMe Support</li> </ul>
Serverboard	SUPER● X10DRFR-N	SUPER● X10DRFR-NT	SUPER● X10DRFR-N
Chipset	Intel® C612 Chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	Quad set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Quad set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Quad set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	Quad set of 1 PCI-E 3.0 x16 (low-profile) and 1 Micro LP PCI-E 3.0 x8	Quad set of 1 PCI-E 3.0 x16 (low-profile) and 1 Micro LP PCI-E 3.0 x8	Quad set of 1 PCI-E 3.0 x16 (low-profile) and 1 PCI-E 3.0 x8 (Micro LP)
Onboard Storage Controller	<p>-RC0B+: Quad set of Broadcom 3008 SAS 3.0 (12Gbps); SW RAID 0, 1, 10 support</p> <p>-RC1B+: Quad set of Broadcom 3108 SAS 3.0 (12Gbps); HW RAID 0, 1, 5, 6, 10, 50, 60</p>	<p>-RC0BPT+: Quad set of Broadcom 3008 SAS 3.0 (12Gbps); SW RAID 0, 1, 10 support</p> <p>-RC1BPT+: Quad set of Broadcom 3108 SAS 3.0 (12Gbps); HW RAID 0, 1, 5, 6, 10, 50, 60</p>	Quad set of Intel® C612 chipset SATA3 (6Gbps) with RAID 0, 1, 5, 10
Connectivity	Quad set of Dual LAN ports with Intel® i350 Gigabit Ethernet controller	Quad set of Dual 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector	-RTBN+: Quad set of Intel® i350-AM2 Dual Port Gigabit Ethernet -RTBPTN+: Quad set of Intel® X540 Dual Port 10GBase-T
VGA/Audio	Quad set of AST2400 VGA	Quad set of AST2400 VGA	Quad set of AST2400 VGA
Management	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	Quad set of 8x 3.5" hot-swap SAS3/SATA drive bays; or 6x SAS/SATA + 2x NVMe optional	Quad set of 8x 3.5" hot-swap SAS3/SATA drive bays; or 6x SAS/SATA + 2x NVMe optional	Quad set of 8x 3.5" hot-swap SATA3 drive bays; or 6x SATA + 2x NVMe
Peripheral Bays	N/A	N/A	N/A
Power Supply	Quad set of Redundant 1280W Platinum Level (95%+) Digital power supplies with I <sup>2</sup> C & PMBus	Quad set of Redundant 1280W Platinum Level (95%+) Digital power supplies with I <sup>2</sup> C & PMBus	Quad set of Redundant 1280W Platinum Level (95%+) Digital power supplies with I <sup>2</sup> C & PMBus
Cooling System	Quad set of 2x 80mm heavy duty fans with air shroud & PWM fan speed control	Quad set of 2x 80mm heavy duty fans with air shroud & PWM fan speed control	Quad set of 2x 80mm heavy duty fans with air shroud & PWM fan speed control
Form Factor	4U Rackmount 448 x 177 x 737mm (17.63" x 6.96" x 29")	4U Rackmount 448 x 177 x 737mm (17.63" x 6.96" x 29")	4U Rackmount 448 x 177 x 737mm (17.63" x 6.96" x 29")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# FATTWIN®

(For Complete System Only)

4-Node Rear I/O, 8 Hot-swap 3.5" HDDs per 1U



MODEL	SYS-F648G2-FC0+ SYS-F648G2-FC0PT+	SYS-F648G2-FT+ SYS-F648G2-FTPT+
Processor Support	<b>Twin set of</b> Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	<b>Twin set of</b> Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>• 3D Rendering</li> <li>• CAD/CAM/CAE</li> <li>• Compute Intensive Application</li> <li>• Digital Content Creation</li> <li>• GPU server</li> <li>• High-performance computing</li> </ul>	<ul style="list-style-type: none"> <li>• 3D Rendering</li> <li>• CAD/CAM/CAE</li> <li>• Compute Intensive Application</li> <li>• Digital Content Creation</li> <li>• GPU server</li> <li>• High-performance computing</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 145W CPU support</li> <li>• 8x 2.5" SAS/SATA drive bays</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• Up to 6 GPUs per node* (*4x K80 per node)</li> <li>• 3008 controller (-FC0+/-FC0PT+)</li> </ul>	<ul style="list-style-type: none"> <li>• 145W CPU support</li> <li>• 8x 2.5" SAS/SATA drive bays</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• Up to 6 GPUs per node* (*4x K80 per node)</li> <li>• 3008 controller (-FC0+/-FC0PT+)</li> </ul>
Serverboard	-FC0+: SUPER● X10DRFF-CG -FC0PT+: SUPER● X10DRFF-CTG	-FT+: SUPER● X10DRFF-iG -FTPT+: SUPER● X10DRFF-iTG
Chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	<b>Twin set of</b> up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	<b>Twin set of</b> up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	<b>Twin set of</b> 6 PCI-E 3.0 x16 FHFL Double Width; 2 PCI-E 3.0 x8 FH/HL	<b>Twin set of</b> 6 PCI-E 3.0 x16 FHFL Double Width; 2 PCI-E 3.0 x8 FH/HL
Onboard Storage Controller	<b>Twin set of</b> Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1; <b>Twin set of</b> 3008 SW controller for 8 SAS3 (12Gbps) ports; RAID 0,1,10	<b>Twin set of</b> Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1
Connectivity	-FC0+: <b>Quad set of</b> Dual LAN with Intel® i350 Gigabit Ethernet Controller; -FC0PT+: <b>Quad set of</b> Dual 10GBase-T with Intel® X540 10GbE Controller	-FT+: <b>Quad set of</b> Dual LAN with Intel® i350 Gigabit Ethernet Controller; -FTPT+: <b>Quad set of</b> Dual 10GBase-T with Intel® X540 10GbE Controller
VGA/Audio	<b>Twin set of</b> AST2400 VGA	<b>Twin set of</b> AST2400 VGA
Management	<b>Twin set of</b> IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	<b>Twin set of</b> IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	<b>Twin set of</b> 8x 2.5" hot-swap SATA3/SAS3 drive bays	<b>Twin set of</b> 8x 2.5" hot-swap SATA3/SAS3 drive bays
Peripheral Bays	N/A	N/A
Power Supply	4x Redundant 2000W <b>Titanium Level</b> power supplies	4x Redundant 2000W <b>Titanium Level</b> power supplies
Cooling System	8x 80mm heavy duty fans with air shroud and PWM fan speed control and additional internal fans available	8x 80mm heavy duty fans with air shroud and PWM fan speed control and additional internal fans available
Form Factor	4U Rackmount 448 x 177 x 889mm (17.63" x 6.96" x 35")	4U Rackmount 448 x 177 x 889mm (17.63" x 6.96" x 35")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# X12 TWINPRO®

(For Complete System Only)

**NEW!**

3rd Gen Intel® Xeon® Scalable processors Supported



3x 3.5" Drives/Node x 4 Nodes



3x 3.5" Drives/Node x 4 Nodes



3x 3.5" Drives/Node x 4 Nodes



MODEL	SYS-620TP-HTTR	SYS-620TP-HC0TR	SYS-620TP-HC1TR
Processor Support	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA-4189 (Socket P+) supported TDP up to 185W; 2 UPI up to 11.2GT/s	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA-4189 (Socket P+) supported TDP up to 185W; 2 UPI up to 11.2GT/s	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA-4189 (Socket P+) supported TDP up to 185W; 2 UPI up to 11.2GT/s
Key Applications	<ul style="list-style-type: none"> <li>High Performance Computing</li> <li>Hyper-Converged Infrastructure</li> <li>Big Data / Big Science</li> <li>Oil immersion, Liquid Cooling</li> </ul>	<ul style="list-style-type: none"> <li>High Performance Computing</li> <li>Hyper-Converged Infrastructure</li> <li>Big Data / Big Science</li> <li>Oil immersion, Liquid Cooling</li> </ul>	<ul style="list-style-type: none"> <li>High Performance Computing</li> <li>Hyper-Converged Infrastructure</li> <li>Big Data / Big Science</li> <li>Oil immersion, Liquid Cooling</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>The most cost optimized 2U, 4 node solution</li> </ul>	<ul style="list-style-type: none"> <li>The most cost optimized 2U, 4 node solution</li> </ul>	<ul style="list-style-type: none"> <li>The most cost optimized 2U, 4 node solution</li> </ul>
Serverboard	SUPERMICRO® X12DPT-PT6	SUPERMICRO® X12DPT-PT6	SUPERMICRO® X12DPT-PT6
Chipset	Intel® C621A	Intel® C621A	Intel® C621A
System Memory (Max.)	16 DIMM slots Up to 4TB ECC RDIMM, DDR4-3200MHz	16 DIMM slots Up to 4TB ECC RDIMM, DDR4-3200MHz	16 DIMM slots Up to 4TB ECC RDIMM, DDR4-3200MHz
Expansion Slots	M.2 slot(s) 2 PCI-E 4.0 x16 LP slot(s)	M.2 slot(s) 2 PCI-E 4.0 x16 LP slot(s)	M.2 slot(s) 2 PCI-E 4.0 x16 LP slot(s)
Onboard Storage Controller	Intel® SATA	Broadcom® 3008	Broadcom® 3108
Connectivity	2x 10GbE RJ45 port(s) with Intel® Ethernet Controller X710-AT2	2x 10GbE RJ45 port(s) with Intel® Ethernet Controller X710-AT2	2x 10GbE RJ45 port(s) with Intel® Ethernet Controller X710-AT2
VGA/Audio	1 VGA port	1 VGA port	1 VGA port
Management	SuperDoctor® 5; Watch Dog; NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; IPMI 2.0; Redfish API; Supermicro Out of Band (OOB) Software License Key	SuperDoctor® 5; Watch Dog; NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; IPMI 2.0; Redfish API; Supermicro Out of Band (OOB) Software License Key	SuperDoctor® 5; Watch Dog; NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; IPMI 2.0; Redfish API; Supermicro Out of Band (OOB) Software License Key
Drive Bays	3x 3.5" hot-swap SATA drive bays;	3x 3.5" hot-swap SAS/SATA drive bays;	3x 3.5" hot-swap SATA/SAS drive bays;
Peripheral Bays	None	None	None
Power Supply	2200W Titanium level (96%)	2200W Titanium level (96%)	2200W Titanium level (96%)
Cooling System	4x 8cm heavy duty fan(s)	4x 8cm heavy duty fan(s)	4x 8cm heavy duty fan(s)
Form Factor	2U rackmount Enclosure: 438 x 88 x 774mm (17.25" x 3.47" x 30.5") Package: 622 x 254 x 1143mm (24.5" x 10" x 45")	2U rackmount Enclosure: 438 x 88 x 774mm (17.25" x 3.47" x 30.5") Package: 622 x 254 x 1143mm (24.5" x 10" x 45")	2U rackmount Enclosure: 438 x 88 x 774mm (17.25" x 3.47" x 30.5") Package: 622 x 254 x 1143mm (24.5" x 10" x 45")

1U TwinPro  
Dual DP Nodes, 4x 2.5" Drive Bays

1U TwinPro  
Dual DP Nodes, 4x 2.5" Drive Bays

1U TwinPro  
Dual DP Nodes, 4x 2.5" Drive Bays



MODEL	SYS-1029TP-DC0R	SYS-1029TP-DC1R	SYS-1029TP-DTR
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W TDP, 2 UPI up to 10.4GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).GT/s	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W TDP, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W TDP, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).
Key Applications	<ul style="list-style-type: none"> <li>Mission-critical applications High Availability Storage Appliance Platform</li> <li>2 hot swappable nodes in 1U</li> </ul>	<ul style="list-style-type: none"> <li>Mission-critical applications High Availability Storage Appliance Platform</li> <li>2 hot swappable nodes in 1U</li> </ul>	<ul style="list-style-type: none"> <li>Mission-critical applications High Availability Storage Appliance Platform</li> <li>2 hot swappable nodes in 1U</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>1 SIOM card support</li> <li>2x PCI-E 3.0 x16 Low-profile slot and 2 x M.2 slot</li> <li>Dual set of 4 hot-swap 2.5" SATA/SAS drive bays</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>1000W Titanium Level High-Efficiency Redundant Power Supplies</li> </ul>	<ul style="list-style-type: none"> <li>1 SIOM card support</li> <li>2x PCI-E 3.0 x16 Low-profile slot and 2 x M.2 slot</li> <li>Dual set of 4 hot-swap 2.5" SATA/SAS drive bays</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>1000W Titanium Level High-Efficiency Redundant Power Supplies</li> </ul>	<ul style="list-style-type: none"> <li>1 SIOM card support</li> <li>2x PCI-E 3.0 x16 Low-profile slot and 2 x M.2 slot</li> <li>Dual set of 4 hot-swap 2.5" SATA drive bays</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>1000W Titanium Level High-Efficiency Redundant Power Supplies</li> </ul>
Serverboard	SUPER● X11DPT-PS	SUPER● X11DPT-PS	SUPER● X11DPT-PS
Chipset	Intel® C621 chipset	Intel® C621 chipset	Intel® C621 chipset
System Memory (Max.)*	16 DIMM slots; Up to 4TB DDR4-2933 MHz† with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM†† (128/256/512GB)	16 DIMM slots; Up to 4TB DDR4-2933 MHz† with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM†† (128/256/512GB)	16 DIMM slots; Up to 4TB DDR4-2933 MHz† with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM†† (128/256/512GB)
Expansion Slots	Dual set of: 2x PCI-E 3.0 LP x16; 1x SIOM card support	Dual set of: 2x PCI-E 3.0 LP x16; 1x SIOM card support	Dual set of: 2x PCI-E 3.0 LP x16; 1x SIOM card support
Onboard Storage Controller	Dual set of Broadcom 3008 HW RAID 12Gbps SAS 3.0 controller for RAID 0,1,5,6,10,50 w/ optional SuperCap	Dual set of Broadcom 3108 HW RAID 12Gbps SAS 3.0 controller for RAID 0,1,5,6,10,50	Dual set of Intel® C621 controller for 4 SATA3 (6 Gbps) ports; RAID 0,1,5,10
Connectivity	Dual set of single IPMI 2.0 + KVM with dedicated LAN only. Need to bundle with network card	Dual set of single IPMI 2.0 + KVM with dedicated LAN only. Need to bundle with network card	Dual set of single IPMI 2.0 + KVM with dedicated LAN only. Need to bundle with network card
VGA/Audio	1 VGA, 1 Aspeed AST2500 BMC;	1 VGA, 1 Aspeed AST2500 BMC;	1 VGA, 1 Aspeed AST2500 BMC;
Management	Dual set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog	Dual set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog	Dual set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog
Drive Bays	Twin set of 4x 2.5" hot-swap SATA/SAS drive bays	Twin set of 4x 2.5" hot-swap SATA/SAS drive bays	Twin set of 4x 2.5" hot-swap SATA drive bays
Peripheral Bays	N/A	N/A	N/A
Power Supply	1000W Redundant Titanium Level high-efficiency Power Supplies with I2C & PMBus	1000W Redundant Titanium Level high-efficiency Power Supplies with I2C & PMBus	1000W Redundant Titanium Level high-efficiency Power Supplies with I2C & PMBus
Cooling System	Dual set of 3x heavy duty counter rotating fans with air shroud and optimal fan speed control	Dual set of 3x heavy duty counter rotating fans with air shroud and optimal fan speed control	Dual set of 3x heavy duty counter rotating fans with air shroud and optimal fan speed control
Form Factor	1U Rackmount; Enclosure: 437 x 43 x 718mm (17.2" x 1.7" x 28.25") Package: 752 x 203 x 975mm (29.6" x 8" x 38.4") Gross Weight: 48.1lbs (21.82kg) Net Weight: 33.5lbs (15.2kg)	1U Rackmount; Enclosure: 437 x 43 x 718mm (17.2" x 1.7" x 28.25") Package: 752 x 203 x 975mm (29.6" x 8" x 38.4") Gross Weight: 48.1lbs (21.82kg) Net Weight: 33.5lbs (15.2kg)	1U Rackmount; Enclosure: 437 x 43 x 718mm (17.2" x 1.7" x 28.25") Package: 752 x 203 x 975mm (29.6" x 8" x 38.4") Gross Weight: 48.1lbs (21.82kg) Net Weight: 33.5lbs (15.2kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details  
 † 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.  
 †† For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.

# TWINPRO®

(For Complete System Only)

X11 TwinPro2™  
Quad DP Nodes, 24x 2.5" Drive Bays

X11 TwinPro2™  
Quad DP Nodes, 24x 2.5" Drive Bays

X11 TwinPro2™  
Quad DP Nodes, 24x 2.5" Drive Bays



MODEL	SYS-2029TP-HC0R	SYS-2029TP-HC1R	SYS-2029TP-HTR
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W TDP, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed <i>Cascade Lake Refresh</i> ).	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W TDP, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed <i>Cascade Lake Refresh</i> ).	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W TDP, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed <i>Cascade Lake Refresh</i> ).
Key Applications	<ul style="list-style-type: none"> <li>Compute Intensive Application</li> <li>Data Center</li> <li>Enterprise Server</li> <li>Financial Analysis</li> <li>HPC</li> <li>Mission-Critical</li> </ul>	<ul style="list-style-type: none"> <li>Compute Intensive Application</li> <li>Data Center</li> <li>Enterprise Server</li> <li>Financial Analysis</li> <li>HPC</li> <li>Mission-Critical</li> </ul>	<ul style="list-style-type: none"> <li>Compute Intensive Application</li> <li>Data Center</li> <li>Enterprise Server</li> <li>Financial Analysis</li> <li>HPC</li> <li>Mission-Critical</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>2 Low-profile PCI-E 3.0 x16 slots</li> <li>1 PCI-E 3.0 x16 SIOm LAN Networking slot</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>QUAD set of 6 hot-swap 2.5" SATA/SAS drive bays</li> </ul>	<ul style="list-style-type: none"> <li>2 Low-profile PCI-E 3.0 x16 slots</li> <li>1 PCI-E 3.0 x16 SIOm LAN Networking slot</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>QUAD set of 6 hot-swap 2.5" SATA/SAS drive bays</li> </ul>	<ul style="list-style-type: none"> <li>2 Low-profile PCI-E 3.0 x16 slots</li> <li>1 PCI-E 3.0 x16 SIOm LAN Networking slot</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>QUAD set of 6 hot-swap 2.5" SATA/SAS drive bays</li> </ul>
Serverboard	SUPER● X11DPT-PS	SUPER● X11DPT-PS	SUPER● X11DPT-PS
Chipset	Intel® C621 chipset	Intel® C621 chipset	Intel® C621 chipset
System Memory (Max.)*	16 DIMM slots; Up to 4TB DDR4-2933 MHz† with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM†† (128/256/512GB)	16 DIMM slots; Up to 4TB DDR4-2933 MHz† with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM†† (128/256/512GB)	16 DIMM slots; Up to 4TB DDR4-2933 MHz† with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM†† (128/256/512GB)
Expansion Slots	Quad set of: 2x PCI-E 3.0 LP x16; 1x SIOm LAN Networking card support	Quad set of: 2x PCI-E 3.0 LP x16; 1x SIOm LAN Networking card support	Quad set of: 2x PCI-E 3.0 LP x16; 1x SIOm LAN Networking card support
Onboard Storage Controller	Quad set of Broadcom 3008 HW RAID 12Gbps SAS 3.0 controller for RAID 0,1,1E/10	Quad set of Broadcom 3108 HW RAID 12Gbps SAS 3.0 controller for RAID 0,1,5,6,10,50,60 w/ optional SuperCap	Quad set of Intel® C620 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,10
Connectivity	Quad set of single IPMI 2.0 + KVM with dedicated LAN only. Need one network card installed per node	Quad set of single IPMI 2.0 + KVM with dedicated LAN only. Need to bundle with network card	Quad set of single IPMI 2.0 + KVM with dedicated LAN only. Need one network card installed per node
VGA/Audio	1 VGA, 1 Aspeed AST2500 BMC	1 VGA, 1 Aspeed AST2500 BMC	1 VGA, 1 Aspeed AST2500 BMC
Management	Quad set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog	Quad set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog	Quad set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog
Drive Bays	Quad set of 6x 2.5" hot-swap SAS/SATA drive bays	Quad set of 6x 2.5" hot-swap SATA drive bays	Quad set of 6x 2.5" hot-swap SATA drive bays
Peripheral Bays	N/A	N/A	N/A
Power Supply	2200W Redundant Titanium Level high-efficiency Power Supplies with I2C & PMBus	2200W Redundant Titanium Level high-efficiency Power Supplies with I2C & PMBus	2200W Redundant Titanium Level high-efficiency Power Supplies with I2C & PMBus
Cooling System	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control
Form Factor	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.5"); Enclosure: 438 x 88 x 724mm (17.25" x 3.47" x 28.5") Package: 622 x 254 x 1143mm (24.5" x 10" x 45") Gross Weight: 90lbs (40.82kg) Net Weight: 72lbs (32.66kg)	438 x 88 x 724mm (17.25" x 3.47" x 28.5")	438 x 88 x 724mm (17.25" x 3.47" x 28.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

† 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

†† For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.



X11 TwinPro2™  
Dual DP Nodes, 12x 3.5" Drive Bays

X11 TwinPro2™  
Dual DP Nodes, 12x 3.5" Drive Bays



MODEL	SYS-6029TP-HC0R	SYS-6029TP-HC1R
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W TDP, 2 UPI up to 10.4 GT/s. <i>Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).</i>	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W TDP, 2 UPI up to 10.4 GT/s. <i>Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).</i>
Key Applications	<ul style="list-style-type: none"> <li>Compute Intensive Application</li> <li>Data Center</li> <li>Enterprise Server</li> <li>Financial Analysis</li> <li>HPC</li> <li>Mission-Critical</li> </ul>	<ul style="list-style-type: none"> <li>Compute Intensive Application</li> <li>Data Center</li> <li>Enterprise Server</li> <li>Financial Analysis</li> <li>HPC</li> <li>Mission-Critical</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>2 Low-profile PCI-E 3.0 x16 slots</li> <li>1 PCI-E 3.0 x16 SIOM LAN Networking slot</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> </ul>	<ul style="list-style-type: none"> <li>2 Low-profile PCI-E 3.0 x16 slots</li> <li>1 PCI-E 3.0 x16 SIOM LAN Networking slot</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> </ul>
Serverboard	SUPER● X11DPT-PS	SUPER● X11DPT-PS
Chipset	Intel® C621 chipset	Intel® C621 chipset
System Memory (Max.)*	16 DIMM slots; Up to 4TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)	16 DIMM slots; Up to 4TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)
Expansion Slots	Quad set of: 2x PCI-E 3.0 LP x16; 1x SIOM card support	Quad set of: 2x PCI-E 3.0 LP x16; 1x SIOM LAN Networking card support
Onboard Storage Controller	Quad set of Broadcom 3008 SAS3 controller for 3 SATA3(6 Gbps)/SAS3(12Gbps) ports; RAID 0,1,E	Quad set of Broadcom 3108 SAS3 controller for 3 SATA3(6 Gbps) ports; RAID 0,1,5,6 w/optional SuperCap
Connectivity	Quad set of single IPMI 2.0 + KVM with dedicated LAN only. Need one network card installed per node	Quad set of single IPMI 2.0 + KVM with dedicated LAN only. Need one network card installed per node
VGA/Audio	1 VGA, 1 Aspeed AST2500 BMC	1 VGA, 1 Aspeed AST2500 BMC
Management	Quad set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog	Quad set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog
Drive Bays	Quad set of 3x 3.5" hot-swap SATA drive bays	Quad set of 3x 3.5" hot-swap SAS/SATA drive bays
Peripheral Bays	N/A	N/A
Power Supply	2200W Redundant Titanium Level high-efficiency Power Supplies with I2C & PMBus	2200W Redundant Titanium Level high-efficiency Power Supplies with I2C & PMBus
Cooling System	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control
Form Factor	2U Rackmount 438 x 88 x 774mm (17.25" x 3.47" x 30.5"); Enclosure: 438 x 88 x 775mm (17.25" x 3.47" x 30.5") Package: 622 x 254 x 1143mm (24.5" x 10" x 45") Gross Weight: 90lbs (40.82kg) Net Weight: 72lbs (32.66kg)	2U Rackmount 438 x 88 x 774mm (17.25" x 3.47" x 30.5"); Enclosure: 438 x 88 x 775mm (17.25" x 3.47" x 30.5") Package: 622 x 254 x 1143mm (24.5" x 10" x 45") Gross Weight: 90lbs (40.82kg) Net Weight: 72lbs (32.66kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

<sup>†</sup> 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

<sup>††</sup> For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.

1U TwinPro™  
2 hot swappable nodes in 1U, Redundant Titanium Level power supplies



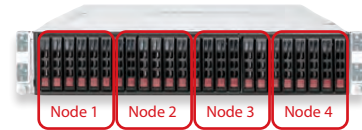
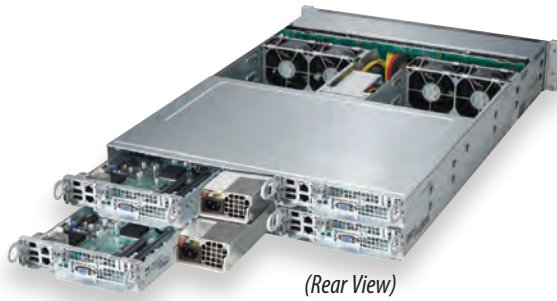
MODEL	SYS-1028TP-DTFR SYS-1028TP-DC0FR SYS-1028TP-DC1FR	SYS-1028TP-DTR SYS-1028TP-DC0R SYS-1028TP-DC1R	SYS-1028TP-DTTR SYS-1028TP-DC0TR SYS-1028TP-DC1TR
Processor Support	Twin set of Intel® Xeon® processor E5-2600 v3 Socket R3 (LGA 2011) supported; UPI up to 9.6GT/s; CPU TDP support Up to 145W	Twin set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s; CPU support up to 145W TDP	Twin set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s; CPU support up to 145W TDP
Key Applications	<ul style="list-style-type: none"> <li>Mission-critical applications</li> <li>High Availability Storage Appliance Platform</li> </ul>	<ul style="list-style-type: none"> <li>Mission-critical applications</li> <li>High Availability Storage Appliance Platform</li> </ul>	<ul style="list-style-type: none"> <li>Mission-critical applications</li> <li>High Availability Storage Appliance Platform</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>2 hot swappable nodes in 1U</li> <li>1x PCI-E 3.0 x16 Low-profile slot and 1 x "0" slot</li> <li>Single port FDR (56Gbps) IB w/ QSFP connector</li> <li>Intel® i350-AM2 Dual port GbE LAN</li> <li>900W Redundant Power Supplies</li> </ul>	<ul style="list-style-type: none"> <li>2 hot swappable nodes in 1U</li> <li>3108 SAS3 controller (DC1R)</li> <li>3008 SAS3 controller (DC0R)</li> <li>1x PCI-E 3.0 x16 Low-profile slot and 1x "0" slot</li> <li>Intel® i350-AM2 Dual port GbE LAN</li> <li>1000W Redundant Power Supplies</li> </ul>	<ul style="list-style-type: none"> <li>2 hot swappable nodes in 1U</li> <li>3108 SAS3 controller (DC1TR) 3008 SAS3 controller (DC0TR)</li> <li>1x PCI-E 3.0 x16 Low-profile slot and 1x "0" slot</li> <li>Intel® X540 Dual port 10GBase-T LAN</li> <li>1000W Redundant Power Supplies</li> </ul>
Serverboard	SUPER● X10DRT-PIBF	SUPER● X10DRT-P	SUPER● X10DRT-PT
Chipset	Intel® C612 chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Dual set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, DDR4-2133MHz in 16 DIMM slots.	Twin set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Twin set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	Dual set of low-profile PCI-E x16; 1 x "0" slot	Twin set of Low-profile PCI-E x16 slot 1x "0" slot (-DC0R)	Twin set of Low-profile PCI-E x16 slot 1x "0" slot (-DC0TR)
Onboard Storage Controller	<p>-DTFR: Dual set of Intel® C612 controller for 4 SATA3 (6 Gbps) ports; RAID 0,1,5,10</p> <p>-DC0FR: Dual set of Broadcom 3008 controller for 4 SAS3(12 Gbps) ports; RAID 0,1,10</p> <p>-DC1FR: Dual set of Broadcom 3108 controller for 4 SAS3(12 Gbps) ports; RAID 0,1,5,6,10</p>	<p>-DTR: Twin set of Intel® C612 controller for 4 SATA3 (6 Gbps) ports; RAID 0,1,5,10;</p> <p>-DC0R: Twin set of 3008 SW RAID for 4 SAS3 (12 Gbps) ports; RAID 0,1,10;</p> <p>-DC1R: Twin set of 3108 HW RAID for 4 SAS3 (12 Gbps) ports; RAID 0,1,5,6,10</p>	<p>-DTTR: Dual set of Intel® C612 controller for 4 SATA3 (6 Gbps) ports; RAID 0,1,5,10;</p> <p>-DC0TR: Twin set of 3008 SW RAID for 4 SAS3 (12 Gbps) ports; RAID 0,1,10;</p> <p>-DC1TR: Twin set of 3108 HW RAID for 4 SAS3 (12 Gbps) ports; RAID 0,1,5,6,10</p>
Connectivity	Dual set of Dual LAN with Intel® i350 Gigabit Ethernet controller Dual set of Single FDR infiniband with Mellanox Connect-X3	Twin set of Dual 1GbE ports with Intel® i350 Ethernet controller	Twin set of Dual 10GBase-T ports with Intel® X540 Ethernet controller
VGA/Audio	1 VGA, 1 Aspeed AST2400 BMC;	Twin set of Aspeed AST2400 BMC	Twin set of Aspeed AST2400 BMC
Management	Dual set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog	Twin set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor® 5, Watchdog	Twin set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor® 5, Watchdog
Drive Bays	Dual set of 4x 2.5" hot-swap SATA drive bays	Twin set of 4x 2.5" hot-swap SAS3/SATA3 drive bays	Twin set of 4x 2.5" hot-swap SAS3/SATA3 drive bays
Peripheral Bays	N/A	N/A	N/A
Power Supply	900W Redundant Titanium Level high-efficiency Power Supplies with I2C & PMBus	1000W Redundant Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	1000W Redundant Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMBus
Cooling System	Dual set of 3x heavy duty counter rotating fans with air shroud and optimal fan speed control	Twin set of 3x heavy duty counter rotating fans with air shroud and optimal fan speed control	Twin set of 3x heavy duty counter rotating fans with air shroud and optimal fan speed control
Form Factor	1U Rackmount	1U Rackmount	1U Rackmount

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# TWINPRO®

(For Complete System Only)

2U TwinPro2™  
4 hot-swap nodes in 2U w/ 2.5" or 3.5" HDDs, Intel® Xeon® Processor E5-2600 v4 product family support



**SYS-2028TP-H Series**  
4 DP Nodes in 2U, 24x 2.5" SAS3/SATA drives

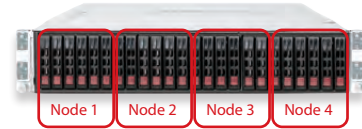
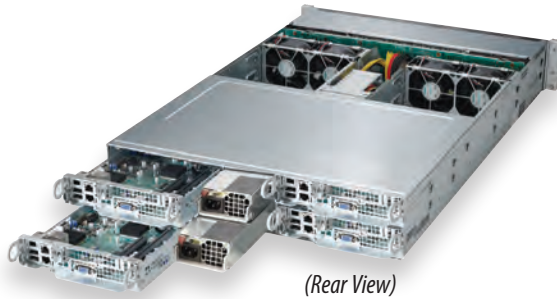
MODEL	SYS-2028TP-HC0R	SYS-2028TP-HC0FR	SYS-2028TP-HC0TR
Processor Support	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s; CPU TDP support Up to 145W	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s; CPU TDP support Up to 145W	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s; CPU TDP support Up to 145W
Key Applications	<ul style="list-style-type: none"> <li>• Compute Intensive Application</li> <li>• Data Center</li> <li>• Enterprise Server</li> <li>• Financial Analysis</li> <li>• HPC</li> <li>• Mission-Critical</li> </ul>	<ul style="list-style-type: none"> <li>• Compute Intensive Application</li> <li>• Data Center</li> <li>• Enterprise Server</li> <li>• Financial Analysis</li> <li>• HPC</li> <li>• Mission-Critical</li> </ul>	<ul style="list-style-type: none"> <li>• Compute Intensive Application</li> <li>• Data Center</li> <li>• Enterprise Server</li> <li>• Financial Analysis</li> <li>• HPC</li> <li>• Mission-Critical</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 1 Low-profile PCI-E 3.0 x16 slot + 0 slot</li> <li>• 4 hot swappable nodes in 2U</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• Quad set of 6 hot-swap 2.5" SATA/SAS drive bays</li> <li>• SAS 3.0, 40G Ethernet, FDR IB</li> </ul>	<ul style="list-style-type: none"> <li>• 1 Low-profile PCI-E 3.0 x16 slot + 0 slot</li> <li>• 4 hot swappable nodes in 2U</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• Quad set of 6 hot-swap 2.5" SATA/SAS drive bays</li> <li>• SAS 3.0, 40G Ethernet, FDR IB</li> </ul>	<ul style="list-style-type: none"> <li>• 1 Low-profile PCI-E 3.0 x16 slot + 0 slot</li> <li>• 4 hot swappable nodes in 2U</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• Quad set of 6 hot-swap 2.5" SATA/SAS drive bays</li> <li>• SAS 3.0, 40G Ethernet, FDR IB</li> </ul>
Serverboard	SUPER● X10DRT-P	SUPER● X10DRT-PIBF	SUPER● X10DRT-PT
Chipset	Intel® C612 Chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	Quad set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Quad set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Quad set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	Quad set of low-profile PCI-E 3.0 x16; 1 x16 "0 slot"	Quad set of low-profile PCI-E 3.0 x16; 1 x16 "0 slot"	Quad set of low-profile PCI-E 3.0 x16; 1 x16 "0 slot"
Onboard Storage Controller	Quad set of 3008 SW RAID 12Gbps SAS 3.0 controller; RAID 0,1,10	Quad set of 3008 SW RAID 12Gbps SAS 3.0 controller; RAID 0,1,10	Quad set of 3008 SW RAID 12Gbps SAS 3.0 controller; RAID 0,1,10
Connectivity	Quad set of Dual LAN with Intel® i350 Gigabit Ethernet controller	Quad set of FDR (Connect-X3) InfiniBand / 40G Ethernet	Quad set of Dual 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector
VGA/Audio	Quad set of AST2400 VGA	Quad set of AST2400 VGA	Quad set of AST2400 VGA
Management	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	Quad set of 6x 2.5" hot-swap SAS/SATA drive bays	Quad set of 6x 2.5" hot-swap SAS/SATA drive bays	Quad set of 6x 2.5" hot-swap SAS/SATA drive bays
Peripheral Bays	N/A	N/A	N/A
Power Supply	Redundant 2000W Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	Redundant 2000W Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	Redundant 2000W Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMBus
Cooling System	4x 8cm heavy duty PWM fans with air shroud with optimal fan speed control	4x 8cm heavy duty PWM fans with air shroud with optimal fan speed control	4x 8cm heavy duty PWM fans with air shroud with optimal fan speed control
Form Factor	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.5")	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.5")	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# TWINPRO®

(For Complete System Only)

2U TwinPro2™  
4 hot-swap nodes in 2U w/ 2.5" or 3.5" HDDs, Intel® Xeon® Processor E5-2600 v4 product family support



**SYS-2028TP-H Series**  
4 DP Nodes in 2U, 24x 2.5" SAS3/SATA drives

MODEL	SYS-2028TP-HTFR	SYS-2028TP-HTR	SYS-2028TP-HTTR
Processor Support	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s; CPU TDP support Up to 145W	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s; CPU TDP support Up to 145W	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s; CPU TDP support Up to 145W
Key Applications	<ul style="list-style-type: none"> <li>• Compute Intensive Application</li> <li>• Data Center</li> <li>• Enterprise Server</li> <li>• Financial Analysis</li> <li>• HPC</li> <li>• Mission-Critical</li> </ul>	<ul style="list-style-type: none"> <li>• Compute Intensive Application</li> <li>• Data Center</li> <li>• Enterprise Server</li> <li>• Financial Analysis</li> <li>• HPC</li> <li>• Mission-Critical</li> </ul>	<ul style="list-style-type: none"> <li>• Compute Intensive Application</li> <li>• Data Center</li> <li>• Enterprise Server</li> <li>• Financial Analysis</li> <li>• HPC</li> <li>• Mission-Critical</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 1 Low-profile PCI-E 3.0 x16 slot + 0 slot</li> <li>• 4 hot swappable nodes in 2U</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• Quad set of 6 hot-swap 2.5" SATA/SAS drive bays</li> <li>• SAS 3.0, 40G Ethernet, FDR IB</li> </ul>	<ul style="list-style-type: none"> <li>• 1 Low-profile PCI-E 3.0 x16 slot + 0 slot</li> <li>• 4 hot swappable nodes in 2U</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• Quad set of 6 hot-swap 2.5" SATA/SAS drive bays</li> <li>• SAS 3.0, 40G Ethernet, FDR IB</li> </ul>	<ul style="list-style-type: none"> <li>• 1 Low-profile PCI-E 3.0 x16 slot + 0 slot</li> <li>• 4 hot swappable nodes in 2U</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• Quad set of 6 hot-swap 2.5" SATA/SAS drive bays</li> <li>• SAS 3.0, 40G Ethernet, FDR IB</li> </ul>
Serverboard	SUPER● X10DRT-PIBF	SUPER● X10DRT-P	SUPER● X10DRT-PT
Chipset	Intel® C612 Chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	Quad set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Quad set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Quad set of up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	Quad set of low-profile PCI-E 3.0 x16; 1 x16 "0 slot"	Quad set of low-profile PCI-E 3.0 x16; 1 x16 "0 slot"	Quad set of low-profile PCI-E 3.0 x16; 1 x16 "0 slot"
Onboard Storage Controller	Quad set of Intel® C612 AHCI controller for 6 SATA3 (6Gbps); RAID 0,1,5,10	Quad set of Intel® C612 AHCI controller for 6 SATA3 (6Gbps); RAID 0,1,5,10	Quad set of Intel® C612 AHCI controller for 6 SATA3 (6Gbps); RAID 0,1,5,10
Connectivity	Quad set of FDR (Connect-X3) InfiniBand / 40G Ethernet	Quad set of Dual LAN with Intel® i350 Gigabit Ethernet controller	Quad set of Dual 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector
VGA/Audio	Quad set of AST2400 VGA	Quad set of AST2400 VGA	Quad set of AST2400 VGA
Management	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	Quad set of 6x 2.5" hot-swap SATA drive bays	Quad set of 6x 2.5" hot-swap SATA drive bays	Quad set of 6x 2.5" hot-swap SATA drive bays
Peripheral Bays	N/A	N/A	N/A
Power Supply	Redundant 2000W Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	Redundant 2000W Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	Redundant 2000W Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMBus
Cooling System	4x 8cm heavy duty PWM fans with air shroud with optimal fan speed control	4x 8cm heavy duty PWM fans with air shroud with optimal fan speed control	4x 8cm heavy duty PWM fans with air shroud with optimal fan speed control
Form Factor	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.5")	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.5")	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.5")

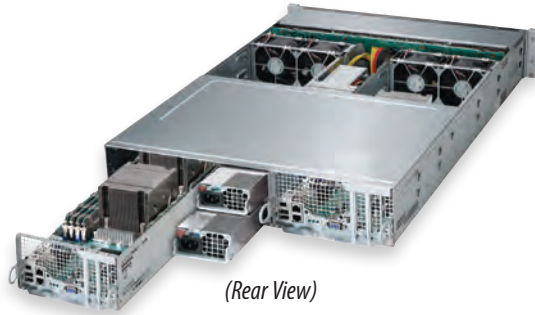
\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# TWINPRO®

(For Complete System Only)

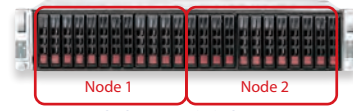
2U TwinPro™

2 hot-swap nodes in 2U w/ 2.5" HDDs, Intel® Xeon® Processor E5-2600 v4 product family support



**SYS-2028TP-DEC(F)(T)R**

Expander to support 12x SAS 3.0 HDDs provided



**SYS-2028TP-D Series**

2 DP Nodes in 2U, 24x 2.5" SAS3/SATA3 drives

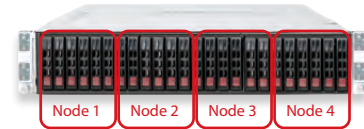
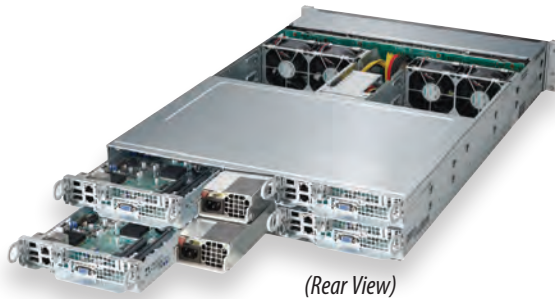
MODEL	SYS-2028TP-DC0R SYS-2028TP-DC1R SYS-2028TP-DECR SYS-2028TP-DTR	SYS-2028TP-DC0FR SYS-2028TP-DECFR	SYS-2028TP-DC0TR SYS-2028TP-DC1TR SYS-2028TP-DTTR
Processor Support	Twin set of Intel® Xeon® processor E5-2600 v3 Socket R3 (LGA 2011) supported; UPI up to 9.6GT/s; CPU TDP support Up to 145W	Twin set of Intel® Xeon® processor E5-2600 v3 Socket R3 (LGA 2011) supported; UPI up to 9.6GT/s; CPU TDP support Up to 145W	Twin set of Intel® Xeon® processor E5-2600 v3 Socket R3 (LGA 2011) supported; UPI up to 9.6GT/s; CPU TDP support Up to 145W
Key Applications	<ul style="list-style-type: none"> <li>Compute Intensive Application</li> <li>Data Center</li> <li>Enterprise Server</li> <li>Financial Analysis</li> <li>HPC</li> <li>Mission-Critical</li> </ul>	<ul style="list-style-type: none"> <li>Compute Intensive Application</li> <li>Data Center</li> <li>Enterprise Server</li> <li>Financial Analysis</li> <li>HPC</li> <li>Mission-Critical</li> </ul>	<ul style="list-style-type: none"> <li>Compute Intensive Application</li> <li>Data Center</li> <li>Enterprise Server</li> <li>Financial Analysis</li> <li>HPC</li> <li>Mission-Critical</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>2 hot swappable nodes in 2U</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>SAS3.0 (12Gbps) support</li> <li>1280W Platinum Level redundant high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>2 hot swappable nodes in 2U</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>SAS3.0 (12Gbps) support</li> <li>(full size) mSATA support</li> <li>12 hot-swap 2.5" SAS/SATA drive bays per node</li> </ul>	<ul style="list-style-type: none"> <li>2 hot swappable nodes in 2U</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>SAS3.0 (12Gbps) support</li> <li>(full size) mSATA support</li> <li>Up to 2 Low Profile Add-On-Cards</li> <li>1280W Platinum Level redundant high-efficiency power supplies</li> </ul>
Serverboard	SUPER● X10DRT-P	SUPER● X10DRT-PIBF	SUPER● X10DRT-PT
Chipset	Intel® C612 chipset	Intel® C612 Chipset	Intel® C612 chipset
System Memory (Max.)*	Twin set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, DDR4-2133MHz in 16 DIMM slots.	Twin set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, DDR4-2133MHz in 16 DIMM slots.	Twin set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, DDR4-2133MHz in 16 DIMM slots.
Expansion Slots	-DC0R/DECR: Twin set of 1 PCI-E 3.0 x16, 1 PCI-E 3.0 x8 and 1 "0 slot" -DC1R: Twin set of 1 PCI-E 3.0 x16, 1 PCI-E 3.0 x8 and One GPU/Xeon Phi or internal X16 slot. -DTR: Twin set of 1 PCI-E 3.0 x16, 1 PCI-E 3.0 x8 and 1 PCI-E 3.0 x16 for GPU support (with GPU kit)	Twin set of 1 PCI-E 3.0 x16, 1 PCI-E 3.0 x8 and 1 "0 slot"	-DC0TR: Twin set of 1 PCI-E 3.0 x16, 1 PCI-E 3.0 x8 and 1 "0 slot" -DC1TR/DTTR: Twin set of 1 PCI-E 3.0 x16, 1 PCI-E 3.0 x8 and 1 PCI-E 3.0 x16 for GPU support (with GPU kit)
Onboard Storage Controller	-DC0R/DECR: Twin set of Broadcom® 3008 SAS3 (12Gbps); RAID 0,1,10 -DC1R: Twin set of Broadcom® 3108 SAS3 (12Gbps); RAID 0,1,5,6,10,50,60 -DTR: Twin set of Intel® C612 PCH controller for 8 SATA3 ports; RAID 0,1,5,10,50	-DC0FR: Twin set of Broadcom® 3008 SAS3 (12Gbps); RAID 0,1,10 -DECFR: Twin set of FDR (Connect-X3) / 40G Ethernet	-DC0TR: Twin set of Broadcom® 3008 SAS3 (12Gbps); RAID 0,1,10 -DC1TR: Twin set of Broadcom® 3108 SAS3 (12Gbps); RAID 0,1,5,6,10,50,60 -DTTR: Twin set of Intel® C612 PCH controller for 8 SATA3 ports; RAID 0,1,5,10,50
Connectivity	Twin set of Dual LAN with Intel® i350 Gigabit Ethernet controller	Twin set of FDR (Connect-X3) / 40G Ethernet	Twin set of Dual 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector
VGA/Audio	1 VGA, 1 Aspeed AST2400 BMC	1 VGA, 1 Aspeed AST2400 BMC	1 VGA, 1 Aspeed AST2400 BMC
Management	Twin set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog	Twin set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog	Twin set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog
Drive Bays	Twin set of 12x 2.5" hot-swap SAS(8)+SATA(4) drive bays	Twin set of 12x 2.5" hot-swap SAS(8)+SATA(4) drive bays	Twin set of 12x 2.5" hot-swap SAS(8)+SATA(4) drive bays
Peripheral Bays	N/A	N/A	N/A
Power Supply	1280W Redundant Platinum Level Digital high-efficiency power supplies with I2C & PMBus	1280W Redundant Platinum Level Digital high-efficiency power supplies with I2C & PMBus	1280W Redundant Platinum Level Digital high-efficiency power supplies with I2C & PMBus
Cooling System	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control
Form Factor	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.75")	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.75")	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.75")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# TWINPRO®

(For Complete System Only)

2U TwinPro2™  
4 hot-swap nodes in 2U w/ 2.5" or 3.5" HDDs, Intel® Xeon® Processor E5-2600 v4 product family support



**SYS-2028TP-H Series**  
4 DP Nodes in 2U, 24x 2.5" SAS3/SATA drives

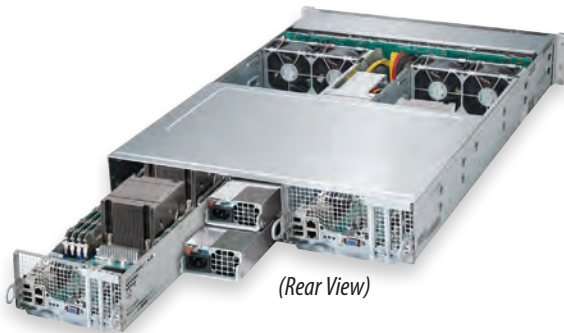
MODEL	<b>SYS-2028TP-HC0R</b> <b>SYS-2028TP-HC1R</b> <b>SYS-2028TP-HTR</b>	<b>SYS-2028TP-HC0TR</b> <b>SYS-2028TP-HC1TR</b> <b>SYS-2028TP-HTTR</b>	<b>SYS-2028TP-HC0FR</b> <b>SYS-2028TP-HC1FR</b> <b>SYS-2028TP-HTFR</b>
Processor Support	Quad set of Intel® Xeon® processor E5-2600 v3 Socket R3 (LGA 2011) supported; UPI up to 9.6GT/s; CPU TDP support Up to 145W	Quad set of Intel® Xeon® processor E5-2600 v3 Socket R3 (LGA 2011) supported; UPI up to 9.6GT/s; CPU TDP support Up to 145W	Quad set of Intel® Xeon® processor E5-2600 v3 Socket R3 (LGA 2011) supported; UPI up to 9.6GT/s; CPU TDP support Up to 145W
Key Applications	<ul style="list-style-type: none"> <li>Compute Intensive Application</li> <li>Data Center</li> <li>Enterprise Server</li> <li>Financial Analysis</li> <li>HPC</li> <li>Mission-Critical</li> </ul>	<ul style="list-style-type: none"> <li>Compute Intensive Application</li> <li>Data Center</li> <li>Enterprise Server</li> <li>Financial Analysis</li> <li>HPC</li> <li>Mission-Critical</li> </ul>	<ul style="list-style-type: none"> <li>Compute Intensive Application</li> <li>Data Center</li> <li>Enterprise Server</li> <li>Financial Analysis</li> <li>HPC</li> <li>Mission-Critical</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>1 Low-profile PCI-E x16 slot</li> <li>4 hot swappable nodes in 2U</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>QUAD set of 6 hot-swap 2.5" SATA/SAS drive bays</li> </ul>	<ul style="list-style-type: none"> <li>1 Low-profile PCI-E x16 slot</li> <li>4 hot swappable nodes in 2U</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>QUAD set of 6 hot-swap 2.5" SATA/SAS drive bays</li> </ul>	<ul style="list-style-type: none"> <li>1 Low-profile PCI-E x16 slot</li> <li>4 hot swappable nodes in 2U</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>QUAD set of 6 hot-swap 2.5" SATA/SAS drive bays</li> </ul>
Serverboard	SUPER● X10DRT-P	SUPER● X10DRT-PT	SUPER● X10DRT-PIBF
Chipset	Intel® C612 chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Quad set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, DDR4-2133MHz in 16 DIMM slots.	Quad set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, DDR4-2133MHz in 16 DIMM slots.	Quad set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, DDR4-2133MHz in 16 DIMM slots.
Expansion Slots	Quad set of low-profile PCI-E 3.0 x16; 1 x16 "0 slot"	Quad set of low-profile PCI-E 3.0 x16; 1 x16 "0 slot"	Quad set of low-profile PCI-E 3.0 x16; 1 x16 "0 slot"
Onboard Storage Controller	<p><b>-HC0R:</b> Quad set of Broadcom® 3008 SAS3 (12Gbps); RAID 0,1,10</p> <p><b>-HC1R:</b> Quad set of Broadcom® 3108 SAS3 (12Gbps); RAID 0,1,5,6,10,50</p> <p>Quad set of Intel® C612 controller for 8 SATA3 (6 Gbps) ports; RAID 0,1,5,10</p>	<p><b>-HC0TR:</b> Quad set of Broadcom® 3008 SAS3 (12Gbps); RAID 0,1,10</p> <p><b>-HC1TR:</b> Quad set of Broadcom® 3108 SAS3 (12Gbps); RAID 0,1,5,6,10,50</p> <p><b>-HTTR:</b> Quad set of Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10</p>	<p><b>-HC0FR:</b> Quad set of Broadcom® 3008 SAS3 (12Gbps); RAID 0,1,10</p> <p><b>-HC1FR:</b> Quad set of Broadcom® 3108 SAS3 (12Gbps); RAID 0,1,5,6,10,50</p> <p><b>-HTFR:</b> Quad set of Intel® C612 controller for 8 SATA3 (6 Gbps) ports; RAID 0,1,5,10</p>
Connectivity	Quad set of Dual LAN with Intel® i350 Gigabit Ethernet controller	Quad set of Dual 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector	Quad set of FDR (Connect-X3) / 56G Ethernet
VGA/Audio	1 VGA, 1 Aspeed AST2400 BMC	1 VGA, 1 Aspeed AST2400 BMC	1 VGA, 1 Aspeed AST2400 BMC
Management	Quad set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog	Quad set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog	Quad set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog
Drive Bays	Quad set of 6x 2.5" hot-swap SATA drive bays	Quad set of 6x 2.5" hot-swap SATA drive bays	Quad set of 6x 2.5" hot-swap SATA drive bays
Peripheral Bays	N/A	N/A	N/A
Power Supply	2000W Redundant Titanium / Platinum Level high-efficiency Power Supplies with I2C & PMBus	2000W Redundant Titanium / Platinum Level high-efficiency Power Supplies with I2C & PMBus	2000W Redundant Titanium / Platinum Level high-efficiency Power Supplies with I2C & PMBus
Cooling System	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control
Form Factor	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.75")	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.75")	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.75")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# TWINPRO®

(For Complete System Only)

2 hot-swap nodes in 2U w/ up to 4 NVMe per Node



**SYS-2028TP-DNC(T)(F)R**

Up to 4x NVMe + 8x SAS 3.0 drives (per node)



**SYS-6028TP-DNC(T)(F)R**

Up to 4x NVMe + 2x SAS 3.0 drives (per node),  
Up to 6x SAS 3.0 support (per node)



MODEL	SYS-2028TP-DNCR	SYS-2028TP-DNCFR	SYS-2028TP-DNCTR
Processor Support	Twin set of Intel® Xeon® processor E5-2600 v3 Socket R3 (LGA 2011) supported; UPI up to 9.6GT/s; CPU TDP support Up to 145W	Twin set of Intel® Xeon® processor E5-2600 v3 Socket R3 (LGA 2011) supported; UPI up to 9.6GT/s; CPU TDP support Up to 145W	Twin set of Intel® Xeon® processor E5-2600 v3 Socket R3 (LGA 2011) supported; UPI up to 9.6GT/s; CPU TDP support Up to 145W
Key Applications	<ul style="list-style-type: none"> <li>Compute Intensive Application</li> <li>Data Center</li> <li>Enterprise Server</li> <li>Financial Analysis</li> <li>HPC</li> <li>Mission-Critical</li> </ul>	<ul style="list-style-type: none"> <li>Compute Intensive Application</li> <li>Data Center</li> <li>Enterprise Server</li> <li>Financial Analysis</li> <li>HPC</li> <li>Mission-Critical</li> </ul>	<ul style="list-style-type: none"> <li>Compute Intensive Application</li> <li>Data Center</li> <li>Enterprise Server</li> <li>Financial Analysis</li> <li>HPC</li> <li>Mission-Critical</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>2 hot swappable nodes in 2U</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>SAS3.0 (12Gbps) support</li> <li>NVMe Support</li> <li>Up to 2 Low Profile Add-On-Cards</li> <li>1280W Platinum Level redundant high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>2 hot swappable nodes in 2U</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>SAS3.0 (12Gbps) support</li> <li>NVMe Support</li> <li>Up to 2 Low Profile Add-On-Cards</li> <li>1280W Platinum Level redundant high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>NVMe support</li> <li>Up to 2 Low Profile Add-On-Cards</li> <li>1280W Platinum Level redundant high-efficiency power supplies</li> <li>2 hot swappable nodes in 2U</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>SAS3.0 (12Gbps) support</li> </ul>
Serverboard	SUPER● X10DRT-P	SUPER● X10DRT-PIBF	SUPER● X10DRT-PT
Chipset	Intel® C612 chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Twin set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, DDR4-2133MHz in 16 DIMM slots.	Twin set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, DDR4-2133MHz in 16 DIMM slots.	Twin set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, DDR4-2133MHz in 16 DIMM slots.
Expansion Slots	Twin set of 1 PCI-E 3.0 x16, 1 PCI-E 3.0 x8.	Twin set of 1 PCI-E 3.0 x16, 1 PCI-E 3.0 x8.	Twin set of 1 PCI-E 3.0 x16, 1 PCI-E 3.0 x8.
Onboard Storage Controller	Twin set of Broadcom® 3008 SAS3 (12Gbps); RAID 0,1,10	Twin set of Broadcom® 3008 SAS3 (12Gbps); RAID 0,1,10	Twin set of Broadcom® 3008 SAS3 (12Gbps); RAID 0,1,10
Connectivity	Twin set of Dual LAN with Intel® i350 Gigabit Ethernet controller	Twin set of FDR (Connect-X3) / 56G Ethernet	Twin set of Dual 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector
VGA/Audio	1 VGA, 1 Aspeed AST2400 BMC (per node)	1 VGA, 1 Aspeed AST2400 BMC (per node)	1 VGA, 1 Aspeed AST2400 BMC (per node)
Management	Twin set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog	Twin set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog	Twin set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog
Drive Bays	Twin set of 4x NVMe and 8x 2.5" hot-swap SAS drives.	Twin set of 4x NVMe and 8x 2.5" hot-swap SAS drives.	Twin set of 4x NVMe and 8x 2.5" hot-swap SAS drives.
Peripheral Bays	N/A	N/A	N/A
Power Supply	1280W Redundant Platinum Level Digital high-efficiency power supplies with I2C & PMBus	1280W Redundant Platinum Level Digital high-efficiency power supplies with I2C & PMBus	1280W Redundant Platinum Level Digital high-efficiency power supplies with I2C & PMBus
Cooling System	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control
Form Factor	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.75")	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.75")	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.75")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# TWINPRO®

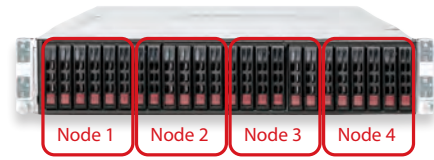
(For Complete System Only)

SIOM Support on 2U TwinPro2™

4 hot-swap nodes in 2U w/ 2.5" HDDs, Up to 2 Low Profile PCI-E Cards + 1 SIOM Card



(Rear View)



## SYS-2028TP-H Series

4 DP Nodes in 2U, 24x 2.5" SAS3/SATA3 drives

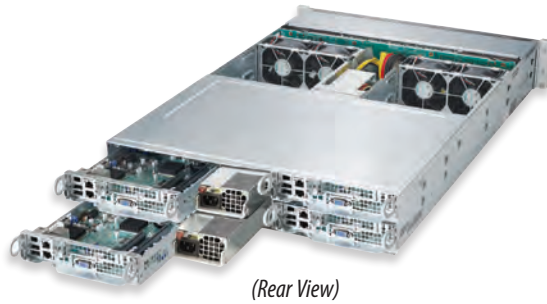


MODEL	SYS-2028TP-HC0R-SIOM SYS-2028TP-HC1R-SIOM SYS-2028TP-HTTR-SIOM	SYS-6028TP-HC0R SYS-6028TP-HC1R SYS-6028TP-HTR	SYS-6028TP-HC0FR SYS-6028TP-HTFR
Processor Support	Quad set of Intel® Xeon® processor E5-2600 v3/ v4 Socket R4 (LGA 2011) supported; UPI up to 9.6GT/s; CPU TDP support Up to 145W	Quad set of Intel® Xeon® processor E5-2600 v3/ v4 Socket R4 (LGA 2011) supported; UPI up to 9.6GT/s; CPU TDP support Up to 145W	Quad set of Intel® Xeon® processor E5-2600 v3/ v4 Socket R4 (LGA 2011) supported; UPI up to 9.6GT/s; CPU TDP support Up to 145W
Key Applications	<ul style="list-style-type: none"> <li>• Compute Intensive Application</li> <li>• Data Center</li> <li>• Enterprise Server</li> <li>• Financial Analysis</li> <li>• HPC</li> <li>• Mission-Critical</li> </ul>	<ul style="list-style-type: none"> <li>• Compute Intensive Application</li> <li>• Data Center</li> <li>• Enterprise Server</li> <li>• Financial Analysis</li> <li>• HPC</li> <li>• Mission-Critical</li> </ul>	<ul style="list-style-type: none"> <li>• Compute Intensive Application</li> <li>• Data Center</li> <li>• Enterprise Server</li> <li>• Financial Analysis</li> <li>• HPC</li> <li>• Mission-Critical</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 2 Low-profile PCI-E slots</li> <li>• 1 SIOM card support</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• QUAD set of 6 hot-swap 2.5" SATA/SAS drive bays</li> </ul>	<ul style="list-style-type: none"> <li>• 1 Low-profile PCI-E x16 slot</li> <li>• 4 hot swappable nodes in 2U</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• QUAD set of 3 hot-swap 3.5" SATA/SAS drive bays</li> </ul>	<ul style="list-style-type: none"> <li>• 1 Low-profile PCI-E x16 slot</li> <li>• 4 hot swappable nodes in 2U</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• QUAD set of 3 hot-swap 3.5" SATA/SAS drive bays</li> </ul>
Serverboard	SUPER● X10DRT-PS	SUPER● X10DRT-P	SUPER● X10DRT-PIBF
Chipset	Intel® C612 chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Quad set of up to 2TB ECC LRDIMM, 512GB ECC RDIMM, DDR4-2400MHz in 16 DIMM slots.	Quad set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, DDR4-2133MHz in 16 DIMM slots.	Quad set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, DDR4-2133MHz in 16 DIMM slots.
Expansion Slots	Quad set of: 1x PCI-E 3.0 x16 LP; 1x PCI-E 3.0 x8 LP; 1x SIOM card support	Quad set of low-profile PCI-E 3.0 x16; 1 x16 "0 slot"	Quad set of low-profile PCI-E 3.0 x16; 1 x16 "0 slot"
Onboard Storage Controller	<p><b>-HC0R-SIOM:</b> Quad set of Broadcom 3008 SW RAID 12Gbps SAS 3.0 controller for RAID 0,1,10</p> <p><b>-HC1R-SIOM:</b> Quad set of Broadcom 3108 HW RAID 12Gbps SAS 3.0 controller for RAID 0,1,5,6,10,50 w/optional SuperCap</p> <p><b>-HTTR-SIOM:</b> Quad set of Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10</p>	<p><b>-HC0R:</b> Quad set of Broadcom® 3008 SAS3 (12Gbps); RAID 0,1,10</p> <p><b>-HC1R:</b> Quad set of Broadcom® 3108 SAS3 (12Gbps); RAID 0,1,5,10</p> <p><b>-HTR:</b> Quad set of Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10</p>	<p><b>-HC0FR:</b> Quad set of Broadcom® 3008 SAS3 (12Gbps); RAID 0,1,10</p> <p><b>-HTFR:</b> Quad set of Intel® C612 controller for 8 SATA3 (6 Gbps) ports; RAID 0,1,5,10</p>
Connectivity	Quad set of single IPMI 2.0 + KVM with dedicated LAN only. Need to bundle with network card	Quad set of Dual LAN with Intel® i350 Gigabit Ethernet controller	<p><b>-HC0FR:</b> Quad set of FDR (Connect-X3) / 56G Ethernet</p> <p><b>-HTFR:</b> Quad set of 3x 3.5" hot-swap SATA drive bays</p>
VGA/Audio	1 VGA, 1 Asped AST2400 BMC	1 VGA, 1 Asped AST2400 BMC	1 VGA, 1 Asped AST2400 BMC
Management	Quad set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog	Quad set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog	Quad set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog
Drive Bays	Quad set of 6x 2.5" hot-swap SAS/SATA drive bays	Quad set of 3x 3.5" hot-swap SATA drive bays	Quad set of 3x 3.5" hot-swap SATA drive bays
Peripheral Bays	N/A	N/A	N/A
Power Supply	2000W Redundant Platinum Level high-efficiency Power Supplies with I2C & PMBus	2000W Redundant Titanium / Platinum Level high-efficiency Power Supplies with I2C & PMBus	2000W Redundant Titanium / Platinum Level high-efficiency Power Supplies with I2C & PMBus
Cooling System	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control
Form Factor	438 x 88 x 730mm (17.25" x 3.47" x 28.75")	2U Rackmount 438 x 88 x 762mm (17.25" x 3.47" x 30")	2U Rackmount 438 x 88 x 762mm (17.25" x 3.47" x 30")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

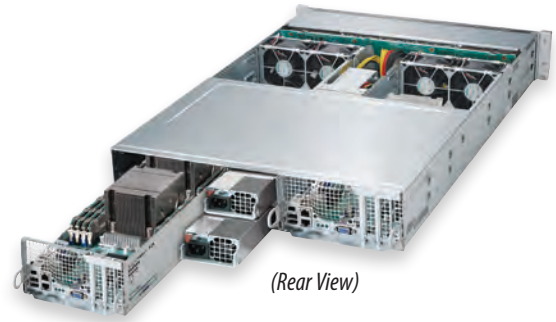


2U TwinPro2™  
4 hot-swap nodes in 2U w/ 2.5" or 3.5" HDDs



(Rear View)

2U TwinPro™  
2 hot-swap nodes in 2U w/ up to 4 NVMe per Node



(Rear View)

MODEL	<b>SYS-6028TP-HC0TR</b> <b>SYS-6028TP-HC1TR</b> <b>SYS-6028TP-HTTR</b>	<b>SYS-6028TP-DNCR</b> <b>SYS-6028TP-DNCFR</b>
Processor Support	Quad set of Intel® Xeon® processor E5-2600 v3 Socket R3 (LGA 2011) supported; UPI up to 9.6GT/s; CPU TDP support Up to 145W	Quad set of Intel® Xeon® processor E5-2600 v3 Socket R3 (LGA 2011) supported; UPI up to 9.6GT/s; CPU TDP support Up to 145W
Key Applications	<ul style="list-style-type: none"> <li>• Compute Intensive Application</li> <li>• Data Center</li> <li>• Enterprise Server</li> <li>• Financial Analysis</li> <li>• HPC</li> <li>• Mission-Critical</li> </ul>	<ul style="list-style-type: none"> <li>• Compute Intensive Application</li> <li>• Data Center</li> <li>• Enterprise Server</li> <li>• Financial Analysis</li> <li>• HPC</li> <li>• Mission-Critical</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 1 Low-profile PCI-E x16 slot</li> <li>• 4 hot swappable nodes in 2U</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• QUAD set of 3 hot-swap 3.5" SATA/SAS drive bays</li> </ul>	<ul style="list-style-type: none"> <li>• 2 hot swappable nodes in 2U</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• SAS3.0 (12Gbps) support</li> <li>• NVMe Support</li> <li>• Up to 2 Low Profile Add-On-Cards</li> <li>• 1280W Platinum Level redundant high-efficiency power supplies</li> </ul>
Serverboard	SUPER® X10DRT-PT	SUPER® X10DRT-P
Chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Quad set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, DDR4-2133MHz in 16 DIMM slots.	Twin set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, DDR4-2133MHz in 16 DIMM slots.
Expansion Slots	Quad set of low-profile PCI-E 3.0 x16; 1 x16 "0 slot"	Twin set of 1 PCI-E 3.0 x16, 1 PCI-E 3.0 x8.
Onboard Storage Controller	<p>-HC0TR: Quad set of Broadcom® 3008 SAS3 (12Gbps); RAID 0,1,10</p> <p>-HC1TR: Quad set of Broadcom® 3108 SAS3 (12Gbps); RAID 0,1,5,10</p> <p>-HTTR: Quad set of Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10</p>	Twin set of Broadcom® 3008 SAS3 (12Gbps); RAID 0,1,10
Connectivity	<p>-HC0TR: Quad set of Dual 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector</p> <p>-HC1TR: Quad set of Dual LAN with Intel® i350 Gigabit Ethernet controller</p> <p>-HTTR: Quad set of Dual LAN with Intel® X540 10GBase-T Ethernet Controller</p>	<p>-DNCR: Twin set of Dual LAN with Intel® i350 Gigabit Ethernet controller</p> <p>-DNCFR: Twin set of FDR (Connect-X3) / 56G Ethernet</p>
VGA/Audio	1 VGA, 1 Aspeed AST2400 BMC	1 VGA, 1 Aspeed AST2400 BMC (per node)
Management	Quad set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog	Twin set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog
Drive Bays	Quad set of 3x 3.5" hot-swap SATA drive bays	Twin set of 6x 3.5" hot-swap drive bays. (Max) Up to 4x NVMe + 2x SAS3 drives (per node), or, (Max) Up to 6x SAS3 support (per node)
Peripheral Bays	N/A	N/A
Power Supply	2000W Redundant Titanium / Platinum Level high-efficiency Power Supplies with I2C & PMBus	1280W Redundant Platinum Level Digital high-efficiency power supplies with I2C & PMBus
Cooling System	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control
Form Factor	2U Rackmount 438 x 88 x 762mm (17.25" x 3.47" x 30")	2U Rackmount 438 x 88 x 762mm (17.25" x 3.47" x 30")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

2U TwinPro™  
2 hot-swap nodes in 2U w/ up to 4 NVMe per Node



SIOM Support on 2U TwinPro2™  
4 hot-swap nodes in 2U w/ 2.5" HDDs,  
Up to 2 Low Profile PCI-E Cards + 1 SIOM Card



MODEL	SYS-6028TP-DNCTR	SYS-6028TP-HC0R-SIOM SYS-6028TP-HC1R-SIOM SYS-6028TP-HTR-SIOM
Processor Support	Twin set of Intel® Xeon® processor E5-2600 v3 Socket R3 (LGA 2011) supported; UPI up to 9.6GT/s; CPU TDP support Up to 145W	Quad set of Intel® Xeon® processor E5-2600 v3/v4 Socket R4 (LGA 2011) supported; UPI up to 9.6GT/s; CPU TDP support Up to 145W
Key Applications	<ul style="list-style-type: none"> <li>• Compute Intensive Application</li> <li>• Data Center</li> <li>• Enterprise Server</li> <li>• Financial Analysis</li> <li>• HPC</li> <li>• Mission-Critical</li> </ul>	<ul style="list-style-type: none"> <li>• Compute Intensive Application</li> <li>• Data Center</li> <li>• Enterprise Server</li> <li>• Financial Analysis</li> <li>• HPC</li> <li>• Mission-Critical</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 2 hot swappable nodes in 2U</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• SAS3.0 (12Gbps) support</li> <li>• NVMe Support</li> <li>• Up to 2 Low Profile Add-On-Cards</li> <li>• 1280W Platinum Level redundant high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>• 2 Low-profile PCI-E slots</li> <li>• 1 SIOM card support</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• QUAD set of 3 hot-swap 3.5" SATA/SAS drive bays</li> </ul>
Serverboard	SUPER● X10DRT-PT	SUPER● X10DRT-PS
Chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Twin set of up to 1TB ECC LRDIMM, 512GB ECC RDIMM, DDR4-2133MHz in 16 DIMM slots.	Quad set of up to 2TB ECC LRDIMM, 512GB ECC RDIMM, DDR4-2400MHz in 16 DIMM slots.
Expansion Slots	Twin set of 1 PCI-E 3.0 x16, 1 PCI-E 3.0 x8.	Quad set of: 1x PCI-E 3.0 LP x16; 1x PCI-E 3.0 LP x8; 1x SIOM card support
Onboard Storage Controller	Twin set of Broadcom® 3008 SAS3 (12Gbps); RAID 0,1,10	<p>-HC0R-SIOM: Quad set of Broadcom 3008 SW RAID 12Gbps SAS 3.0 controller for RAID 0,1,10</p> <p>-HC1R-SIOM: Quad set of Broadcom 3108 HW RAID 12Gbps SAS 3.0 controller for RAID 0,1,5 w/optional SuperCap</p> <p>-HTR-SIOM: Quad set of Intel® C612 controller for 3 SATA3 (6 Gbps) ports; RAID 0,1,5</p>
Connectivity	Twin set of Dual 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector	Quad set of single IPMI 2.0 + KVM with dedicated LAN only. Need to bundle with network card
VGA/Audio	1 VGA, 1 Aspeed AST2400 BMC (per node)	1 VGA, 1 Aspeed AST2400 BMC
Management	Twin set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog	Quad set of IPMI 2.0 + KVM with dedicated LAN, SuperDoctor®, Watch Dog
Drive Bays	Twin set of 6x 3.5" hot-swap drive bays. (Max) Up to 4x NVMe + 2x SAS3 drives (per node), or, (Max) Up to 6x SAS3 support (per node)	Quad set of 3x 3.5" hot-swap SAS/SATA drive bays
Peripheral Bays	N/A	N/A
Power Supply	1280W Redundant Platinum Level Digital high-efficiency power supplies with I2C & PMBus	2000W Redundant Titanium / Platinum Level high-efficiency Power Supplies with I2C & PMBus
Cooling System	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control
Form Factor	2U Rackmount 438 x 88 x 762mm (17.25" x 3.47" x 30")	2U Rackmount 438 x 88 x 774mm (17.25" x 3.47" x 30.5"); Enclosure: 438 x 88 x 775mm (17.25" x 3.47" x 30.5") Gross Weight: 90lbs (40.82kg) Net Weight: 72lbs (32.66kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# TWIN

(For Complete System Only)

1U Twin  
Cost-Optimized, 2 nodes in 1U  
w/ 8x 2.5" HDDs

1U Twin  
Cost-Optimized, 2 nodes in 1U  
w/ 4x 3.5" HDDs

2U Twin  
4 hot-swap nodes in 2U

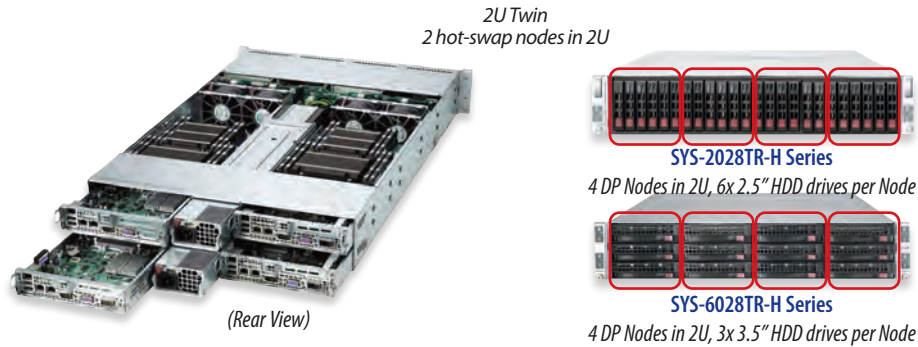


MODEL	SYS-1028TR-T SYS-1028TR-TF	SYS-6018TR-T SYS-6018TR-TF	SYS-2028TR-HTR SYS-2028TR-H72R
Processor Support	Intel® Xeon® processor E5-2600 V3 with UPI up to 9.6GT/s	Intel® Xeon® processor E5-2600 V3 with UPI up to 9.6GT/s	Quad set of Dual Intel® Xeon® Processor E5-2600 V4/V3 product family with UPI up to 9.6 GT/s TDP support up to 145W
Key Applications	<ul style="list-style-type: none"> <li>HPC</li> <li>Data Center</li> <li>Front End Server</li> </ul>	<ul style="list-style-type: none"> <li>HPC</li> <li>Data Center</li> <li>Front End Server</li> </ul>	<ul style="list-style-type: none"> <li>HPC</li> <li>Virtualization</li> <li>Data Center</li> <li>Web Server</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>1000W Titanium Level high-efficiency power supply</li> <li>10x 2.5" SAS/SATA drive bays</li> <li>IPMI 2.0 management with dedicated LAN</li> </ul>	<ul style="list-style-type: none"> <li>IPMI 2.0 Management</li> <li>1000W Titanium Level high-efficiency power supply</li> </ul>	<ul style="list-style-type: none"> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>4 hot swappable nodes in 2U</li> <li>2 SATA DOM support with embedded power</li> <li>Redundant 1600W Titanium Level high-efficiency power supplies</li> </ul>
Serverboard	-T: SUPER● X10DRT-L -TF: SUPER● X10DRT-LIBF	-T: SUPER● X10DRT-L -TF: SUPER● X10DRT-LIBF	SUPER● X10DRT-H
Chipset	Intel® C612 chipset	Intel® C612 chipset	Intel C612
System Memory (Max.)*	512GB Registered ECC, DDR4-2133MHz in 8 DIMM slots	512GB Registered ECC, DDR4-2133MHz in 8 DIMM slots	Quad set of 512 GB ECC LRDIMM, 256 GB ECC RDIMM; DDR4-2400MHz in 8 DIMM slots
Expansion Slots	1 PCI-E 3.0 x16 (in x16 slot);	1 PCI-E 3.0 x16 (in x16 slot);	Quad set of 1 PCI-E 3.0 x16 Low-profile
Onboard Storage Controller	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	-HTR: Quad set of SATA3 via Intel C612; SW RAID supports 0,1,5,10, -H72R: Quad set of SAS2 (6Gbps) via Broadcom 2208; HW RAID supports 0, 1, 5, 6, 10, 50
Connectivity	-T: 2 Intel® i350 Gigabit Ethernet -TF: 2 Intel® i350 Gigabit Ethernet + Single port IB (FDR, 56Gbps), w/ QSFP connector	-T: 2 Intel® i350 Gigabit Ethernet -TF: 2 Intel® i350 Gigabit Ethernet + Single port IB (FDR, 56Gbps), w/ QSFP connector	Quad set of dual LAN with INTEL i350 Gigabit Ethernet controller
VGA/Audio	1 VGA, 1 Aspeed AST2400 BMC;	1 VGA, 1 Aspeed AST2400 BMC;	Quad set of Aspeed AST2400 BMC
Management	Intel® Node Manager; IPMI2.0; NMI; SuperDoctor® 5; Watchdog;	Intel® Node Manager; IPMI2.0; NMI; SuperDoctor® 5; Watchdog;	Intel® Node Manager; IPMI2.0; NMI; SMCBU and SMM; SuperDoctor III; Watchdog
Drive Bays	8x 2.5" hot-swap SAS/SATA drive bay	4 x 3.5" host-swap SAS/SATA drive bay	Quad set of 6x 2.5" hot-swap SATA drive bay
Peripheral Bays	N/A	N/A	N/A
Power Supply	1000W redundant Titanium Level digital power supplies	1000W redundant Titanium Level digital power supplies	1600W Redundant Titanium Level high-efficiency power supplies with I2C & PMBus
Cooling System	6x 40x56mm counter-rotation PWM fan;	6x 40x56mm counter-rotation PWM fan;	4x 8cm heavy duty fans with PWM fan speed control
Form Factor	1U-Twin 17.2" (437mm) x 1.75" (44.45mm) x 27.75" (705mm)	1U-Twin 17.2" (437mm) x 1.75" (44.45mm) x 27.75" (705mm)	2U Rackmount; Enclosure: 438 x 88 x 724mm (17.25" x 3.47" x 28.5") Package: 671 x 284 x 1011mm (26.4" x 11.2" x 39.8") Gross Weight: 85lbs (38.56kg) Net Weight: 54.5lbs (24.72kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

## TWIN

(For Complete System Only)



MODEL	SYS-2028TR-H72FR SYS-2028TR-HTFR	SYS-6028TR-HTR	SYS-6028TR-HTFR
Processor Support	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s; CPU TDP support Up to 145W	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s; CPU TDP support Up to 145W	Quad set of Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s; CPU TDP support Up to 145W
Key Applications	<ul style="list-style-type: none"> <li>Data Center</li> <li>Web Server</li> <li>HPC</li> <li>Virtualization</li> </ul>	<ul style="list-style-type: none"> <li>Data Center</li> <li>Web Server</li> <li>HPC</li> <li>Virtualization</li> </ul>	<ul style="list-style-type: none"> <li>Data Center</li> <li>Web Server</li> <li>HPC</li> <li>Virtualization</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>2208</li> <li>1600W Redundant <b>Titanium Level</b> high-efficiency power supplies</li> <li>8 DIMM slots</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>2x SATADOM</li> <li>4 hot-swappable nodes in 2U</li> </ul>	<ul style="list-style-type: none"> <li>1600W Redundant <b>Titanium Level</b> high-efficiency power supplies</li> <li>8 DIMM slots</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>2x SATADOM</li> <li>4 hot-swappable nodes in 2U</li> </ul>	<ul style="list-style-type: none"> <li>1600W Redundant <b>Titanium Level</b> high-efficiency power supplies</li> <li>8 DIMM slots</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>2x SATADOM</li> <li>4 hot-swappable nodes in 2U</li> </ul>
Serverboard	SUPER● X10DRT-HIBF	SUPER● X10DRT-H	SUPER● X10DRT-HIBF
Chipset	Intel® C612 Chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	Quad set of up to 1TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 8 DIMM slots	Quad set of up to 1TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 8 DIMM slots	Quad set of up to 1TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 8 DIMM slots
Expansion Slots	Quad set of 1 PCI-E 3.0 x16 Low-profile	Quad set of 1 PCI-E 3.0 x16 Low-profile	Quad set of 1 PCI-E 3.0 x16 Low-profile
Onboard Storage Controller	Quad set of SAS2 (6Gbps) via 2208; HW RAID supports 0,1,5,6,10,50	Quad set of Intel® C612 controller for 3 SATA3 (6 Gbps) ports; RAID 0,1	Quad set of Intel® C612 controller for 3 SATA3 (6 Gbps) ports; RAID 0,1
Connectivity	-H72FR: Quad set of dual LAN with ConnectX3 single port FDR -HTFR: Quad set of dual LAN with ConnectX3 single port FDR	Quad set of dual LAN with Intel® i350 dual Gigabit Ethernet LAN	Quad set of dual LAN with ConnectX3 single port FDR
VGA/Audio	Quad set of AST2400 VGA	Quad set of AST2400 VGA	Quad set of AST2400 VGA
Management	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Quad set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	Quad set of 6x 2.5" hot-swap SAS2 HDDs	Quad set of 3x 3.5" hot-swap SATA3 HDDs	Quad set of 3x 3.5" hot-swap SATA3 HDDs
Peripheral Bays	N/A	N/A	N/A
Power Supply	Redundant 1600W <b>Titanium Level</b> high-efficiency power supplies with I <sup>2</sup> C & PMBus	Redundant 1600W <b>Titanium Level</b> high-efficiency power supplies with I <sup>2</sup> C & PMBus	Redundant 1600W <b>Titanium Level</b> high-efficiency power supplies with I <sup>2</sup> C & PMBus
Cooling System	4x 80mm heavy duty fans with PWM fan speed control	4x 80mm heavy duty fans with PWM fan speed control	4x 80mm heavy duty fans with PWM fan speed control
Form Factor	2U Rackmount 438 x 88 x 679mm (17.25" x 3.47" x 26.75")	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.5")	2U Rackmount 438 x 88 x 724mm (17.25" x 3.47" x 28.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# X12 ULTRA

(For Complete System Only)

**NEW!**  
3rd Gen Intel® Xeon® Scalable processors Supported



MODEL	SYS-220U-MTNR	SYS-620U-TNR
Processor Support	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA-4189 (Socket P+) supported TDP up to 270W; 3 UPI up to 11.2GT/s	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA-4189 (Socket P+) supported TDP up to 270W; 3 UPI up to 11.2GT/s
Key Applications	<ul style="list-style-type: none"> <li>Virtualization</li> <li>HPC</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> <li>Software Defined Storage</li> <li>Application Tier Service Provider</li> <li>5G/Telco</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>HPC</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> <li>Software Defined Storage</li> <li>Application Tier Service Provider</li> <li>5G/Telco</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Modular Components for Building Application-Optimized Solutions</li> <li>Optimized cooling with support up to 270W TDP processors</li> <li>Dual Socket P+ (LGA-4189) 3rd Gen Intel® Xeon® Scalable Processors</li> <li>Up to 8TB Intel® Optane™ Persistent Memory (up to 12TB with DRAM)</li> <li>Hot-swappable hybrid drive bays supporting NVMe, SATA or SAS</li> <li>Configurable number of PCI-E 4.0 expansion slots with support for double-width GPUs and FPGAs.</li> <li>Flexible onboard networking options</li> <li>Short-depth model (22.6") optimized for 5G and Telco Markets</li> </ul>	<ul style="list-style-type: none"> <li>Modular Components for Building Application-Optimized Solutions</li> <li>Optimized cooling with support up to 270W TDP processors</li> <li>Dual Socket P+ (LGA-4189) 3rd Gen Intel® Xeon® Scalable Processors</li> <li>Up to 8TB Intel® Optane™ Persistent Memory (up to 12TB with DRAM)</li> <li>Hot-swappable hybrid drive bays supporting NVMe, SATA or SAS</li> <li>Configurable number of PCI-E 4.0 expansion slots with support for double-width GPUs and FPGAs.</li> <li>Flexible onboard networking options</li> </ul>
Serverboard	SUPER● X12DPU-6	SUPER● X12DPU-6
Chipset	Intel® C621A	Intel® C621A
System Memory (Max.)	32 DIMM slots Up to 8TB ECC LRDIMM, DDR4-3200MHz Up to 8TB ECC RDIMM, DDR4-3200MHz	32 DIMM slots Up to 8TB ECC LRDIMM, DDR4-3200MHz Up to 8TB ECC RDIMM, DDR4-3200MHz
Expansion Slots	1 PCI-E 4.0 x16 FH, 10.5"L slot 1 PCI-E 4.0 x16 LP slot 5 PCI-E 4.0 x8 FH, 10.5"L slots (PCI-E 4.0 x16 options available) 1 PCI-E 4.0 x8 internal LP slot	1 PCI-E 4.0 x16 FH, 10.5"L slot 1 PCI-E 4.0 x16 LP slot 5 PCI-E 4.0 x8 FH, 10.5"L slots (PCI-E 4.0 x16 options available) 1 PCI-E 4.0 x8 internal LP slot
Onboard Storage Controller	Intel® SATA	Intel® SATA
Connectivity	2x 10GbE RJ45 with Intel® X710-AT2 (optional) 2x 10GbE RJ45 or 2x 10GbE SFP+ with Intel® X710-TM4 (optional)	2x 10GbE RJ45 with Intel® X710-AT2 (optional) 2x 10GbE RJ45 or 2x 10GbE SFP+ with Intel® X710-TM4 (optional)
VGA/Audio	1 VGA port	1 VGA port
Management	SuperDoctor® 5; Watch Dog; NMI; SUM; KVM with dedicated LAN; Intel® Node Manager; IPMI 2.0; Redfish API	SuperDoctor® 5; Watch Dog; NMI; SUM; KVM with dedicated LAN; Intel® Node Manager; IPMI 2.0; Redfish API
Drive Bays	6x 2.5" hot-swap NVMe/SATA/SAS drive bays; 6x 2.5" NVMe hybrid; Optional RAID support via RAID controller AOC	12x 3.5" hot-swap NVMe/SATA/SAS drive bays; 12x 2.5" NVMe hybrid; Optional RAID support via RAID controller AOC
Peripheral Bays	None	None
Power Supply	Redundant 1600W Titanium level (96%)	Redundant 1200W Titanium level (96%)
Cooling System	6x 6cm heavy duty fan(s)	4x 8cm heavy duty fan(s)
Form Factor	2U rackmount Enclosure: 437 x 89 x 574mm (17.2" x 3.5" x 22.6") Package: 625 x 253 x 1154mm (24.6" x 9.96" x 45.43")	2U rackmount Enclosure: 437 x 89 x 723mm (17.2" x 3.5" x 28.46") Package: 605 x 256 x 947mm (23.81" x 10.07" x 37.28")

# X12 ULTRA

(For Complete System Only)

**NEW!**

3rd Gen Intel® Xeon® Scalable processors Supported



12x 2.5" Drives



4x 3.5" Drives



24x 2.5" Drives



Ultra/M10

MODEL	SYS-120U-TNR	SYS-610U-TNR	SYS-220U-TNR
Processor Support	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA-4189 (Socket P+) supported TDP up to 270W; 3 UPI up to 11.2GT/s	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA-4189 (Socket P+) supported TDP up to 270W; 3 UPI up to 11.2GT/s	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA-4189 (Socket P+) supported TDP up to 270W; 3 UPI up to 11.2GT/s
Key Applications	<ul style="list-style-type: none"> <li>Virtualization</li> <li>HPC</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> <li>Software Defined Storage</li> <li>Application Tier Service Provider</li> <li>5G/Telco</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>HPC</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> <li>Software Defined Storage</li> <li>Application Tier Service Provider</li> <li>5G/Telco</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>HPC</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> <li>Software Defined Storage</li> <li>Application Tier Service Provider</li> <li>5G/Telco</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Modular Components for Building Application-Optimized Solutions</li> <li>Optimized cooling with support up to 270W TDP processors</li> <li>Dual Socket P+ (LGA-4189) 3rd Gen Intel® Xeon® Scalable Processors</li> <li>Up to 8TB Intel® Optane™ Persistent Memory (up to 12TB with DRAM)</li> <li>Hot-swappable hybrid drive bays supporting NVMe, SATA or SAS</li> <li>Configurable number of PCI-E 4.0 expansion slots with support for double-width GPUs and FPGAs.</li> <li>Flexible onboard networking options</li> </ul>	<ul style="list-style-type: none"> <li>Modular Components for Building Application-Optimized Solutions</li> <li>Optimized cooling with support up to 270W TDP processors</li> <li>Dual Socket P+ (LGA-4189) 3rd Gen Intel® Xeon® Scalable Processors</li> <li>Up to 8TB Intel® Optane™ Persistent Memory (up to 12TB with DRAM)</li> <li>Hot-swappable hybrid drive bays supporting NVMe, SATA or SAS</li> <li>Configurable number of PCI-E 4.0 expansion slots with support for double-width GPUs and FPGAs.</li> <li>Flexible onboard networking options</li> </ul>	<ul style="list-style-type: none"> <li>Modular Components for Building Application-Optimized Solutions</li> <li>Optimized cooling with support up to 270W TDP processors</li> <li>Dual Socket P+ (LGA-4189) 3rd Gen Intel® Xeon® Scalable Processors</li> <li>Up to 8TB Intel® Optane™ Persistent Memory (up to 12TB with DRAM)</li> <li>Hot-swappable hybrid drive bays supporting NVMe, SATA or SAS</li> <li>Configurable number of PCI-E 4.0 expansion slots with support for double-width GPUs and FPGAs.</li> <li>Flexible onboard networking options</li> </ul>
Serverboard	SUPER● X12DPU-6	SUPER● X12DPU-6	SUPER● X12DPU-6
Chipset	Intel® C621A	Intel® C621A	Intel® C621A
System Memory (Max.)	32 DIMM slots Up to 8TB ECC LRDIMM, DDR4-3200MHz Up to 8TB ECC RDIMM, DDR4-3200MHz	32 DIMM slots Up to 8TB ECC LRDIMM, DDR4-3200MHz Up to 8TB ECC RDIMM, DDR4-3200MHz	32 DIMM slots Up to 8TB ECC LRDIMM, DDR4-3200MHz Up to 8TB ECC RDIMM, DDR4-3200MHz
Expansion Slots	2 PCI-E 4.0 x16 FH, 10.5"L slots 1 PCI-E 4.0 x16 LP slot 1 PCI-E 4.0 x16 Internal LP slot	2 PCI-E 4.0 x16 FH, 10.5"L slots 1 PCI-E 4.0 x16 LP slot 1 PCI-E 4.0 x16 Internal LP slot	1 PCI-E 4.0 x16 FH, 10.5"L slot 1 PCI-E 4.0 x16 LP slot 5 PCI-E 4.0 x8 FH, 10.5"L slots (PCI-E 4.0 x16 options available) 1 PCI-E 4.0 x8 internal LP slot
Onboard Storage Controller	Intel® SATA	Intel® SATA	Intel® SATA
Connectivity	2x 10GbE RJ45 with Intel® X710-AT2 (optional) 2x 10GbE RJ45 or 2x 10GbE SFP+ with Intel® X710-TM4 (optional)	2x 10GbE RJ45 with Intel® X710-AT2 (optional) 2x 10GbE RJ45 or 2x 10GbE SFP+ with Intel® X710-TM4 (optional)	2x 10GbE RJ45 with Intel® X710-AT2 (optional) 2x 10GbE RJ45 or 2x 10GbE SFP+ with Intel® X710-TM4 (optional)
VGA/Audio	1 VGA port	1 VGA port	1 VGA port
Management	SuperDoctor® 5; Watch Dog; NMI; SUM; KVM with dedicated LAN; Intel® Node Manager; IPMI 2.0; Redfish API	SuperDoctor® 5; Watch Dog; NMI; SUM; KVM with dedicated LAN; Intel® Node Manager; IPMI 2.0; Redfish API	SuperDoctor® 5; Watch Dog; NMI; SUM; KVM with dedicated LAN; Intel® Node Manager; IPMI 2.0; Redfish API
Drive Bays	12x 2.5" hot-swap NVMe/SATA/SAS drive bays; 12x 2.5" NVMe hybrid; Optional RAID support via RAID controller AOC	4x 3.5" hot-swap NVMe/SATA/SAS drive bays; 2x 2.5" NVMe hybrid; Optional RAID support via RAID controller AOC	24x 2.5" hot-swap NVMe/SATA/SAS drive bays; 22x 2.5" NVMe hybrid; Optional RAID support via RAID controller AOC
Peripheral Bays	None	None	None
Power Supply	Redundant 1200W Titanium level (96%)	Redundant 1200W Titanium level (96%)	Redundant 1600W Titanium level (96%)
Cooling System	8x 4cm heavy duty fan(s)	8x 4cm heavy duty fan(s)	4x 8cm heavy duty fan(s)
Form Factor	1U rackmount Enclosure: 437 x 43 x 739mm (17.2" x 1.7" x 29.1") Package: 605 x 203 x 950mm (23.81" x 7.99" x 37.4")	1U rackmount Enclosure: 437 x 43 x 754mm (17.2" x 1.7" x 29.7") Package: 605 x 203 x 950mm (23.81" x 7.99" x 37.4")	2U rackmount Enclosure: 437 x 89 x 705.3mm (17.2" x 3.5" x 27.76") Package: 625 x 253 x 1154mm (24.6" x 9.96" x 45.43")

# ULTRA

(For Complete System Only)

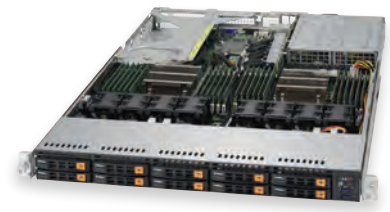
1U X11 Ultra  
Low Latency



1U X11 Ultra  
Low Latency



1U X11 Ultra  
10x 2.5" NVMe Drive Bays



Ultra/W10

MODEL	SYS-1029UX-LL1-C16 SYS-1029UX-LL2-C16 SYS-1029UX-LL3-C16	SYS-1029UX-LL1-S16 SYS-1029UX-LL2-S16 SYS-1029UX-LL3-S16	SYS-1029U-TN10RT
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. LL1: Dual Socket P (LGA 3647), Intel Xeon Gold 6244 included LL2: Dual Socket P (LGA 3647), Intel Xeon® Gold 6246 included LL3: Dual Socket P (LGA 3647), Intel Xeon® Gold 6254 included Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. LL1: Dual Socket P (LGA 3647), Intel Xeon Gold 6144 included LL2: Dual Socket P (LGA 3647), Intel Xeon Gold 6146 included LL3: Dual Socket P (LGA 3647), Intel Xeon Gold 6154 included Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).
Key Applications	<ul style="list-style-type: none"> <li>Financial Analysis</li> <li>Business Critical Applications</li> <li>Enterprise Server</li> <li>Hyper-Speed Hardware Acceleration</li> <li>Low Latency &amp; Jitter Optimized</li> </ul>	<ul style="list-style-type: none"> <li>Financial Analysis</li> <li>Business Critical Applications</li> <li>Enterprise Server</li> <li>Hyper-Speed Hardware Acceleration</li> <li>Low Latency &amp; Jitter Optimized</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>8x 2.5" SAS/SATA drive bays</li> <li>2x 2.5" NVMe drive bay support</li> <li>Optimized cooling</li> <li>Platinum Level redundant power supply</li> </ul>	<ul style="list-style-type: none"> <li>8x 2.5" SAS/SATA drive bays</li> <li>2x 2.5" NVMe drive bay support</li> <li>Optimized cooling</li> <li>Platinum Level redundant power supply</li> </ul>	<ul style="list-style-type: none"> <li>10 NVMe SSDs Support</li> <li>24 DIMM sockets</li> <li>2 PCI-E 3.0 (x16)</li> <li>Dual 10G BaseT</li> <li>1000W Titanium Level Power Supply</li> <li>2 SATA DOMs Support with Embedded Power</li> </ul>
Serverboard Chipset	SUPER® X11DPU-XLL Intel C621 Chipset 16 DIMM slots;	SUPER® X11DPU-XLL Intel C621 Chipset 16 DIMM slots;	SUPER® X11DPU Intel® C621 Chipset 24 DIMM slots; Up to 6TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB); 12x 16GB DDR4-2933 MHz included
System Memory (Max.)*	Up to 4TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB); 12x 16GB DDR4-2933 MHz included	Up to 4TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)	24 DIMM slots; Up to 6TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)
Expansion Slots	2 PCI-E 3.0 x16(1x Full Height, 10.5" Length; 1x Full Height, 10" Length) 1 PCI-E 3.0 x8 (Low Profile) 1 PCI-E 3.0 x8 (Internal SAS3 integrated 3108)	LL1/LL2: 2 PCI-E 3.0 x16(1x Full Height, 10.5" Length; 1x Full Height, 10" Length) 1 PCI-E 3.0 x8 (Low Profile) 1 PCI-E 3.0 x8 (Internal SAS3 integrated 3108) LL3: 2 PCI-E 3.0 x16(Full Height, 10.5" Length) 1 PCI-E 3.0 x8 (Low Profile) 1 PCI-E 3.0 x8 (Internal SAS3 integrated 3108)	2 PCI-E 3.0 x16 (2 FH, 10.5"L)
Onboard Storage Controller	Broadcom® 3108 controller for 8 SAS3 ports	Broadcom® 3108 controller for 8 SAS3 ports	Intel® C621 SATA3 (6 Gbps) controller
Connectivity	4x Gigabit Ethernet ports via AOC-UR-I4G	4x Gigabit Ethernet ports via AOC-UR-I4G	2 10Gbase-T Ethernet via Intel® X540 Ethernet Controller 5 USB 3.0 ports (2 Rear, 2 Front, 1 Type A) 1 Serial Port
VGA/Audio	1 VGA, 1 Aspeed AST2500 BMC	1 VGA, 1 Aspeed AST2500 BMC	2 VGA ports (1 rear, 1 onboard) 1 Aspeed AST2500 BMC
Management	IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager; Redfish API; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5
Drive Bays	8x SATA/SAS3 Hot-swap 2.5" HDD bays (SAS3 3108) 2x NVMe Hot-swap 2.5" HDD bays	8x SATA/SAS3 Hot-swap 2.5" HDD bays (SAS3 3108) 2x NVMe Hot-swap 2.5" HDD bays	10 Hot-Swappable 2.5" drive bays: 6 NVMe ports (NVMe from CPU1) 4 NVMe/SAS3 hybrid ports for optional SAS3/SATA3 (NVMe from CPU 2)
Peripheral Bays	N/A	N/A	N/A
Power Supply	750W High-efficiency (Platinum level) digital power supply	750W High-efficiency (Platinum level) digital power supply	Redundant 1000W Titanium Level Power Supply
Cooling System	8 heavy duty fans w/ Optimal Fan Speed Control	8 heavy duty fans w/ Optimal Fan Speed Control	8 Heavy Duty fans w/ Optimal Fan Speed Control , 1 Air Shroud
Form Factor	1U Rackmount; Enclosure: 437 x 43 x 724mm (17.2" x 1.7" x 28.5") Gross Weight: 41lbs (18.6kg) Net Weight: 26lbs (11.79kg)	1U Rackmount; Enclosure: 437 x 43 x 724mm (17.2" x 1.7" x 28.5") Gross Weight: 41lbs (18.6kg) Net Weight: 26lbs (11.79kg)	432 x 43 x 706mm (17.2" x 1.7" x 27.8")

<sup>†</sup> 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

<sup>††</sup> For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only, Contact your Supermicro sales rep for more info.

# ULTRA

(For Complete System Only)



1U X11 Ultra  
10x 2.5" Drive Bays



1U X11 Ultra  
10x 2.5" Drive Bays, SAS3 Expander



Ultra/W10

MODEL	SYS-1029U-TR4 SYS-1029U-TR4T SYS-1029U-TRT	SYS-1029U-TRTP SYS-1029U-TRTP2 SYS-1029U-TR25M	SYS-1029U-E1CR4 SYS-1029U-E1CR4T SYS-1029U-E1CRT	SYS-1029U-E1CRTP SYS-1029U-E1CRTP2 SYS-1029U-E1CR25M
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s. <i>Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).</i>		2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s. <i>Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).</i>	
Key Applications	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>		<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>	
Outstanding Features	<ul style="list-style-type: none"> <li>Flexible LAN options</li> <li>10x 2.5" SAS3 (12Gb/s) drive bays</li> <li>24 DIMM sockets</li> <li>4 PCI-E Add-on cards</li> <li>205W CPU support</li> <li>Platinum Level Power Supply</li> <li>2 SATA DOM support with embedded power</li> </ul>		<ul style="list-style-type: none"> <li>Flexible LAN options</li> <li>10x 2.5" SAS3 (12Gb/s) drive bays</li> <li>24 DIMM sockets</li> <li>4 PCI-E Add-on cards</li> <li>205W CPU support</li> <li>Platinum Level Power Supply</li> <li>2 SATA DOM support with embedded power</li> </ul>	
Serverboard	SUPER● X11DPU		SUPER● X11DPU	
Chipset	Intel® C621 chipset		Intel® C621 chipset	
System Memory (Max.)*	24 DIMM slots; Up to 6TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)		24 DIMM slots; Up to 6TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)	
Expansion Slots	2 PCI-E 3.0 x16 (FH, 10.5"L); 2 PCI-E 3.0 x8 (1 LP, 1 Internal LP)		2 PCI-E 3.0 x16 (FH, 10.5"L); 2 PCI-E 3.0 x8 (1 LP, 1 Internal LP)	
Onboard Storage Controller	Intel® C621 SATA controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;		Intel® C621 SATA3 (6Gb/s) controller	
Connectivity	<b>-TR4:</b> 4 Gigabit Ethernet; 2 VGA ports (1 rear, 1 onboard) 5 USB 3.0 ports (2 rear, 2 front, 1 Type A); 1 Serial Port <b>-TR4T:</b> 4 10GBase-T Ethernet; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port <b>-TRT:</b> 2 10GBase-T Ethernet; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port <b>-TRTP:</b> 2 10G SFP+ Ethernet; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port <b>-TRTP2:</b> 2 10G SFP+ Ethernet; 2 Gigabit Ethernet; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port <b>-TR25M:</b> 2 25G SFP28 Ethernet; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port		<b>-E1CR4:</b> 4 Gigabit Ethernet; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port <b>-E1CR4T:</b> 4 10GBase-T Ethernet; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port <b>-E1CRT:</b> 2 10GBase-T Ethernet; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port <b>-E1CRTP:</b> 2 10G SFP+ Ethernet; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port <b>-E1CRTP2:</b> 2 10G SFP+ Ethernet; 2 Gigabit Ethernet; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port <b>-E1CR25M:</b> 2 25G SFP28 Ethernet; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port	
VGA/Audio	Aspeed AST2500 BMC		Aspeed AST2500 BMC	
Management	<b>-TR4:</b> Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SSM, SUM, SuperDoctor® 5 <b>-TR4T/TRT/TRTP/TRTP2/TR25M:</b> Intel® Node Manager; Redfish API; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5;		Intel® Node Manager; Redfish API; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5;	
Drive Bays	<b>-TR4:</b> 10 hot-swap 2.5" drive support <b>-TR4T/TRT/TRTP/TRTP2/TR25M:</b> 10 hot-swap 2.5" drive bays; 10 SAS3 ports support via AOC		10 hot-swap 2.5" drive bays; 10 SAS3 ports support via Expander and AOC	
Peripheral Bays	N/A		N/A	
Power Supply	750W Redundant Platinum Level Power Supply		750W Redundant Platinum Level Power Supply	
Cooling System	8 heavy duty fans w/ Optimal Fan Speed Control, 1 Air Shroud		8 heavy duty fans w/ Optimal Fan Speed Control, 1 Air Shroud	
Form Factor	437 x 43 x 707mm (17.2" x 1.7" x 27.82")		1U Chassis; Enclosure: 437 x 43 x 707mm (17.2" x 1.7" x 27.82") Gross Weight: 48lbs (21.77kg) Net Weight: 36.5lbs (16.56kg)	

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

<sup>†</sup> 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

<sup>††</sup> For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.





# ULTRA

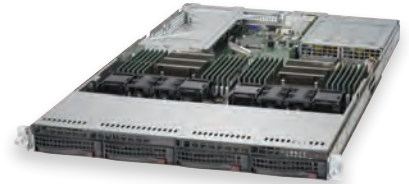
(For Complete System Only)



1U X11 Ultra  
12x 2.5" NVMe Drive Bays

1U X11 Ultra  
4x 3.5" NVMe Drive Bays

1U X11 Ultra  
4x 3.5" Drive Bays



Ultra/WIO

MODEL	SYS-1029U-TN12RV	SYS-6019U-TN4RT SYS-6019U-TN4R4T	SYS-6019U-TR4 SYS-6019U-TR4T SYS-6019U-TRT	SYS-6019U-TRTP SYS-6019U-TRTP2 SYS-6019U-TR25M
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).
Key Applications	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> <li>4 Hot-Swap NVMe Support</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> <li>Flexible LAN options</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> <li>Flexible LAN options</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>12 Hot-Swap NVMe/SATA Drive Bays</li> <li>24 DIMM sockets</li> <li>3 PCI-E Expansion Slots</li> <li>Flexible Networking Options with Ultra Riser Card</li> <li>1200W Redundant Power, Titanium Level (96% typical efficiency)</li> </ul>	<ul style="list-style-type: none"> <li>4 3.5" drive bays</li> <li>24 DIMM sockets</li> <li>4 PCI-E Add-on cards</li> <li>205W CPU support</li> <li>Platinum Level Power Supply</li> <li>2 SATA DOM support with embedded power</li> </ul>	<ul style="list-style-type: none"> <li>24 DIMM sockets</li> <li>4 PCI-E Add-on cards</li> <li>4 3.5" drive bays</li> <li>205W CPU support</li> <li>Platinum Level Power Supply</li> <li>2 SATA DOM support with embedded power</li> </ul>	<ul style="list-style-type: none"> <li>24 DIMM sockets</li> <li>4 PCI-E Add-on cards</li> <li>4 3.5" drive bays</li> <li>205W CPU support</li> <li>Platinum Level Power Supply</li> <li>2 SATA DOM support with embedded power</li> </ul>
Serverboard Chipset	SUPER● X11DPU-V Intel® C621 Chipset	SUPER● X11DPU Intel® C621 chipset	SUPER● X11DPU Intel® C621 chipset	SUPER● X11DPU Intel® C621 chipset
System Memory (Max.)*	24 DIMM slots; Up to 6TB DDR4-2933 MHz <sup>1</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)	24 DIMM slots; Up to 6TB DDR4-2933 MHz <sup>1</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)	24 DIMM slots; Up to 6TB DDR4-2933 MHz <sup>1</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)	24 DIMM slots; Up to 6TB DDR4-2933 MHz <sup>1</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)
Expansion Slots	1 PCI-E 3.0 x16 (FH, 10.5"L), 1 PCI-E 3.0 x8 (LP), 1 Internal PCI-E 3.0 x16 (For SMC Storage Controllers)	2 PCI-E 3.0 x16 (FH, 10.5"L); 2 PCI-E 3.0 x8 (1 LP, 1 Internal LP)	2 PCI-E 3.0 x16 (FH, 10.5"L); 2 PCI-E 3.0 x8 (1 LP, 1 Internal LP)	2 PCI-E 3.0 x16 (FH, 10.5"L); 2 PCI-E 3.0 x8 (1 LP, 1 Internal LP)
Onboard Storage Controller	Intel® C621 SATA3 (6 Gbps) controller	Intel® C621 SATA3 (6Gb/s) controller	Intel® C621 SATA3 (6Gb/s) controller	Intel® C621 SATA3 (6Gb/s) controller
Connectivity	Optional 2x25GbE (SFP28) or 2x10GbE (RJ45) via Ultra Riser Card; 4 USB 3.0 ports (2 Rear, 1 Front, 1 Type A); 1 Serial Port	<p>-TN4RT: 2 10GbBase-T Ethernet ports; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p> <p>-TN4R4T: 4x 10GbBase-T Ethernet ports via AOC-UR-14XTF; Intel® X710 + X557 10GbBase-T; 1x Realtek RTL8211E PHY (dedicated IPMI); 2 VGA ports (1 rear, 1 onboard); 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p>	<p>-TR4: 4 Gigabit Ethernet; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p> <p>-TR4T: 4 10GbBase-T Ethernet ports; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p> <p>-TRT: 2 10GbBase-T Ethernet ports; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p> <p>-TRTP: 2 10G SFP+ Ethernet ports; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p> <p>-TRTP2: 2 Gigabit Ethernet ports; 2 10G SFP+ Ethernet ports; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p> <p>-TR25M: 2 25G SFP28 Ethernet Ports; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p>	<p>-TR4: 4 Gigabit Ethernet; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p> <p>-TR4T: 4 10GbBase-T Ethernet ports; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p> <p>-TRT: 2 10GbBase-T Ethernet ports; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p> <p>-TRTP: 2 10G SFP+ Ethernet ports; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p> <p>-TRTP2: 2 Gigabit Ethernet ports; 2 10G SFP+ Ethernet ports; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p> <p>-TR25M: 2 25G SFP28 Ethernet Ports; 2 VGA ports (1 rear, 1 onboard) 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p>
VGA/Audio	1 VGA, Aspeed AST2500	Aspeed AST2500 BMC	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager; Redfish API; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5	Intel® Node Manager; Redfish API; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5;	Intel® Node Manager; Redfish API; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5;	Intel® Node Manager; Redfish API; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5;
Drive Bays	12 Hot-Swappable 2.5" drive bays, 6 NVMe/SATA ports (NVMe from CPU1) and 6 NVMe/SATA ports (NVMe from CPU 2); Optional SAS support via SAS storage controller	4 hot-swap 3.5" drive support; 4 NVMe/SATA3 ports	4 hot-swap 3.5" drive support	4 hot-swap 3.5" drive support
Peripheral Bays	N/A	N/A	N/A	N/A
Power Supply	Redundant 1200W Titanium Level Power Supply	Redundant 750W Platinum Level Power Supply	Redundant 750W Platinum Level Power Supply	Redundant 750W Platinum Level Power Supply
Cooling System	8 Heavy Duty fans w/ Optimal Fan Speed Control, 1 Air Shroud	8 heavy duty fans w/ Optimal Fan Speed Control, 1 Air Shroud	8 heavy duty fans w/ Optimal Fan Speed Control, 1 Air Shroud	8 heavy duty fans w/ Optimal Fan Speed Control, 1 Air Shroud
Form Factor	1U Chassis; Enclosure: 432 x 43 x 739mm (17.2" x 1.7" x 29.1")	1U Chassis; Enclosure: 437 x 43 x 737mm (17.2" x 1.7" x 29") Gross Weight: 48lbs (21.77kg) Net Weight: 36.5lbs (16.56kg)	1U Chassis; Enclosure: 437 x 43 x 737mm (17.2" x 1.7" x 29") Gross Weight: 48lbs (21.77kg) Net Weight: 36.5lbs (16.56kg)	1U Chassis; Enclosure: 437 x 43 x 737mm (17.2" x 1.7" x 29") Gross Weight: 48lbs (21.77kg) Net Weight: 36.5lbs (16.56kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

<sup>1</sup> 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

<sup>††</sup> For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.

# ULTRA

(For Complete System Only)

1U X11 Ultra  
20x 2.5" NVMe Drive Bays

2U X11 Ultra  
24x 2.5" NVMe Drive Bays

2U X11 Ultra  
12x 3.5" NVMe Drive Bays

2U X11 Ultra  
24x 2.5" NVMe Drive Bays



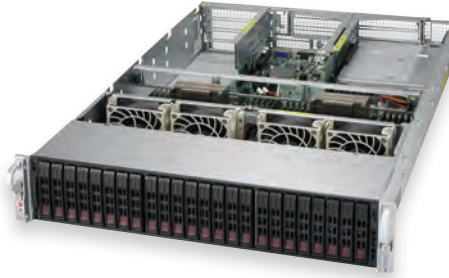
MODEL	SYS-1029UZ-TN20R25M	SYS-2029UZ-TR4+	SYS-6029UZ-TR4+	SYS-2029U-TN24R4T
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).
Key Applications	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High Density Enterprise Server</li> <li>Software Defined Storage</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Hyperconverge Storage</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Hyperconverge Storage</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Hyperconverge Storage</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>20 7mm 2.5" tool-less Hot-swap drive bays</li> <li>165W CPU support</li> <li>24 DIMM sockets</li> <li>Up to 2 PCI-E Add-on cards</li> <li>Dual 25G SFP28</li> <li>1600W Titanium Level Power Supply</li> <li>2 SATA DOMs Support with Embedded Power</li> </ul>	<ul style="list-style-type: none"> <li>Flexible LAN Options</li> <li>24x 2.5" hot-swap drive bays</li> <li>Optional SAS3 and NVMe support</li> <li>24 DIMM support</li> <li>8 PCI-E Add-on cards</li> <li>1600W Titanium Level Power Supply</li> <li>Quad Gigabit Ethernet LAN</li> </ul>	<ul style="list-style-type: none"> <li>Flexible LAN Options</li> <li>12x 3.5" hot-swap drive bays</li> <li>Optional SAS3 and NVMe support</li> <li>24 DIMM support</li> <li>8 PCI-E Add-on cards</li> <li>1600W Titanium Level Power Supply</li> <li>Quad Gigabit Ethernet LAN</li> </ul>	<ul style="list-style-type: none"> <li>24x 2.5" hot-swap NVMe drive bays</li> <li>3 PCI-E Add-on cards</li> <li>24x 2.5" hot-swap NVMe drive bays</li> <li>24 DIMM support</li> <li>Redundant 1600W Titanium Level high-efficiency power supplies</li> <li>4 x 10GBase-T Ports</li> </ul>
Serverboard Chipset	SUPER● X11DPU-Z+ Intel® C621 chipset	SUPER● X11DPU-Z+ Intel® C621 chipset	SUPER● X11DPU-Z+ Intel® C621 chipset	SUPER● X11DPU Intel® C621 chipset
System Memory (Max.)*	24 DIMM slots; Up to 6TB DDR4-2933 MHz* with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane DCPMM† (128/256/512GB)	Up to Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots; Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only).	Up to Up to 6TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 6TB 3DS ECC LRDIMM, DDR4-2933MHz, in 24 DIMM slots; Up to 6TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only).	24 DIMM slots; Up to 6TB DDR4-2933 MHz* with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane DCPMM† (128/256/512GB)
Expansion Slots	Up to 2 PCI-E 3.0 x8 (FH, FL); For 20 NVMe configuration, only 1 PCI-E 3.0 x8 is available For 18 NVMe configuration, 2 PCI-E 3.0 x8 will be available	1 PCI-E 3.0 x16 (FH, 10.5" L); 5 PCI-E 3.0 x8 (FH, 10.5" L); 1 PCI-E 3.0 x8 (LP); 1 PCI-E 3.0 x8 (internal LP)	1 PCI-E 3.0 x16 (FH, 10.5" L); 5 PCI-E 3.0 x8 (FH, 10.5" L); 1 PCI-E 3.0 x8 (LP); 1 PCI-E 3.0 x8 (internal LP)	2 PCI-E 3.0 x16 (FH, 10.5" L); 1 PCI-E 3.0 x8 (LP)
Onboard Storage Controller	Intel® C621 SATA3 (6Gb/s) controller	Intel® C621 SATA3 (6Gb/s) controller	Intel® C621 SATA3 (6Gb/s) controller	Intel® C621 SATA3 (6Gb/s) controller
Connectivity	2 25G SFP28 Ethernet, 3 USB 3.0 ports (2 Rear, 1 Type A), 2 USB 2.0 ports (Front), 1 Serial Port	4 GbE ports with Intel® i350 Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port	4 GbE ports with Intel® i350 Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port	4 10GBase-T ports with Intel® X550 Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port
VGA/Audio	1 VGA, 1 Aspeed AST2500 BMC;	AST2500 VGA	AST2500 VGA	Aspeed AST2500 BMC
Management	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5; Watchdog;	Intel® Node Manager; Redfish API; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5;	Intel® Node Manager; Redfish API; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5;	Intel® Node Manager; Redfish API; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5;
Drive Bays	20 Hot-Swappable 2.5" 7mm drive bays: 8 NVMe ports and 2 SAS/SATA3/NVMe Hybrid Ports from CPU1 and 10 NVMe ports from CPU2	24 Hot-swap 2.5" Drive Bays; 10 SATA3 ports by default; Optional drive support: 20 SAS3 + 4 SAS3/NVMe; Optional 2 Rear Hot-swap 2.5" Drive Bays	12 Hot-swap 3.5" Drive Bays; 10 SATA3 ports by default; Optional drive support: 8 SAS3 + 4 SAS3/NVMe; Optional 2 Rear Hot-swap 2.5" Drive Bays	24 Hot-swap 2.5" NVMe Drive Bays; Optional 20 NVMe + 4 NVMe/SAS3; 2x 2.5" 2 Rear Hot-swap 2.5" Drive Bays (2x SATA3 ports default)
Peripheral Bays	N/A	N/A	N/A	N/A
Power Supply	1600W Titanium Level Power Supply	1600W Redundant Power Supplies with PMBus	1600W Redundant Power Supplies with PMBus	1600W Redundant Power Supplies with PMBus
Cooling System	8 Heavy Duty fans w/ Optimal Fan Speed Control, 2 Air Shroud	4 Heavy duty 8cm PWM fans	4 Heavy duty 8cm PWM fans	4 Heavy duty 8cm PWM fans
Form Factor	1U Chassis; Enclosure: 437 x 43 x 706mm (17.2" x 1.7" x 27.8") Gross Weight: 48lbs (21.77kg) Net Weight: 36.5lbs (16.56kg)	2U Rackmount; Enclosure: 437 x 89 x 705mm (17.2" x 3.5" x 27.76") Gross Weight: 86.5lbs (39.24kg) Net Weight: 51lbs (23.13kg)	2U Rackmount; Enclosure: 437 x 89 x 723mm (17.2" x 3.5" x 28.46") Gross Weight: 91lbs (41.28kg) Net Weight: 55lbs (24.95kg)	2U Rackmount; Enclosure: 437 x 89 x 705mm (17.2" x 3.5" x 27.76") Gross Weight: 86.5lbs (39.24kg) Net Weight: 51lbs (23.13kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details  
 † 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.  
 †† For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.

# ULTRA

(For Complete System Only)

2U X11 Ultra  
24x 2.5" Drive Bays, SAS3 Expander



2U X11 Ultra  
24x 2.5" SAS3/SATA3 Drive Bays



Ultra/W10

MODEL	SYS-2029U-E1CR4 SYS-2029U-E1CR4T SYS-2029U-E1CRT	SYS-2029U-E1CRTP SYS-2029U-E1CR25M	SYS-2029U-TR4 SYS-2029U-TR4T SYS-2029U-TRT	SYS-2029U-TRTP SYS-2029U-TR25M
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed <i>Cascade Lake Refresh</i> ).		2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed <i>Cascade Lake Refresh</i> ).	
Key Applications	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Hyperconverge Storage</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>		<ul style="list-style-type: none"> <li>Virtualization</li> <li>Hyperconverge Storage</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>	
Outstanding Features	<ul style="list-style-type: none"> <li>Quad Gigabit Ethernet LAN [nid:612]</li> <li>8 PCI-E Add-on cards [nid:3716]</li> <li>24x 2.5" hot-swap drive bays</li> <li>SAS3.0 (12Gbps) support</li> <li>Optional NVMe support</li> <li>24 DIMM support</li> <li>1000W Titanium Level Power Supply</li> <li>Flexible LAN Options</li> </ul>		<ul style="list-style-type: none"> <li>8 PCI-E Add-on cards [nid:3716]</li> <li>Quad Gigabit Ethernet LAN [nid:612]</li> <li>24x 2.5" hot-swap drive bays</li> <li>Optional SAS3 and NVMe support</li> <li>24 DIMM support</li> <li>1000W Titanium Level Power Supply</li> <li>Flexible LAN Options</li> </ul>	
Serverboard	SUPER● X11DPU		SUPER● X11DPU	
Chipset	Intel® C621 chipset		Intel® C621 chipset	
System Memory (Max.)*	24 DIMM slots; Up to 6TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)		24 DIMM slots; Up to 6TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)	
Expansion Slots	<b>-E1CR4/E1CRT/E1CRTP/E1CR25M:</b> 1 PCI-E 3.0 x16(FH, 10.5" L); 5 PCI-E 3.0 x8(FH, 10.5" L); 1 PCI-E 3.0 x8(LP); 1 PCI-E 3.0 x8(internal LP) <b>-E1CR4T:</b> 2 PCI-E 3.0 x16(FH, 10.5" L); 4 PCI-E 3.0 x8(FH, 10.5" L); 1 PCI-E 3.0 x8(LP)		<b>-TR4/TRT/TRTP/TR25M:</b> 1 PCI-E 3.0 x16(FH, 10.5" L); 5 PCI-E 3.0 x8(FH, 10.5" L); 1 PCI-E 3.0 x8(LP); 1 PCI-E 3.0 x8(internal LP) <b>-TR4T:</b> 2 PCI-E 3.0 x16(FH, 10.5" L); 4 PCI-E 3.0 x8(FH, 10.5" L); 1 PCI-E 3.0 x8(LP)	
Onboard Storage Controller	One of the following Storage Add-on cards required: AOC-S3108L-H8iR (SAS3 HW RAID), AOC-S3008L-L8i (SAS3 SW RAID), AOC-S3008L-L8e (SAS3 HBA)		Intel® C621 SATA3 (6Gb/s) controller	
Connectivity	<b>-E1CR4:</b> 4 GbE ports with Intel® i350 Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port <b>-E1CR4T:</b> 4 10GBase-T ports with Intel® XL710 Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port <b>-E1CRT:</b> 2 10GBase-T ports with Intel® X540 Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port <b>-E1CRTP:</b> 2 10G SFP+ ports with Intel® 82599ES Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port <b>-E1CR25M:</b> 2 25GbE SFP28 ports with Mellanox® ConnectX®-4 Lx EN Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port		<b>-TR4:</b> 4 GbE ports with Intel® i350 Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port <b>-TR4T:</b> 4 10GBase-T ports with Intel® XL710 Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port <b>-TRT:</b> 2 10GBase-T ports with Intel® X540 Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port <b>-TRTP:</b> 2 10G SFP+ ports with Intel® 82599ES Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port <b>-TR25M:</b> 2 25GbE SFP28 ports with Mellanox® ConnectX®-4 Lx EN Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port	
VGA/Audio	Aspeed AST2500 BMC		Aspeed AST2500 BMC	
Management	Intel® Node Manager; Redfish API; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5;		Intel® Node Manager; Redfish API; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5;	
Drive Bays	24 Hot-swap 2.5" Drive Bays; 24 SAS3 ports support via Expander and AOC; Optional drive support: 20 SAS3 + 4 SAS3/NVMe; Optional 2 Rear Hot-swap 2.5" Drive Bays		24 Hot-swap 2.5" Drive Bays; 14 SATA3 ports by default; Optional drive support: 20 SAS3 + 4 SAS3/NVMe; Optional 2 Rear Hot-swap 2.5" Drive Bays	
Peripheral Bays	N/A		N/A	
Power Supply	1000W Redundant Power Supplies with PMBus		1000W Redundant Power Supplies with PMBus	
Cooling System	4 Heavy duty 8cm PWM fans		4 Heavy duty 8cm PWM fans	
Form Factor	2U Rackmount; Enclosure: 437 x 89 x 705mm (17.2" x 3.5" x 27.76") Gross Weight: 86.5lbs (39.24kg) Net Weight: 51lbs (23.13kg)		2U Rackmount; Enclosure: 437 x 89 x 705mm (17.2" x 3.5" x 27.76") Gross Weight: 86.5lbs (39.24kg) Net Weight: 51lbs (23.13kg)	

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

<sup>†</sup> 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

<sup>††</sup> For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.

# ULTRA

(For Complete System Only)

2U X11 Ultra

2U X11 Ultra  
12x 3.5" Drive Bays

2U X11 Ultra  
12x 3.5" Drive Bays



Ultra/W10

MODEL	SYS-2029UZ-TN20R25M	SYS-6029U-E1CR4 SYS-6029U-E1CRT SYS-6029U-E1CRTP SYS-6029U-E1CR25M	SYS-6029U-E1CR4T
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).
Key Applications	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Hyperconverge Storage</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Hyperconverge Storage</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> <li>8 PCI-E Add-on cards [nid:3716]</li> <li>Quad Gigabit Ethernet LAN [nid:612]</li> <li>12x 3.5" hot-swap drive bays</li> <li>SAS3.0 (12Gbps) support</li> <li>24 DIMM support</li> <li>Optional NVMe support</li> <li>1000W Titanium Level Power Supply</li> <li>Flexible LAN Options</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Hyperconverge Storage</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> <li>8 PCI-E Add-on cards [nid:3716]</li> <li>Quad Gigabit Ethernet LAN [nid:612]</li> <li>12x 3.5" hot-swap drive bays</li> <li>SAS3.0 (12Gbps) support</li> <li>24 DIMM support</li> <li>Optional NVMe support</li> <li>1000W Titanium Level Power Supply</li> <li>Flexible LAN Options</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>20 Port NVMe port direct connect</li> <li>24 DIMM sockets</li> <li>Redundant 1600W Titanium Level high-efficiency power supplies</li> <li>Dual 25G SFP28</li> </ul>		
Serverboard Chipset	SUPER● X11DPU-Z+ Intel® C621 chipset	SUPER● X11DPU Intel® C621 chipset	SUPER● X11DPU Intel® C621 chipset
System Memory (Max.)*	24 DIMM slots; Up to 6TB DDR4-2933 MHz† with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM†† (128/256/512GB)	24 DIMM slots; Up to 6TB DDR4-2933 MHz† with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM†† (128/256/512GB)	24 DIMM slots; Up to 6TB DDR4-2933 MHz† with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM†† (128/256/512GB)
Expansion Slots	1 PCI-E 3.0 x8 (LP)	1 PCI-E 3.0 x16(FH, 10.5" L); 5 PCI-E 3.0 x8(FH, 10.5" L); 1 PCI-E 3.0 x8(LP); 1 PCI-E 3.0 x8(internal LP)	2 PCI-E 3.0 x16(FH, 10.5" L); 4 PCI-E 3.0 x8(FH, 10.5" L); 1 PCI-E 3.0 x8(LP)
Onboard Storage Controller	Intel® C621 SATA3 (6Gb/s) controller	One of the following storage Add-on cards required: AOC-S3108L-H8iR-16DD (SAS3 HW RAID), AOC-S3008L-L8i (SAS3 SW RAID), AOC-S3008L-L8e (SAS3 HBA) -E1CR4: 4 GbE ports with Intel® i350 Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port -E1CRT: 2 10GBase-T ports with Intel® X540 Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port -E1CRTP: 2 10G SFP+ ports with Intel® 82599ES Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port -E1CR25M: 2 25GbE SFP28 ports with Mellanox® ConnectX®-4 Lx EN Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port	One of the following storage Add-on cards required: AOC-S3108L-H8iR-16DD (SAS3 HW RAID), AOC-S3008L-L8i (SAS3 SW RAID), AOC-S3008L-L8e (SAS3 HBA)
Connectivity	2 25GbE SFP28 ports with Mellanox® ConnectX®-4 Lx EN Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port	4 10GBase-T ports with Intel® XL710 Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port	4 10GBase-T ports with Intel® XL710 Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager; Redfish API; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5;	Intel® Node Manager; Redfish API; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5;	Intel® Node Manager; Redfish API; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5;
Drive Bays	24 Hot-swap 2.5" Drive Bays; 20 NVMe + 4 SAS3/ SATA	12 Hot-swap 3.5" Drive Bays; 12 SAS3 ports support via Expander and AOC; Optional drive support: 8 SAS3 + 4 SAS3/NVMe; Optional 2 Rear Hot-swap 2.5" Drive Bays	12 Hot-swap 3.5" Drive Bays; 12 SAS3 ports support via Expander and AOC; Optional drive support: 8 SAS3 + 4 SAS3/NVMe; Optional 2 Rear Hot-swap 2.5" Drive Bays
Peripheral Bays	N/A	N/A	N/A
Power Supply	1600W Redundant Power Supplies with PMBus	1000W Redundant Power Supplies with PMBus	1000W Redundant Power Supplies with PMBus
Cooling System	4 Heavy duty 8cm PWM fans	4 Heavy duty 8cm PWM fans	4 Heavy duty 8cm PWM fans
Form Factor	2U Rackmount; Enclosure: 437 x 89 x 705mm (17.2" x 3.5" x 27.76") Gross Weight: 86.5lbs (39.24kg) Net Weight: 51lbs (23.13kg)	2U Rackmount; Enclosure: 437 x 89 x 723mm (17.2" x 3.5" x 28.46") Gross Weight: 91lbs (41.28kg) Net Weight: 55lbs (24.95kg)	2U Rackmount; Enclosure: 437 x 89 x 723mm (17.2" x 3.5" x 28.46") Gross Weight: 91lbs (41.28kg) Net Weight: 55lbs (24.95kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details  
 † 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.  
 †† For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.

# ULTRA

(For Complete System Only)

2U X11 Ultra  
12x 3.5" Drive Bays



2U X11 Ultra  
12x 3.5" Drive Bays



Ultra/W10

MODEL	<b>SYS-6029U-TR4</b> <b>SYS-6029U-TRT</b> <b>SYS-6029U-TRTP</b> <b>SYS-6029U-TR25M</b>	<b>SYS-6029U-TR4T</b>
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed <i>Cascade Lake Refresh</i> ).	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed <i>Cascade Lake Refresh</i> ).
Key Applications	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Hyperconverge Storage</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Hyperconverge Storage</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>8 PCI-E Add-on cards [nid:3716]</li> <li>Quad Gigabit Ethernet LAN [nid:612]</li> <li>12x 3.5" hot-swap drive bays</li> <li>Optional SAS3 and NVMe support</li> <li>24 DIMM support</li> <li>1000W Titanium Level Power Supply</li> <li>Flexible LAN Options</li> </ul>	<ul style="list-style-type: none"> <li>8 PCI-E Add-on cards [nid:3716]</li> <li>Quad Gigabit Ethernet LAN [nid:612]</li> <li>12x 3.5" hot-swap drive bays</li> <li>Optional SAS3 and NVMe support</li> <li>24 DIMM support</li> <li>1000W Titanium Level Power Supply</li> <li>Flexible LAN Options</li> </ul>
Serverboard	SUPER® X11DPU	SUPER® X11DPU
Chipset	Intel® C621 chipset	Intel® C621 chipset
System Memory (Max.)*	24 DIMM slots; Up to 6TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)	24 DIMM slots; Up to 6TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)
Expansion Slots	1 PCI-E 3.0 x16(FH, 10.5"L); 5 PCI-E 3.0 x8(FH, 10.5"L); 1 PCI-E 3.0 x8(LP); 1 PCI-E 3.0 x8(internal LP)	2 PCI-E 3.0 x16(FH, 10.5"L); 4 PCI-E 3.0 x8(FH, 10.5"L); 1 PCI-E 3.0 x8(LP)
Onboard Storage Controller	Intel® C621 SATA3 (6Gb/s) controller	Intel® C621 SATA3 (6Gb/s) controller
Connectivity	<p><b>-TR4:</b> 4 GbE ports with Intel® i350 Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p> <p><b>-TRT:</b> 2 10GBase-T ports with Intel® X540 Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p> <p><b>-TRTP:</b> 2 10G SFP+ ports with Intel® 82599ES Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p> <p><b>-TR25M:</b> 2 25GbE SFP28 ports with Mellanox® ConnectX®-4 Lx EN Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port</p>	4 10GBase-T ports with Intel® XL710 Ethernet Controller; 3 USB 3.0 ports (2 rear, 1 Type A); 1 Serial Port
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager; Redfish API; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5;	Intel® Node Manager; Redfish API; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5;
Drive Bays	12 Hot-swap 3.5" Drive Bays; 12 SATA3 ports by default; Optional drive support: 8 SAS3 + 4 SAS3/NVMe; Optional 2 Rear Hot-swap 2.5" Drive Bays	12 Hot-swap 3.5" Drive Bays; 12 SATA3 ports by default; Optional drive support: 8 SAS3 + 4 SAS3/NVMe; Optional 2 Rear Hot-swap 2.5" Drive Bays
Peripheral Bays	N/A	N/A
Power Supply	1000W Redundant Power Supplies with PMBus	1000W Redundant Power Supplies with PMBus
Cooling System	4 Heavy duty 8cm PWM fans	4 Heavy duty 8cm PWM fans
Form Factor	437 x 89 x 723mm (17.2" x 3.5" x 28.46")	437 x 89 x 723mm (17.2" x 3.5" x 28.46")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

<sup>†</sup> 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

<sup>††</sup> For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.

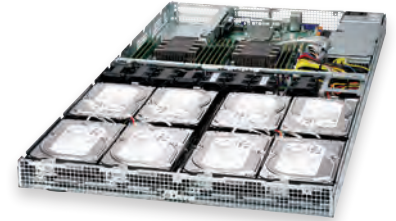
X11 WIO  
1U 4x 3.5" Drive Bays



X11 WIO  
1U 4x 3.5" Drive Bays  
Redundant Power



X11 WIO  
1U 8x 3.5" + 2x 2.5" Drive Bays



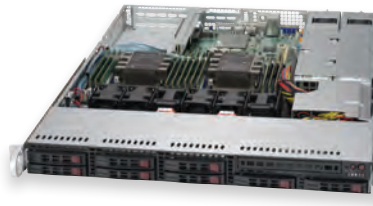
MODEL	SYS-6019P-WT	SYS-6019P-WTR	SYS-6019P-WT8
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).
Key Applications	<ul style="list-style-type: none"> <li>Web Server</li> <li>FireWall Applications</li> <li>Corporate- WINS, DNS, Print, Login Gateway, provisioning servers</li> <li>Compact Network Appliance</li> <li>Cloud Computing</li> </ul>	<ul style="list-style-type: none"> <li>Web Server</li> <li>FireWall Applications</li> <li>Corporate- WINS, DNS, Print, Login Gateway, provisioning servers</li> <li>Compact Network Appliance</li> <li>Cloud Computing</li> </ul>	<ul style="list-style-type: none"> <li>Web Server</li> <li>FireWall Applications</li> <li>Corporate- WINS, DNS, Print, Login Gateway, provisioning servers</li> <li>Compact Network Appliance</li> <li>Cloud Computing</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Supports 3 PCIe and 1 Mezzanine cards</li> <li>1 NVMe M.2 Support</li> <li>Flexible I/O options</li> <li>Dedicated IPMI port</li> <li>4x 3.5" SAS3/SATA3 drive bays</li> <li>Support 1 Slim DVD-ROM and 1 COM &amp; 2 USB3.0 ports module</li> </ul>	<ul style="list-style-type: none"> <li>Supports 3 PCIe and 1 Mezzanine cards</li> <li>1 NVMe M.2 Support</li> <li>Flexible I/O options</li> <li>Dedicated IPMI port</li> <li>4x 3.5" SAS3/SATA3 drive bays</li> <li>Support 1 Slim DVD-ROM and 1 COM &amp; 2 USB3.0 ports module</li> </ul>	<ul style="list-style-type: none"> <li>Supports 3 PCIe and 1 Mezzanine cards</li> <li>1 NVMe M.2 Support</li> <li>8x 3.5" &amp; 2x 2.5" Fixed SATA3 drive bays in 1U</li> <li>Flexible I/O options</li> <li>Dedicated IPMI port</li> </ul>
Serverboard	SUPER● X11DDW-L	SUPER● X11DDW-L	SUPER● X11DDW-L
Chipset	Intel® C621 chipset	Intel® C621 chipset	Intel® C621 chipset
System Memory (Max.)*	12 DIMM slots; Up to 3TB DDR4-2933 MHz† with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM†† (128/256/512GB)	12 DIMM slots; Up to 3TB DDR4-2933 MHz† with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM†† (128/256/512GB)	12 DIMM slots; Up to 3TB DDR4-2933 MHz† with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM†† (128/256/512GB)
Expansion Slots	2 PCI-E 3.0 x16 (FHHL) slots, 1 PCI-E 3.0 x8 (LP) slot, 1 PCI-E 3.0 x16 Add-On-Module for SAS3 storage controller	2 PCI-E 3.0 x16 (FHHL) slots, 1 PCI-E 3.0 x8 (LP) slot, 1 PCI-E 3.0 x16 Add-On-Module for SAS3 storage controller	2 PCI-E 3.0 x16 (FHHL) slots, 1 PCI-E 3.0 x8 (LP) slot, 1 PCI-E 3.0 x16 Add-On-Module for SAS3 storage controller
Onboard Storage Controller	Intel® C621 controller for 14 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C621 controller for 14 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C621 controller for 14 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	Dual 1G LAN ports, 1 dedicated IPMI port, 4 rear USB 3.0 ports	Dual 1G LAN ports, 1 dedicated IPMI port, 4 rear USB 3.0 ports	Dual 1G LAN ports, 1 dedicated IPMI port, 4 rear USB 3.0 ports
VGA/Audio	Onboard VGA	Asped AST2500 BMC	Asped AST2500 BMC
Management	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	4x 3.5" hot-swap SATA3/SAS3 drive bays	4x 3.5" hot-swap SATA3/SAS3 drive bays	8x 3.5" fixed SATA drive bays, 2x 2.5" fixed SATA drive bays
Peripheral Bays	Optional 1x slim DVD-ROM drive bay	Optional 1x slim DVD-ROM drive bay	N/A
Power Supply	600W high-efficiency (Platinum Level) multiple output power supply w/pmbus	Redundant 700/750W High-efficiency (Platinum Level) power supply	650w high-efficiency (Platinum Level) multi-output power supply
Cooling System	4x 40x56mm counter-rotation PWM fan	4x 40x56mm counter-rotation PWM fan	6x 40x56mm counter-rotation PWM fan
Form Factor	1U 17.2" (437mm) x 1.7" (43mm) x 25.6" (650mm); Enclosure: 437 x 43 x 650mm (17.2" x 1.7" x 25.6") Package: 597 x 216 x 856mm (23.5" x 8.5" x 33.7") Gross Weight: 36lbs (16.33kg) Net Weight: 22lbs (9.98kg)	1U 17.2" (437mm) x 1.7" (43mm) x 25.6" (650mm); Enclosure: 437 x 43 x 650mm (17.2" x 1.7" x 25.6") Package: 597 x 216 x 856mm (23.5" x 8.5" x 33.7") Gross Weight: 39lbs (17.69kg) Net Weight: 25.5lbs (11.57kg)	1U Rackmount 437 x 43 x 813mm (17.2" x 1.7" x 32"); Enclosure: 437 x 43 x 813mm (17.2" x 1.7" x 32") Package: 597 x 198 x 1019mm (23.5" x 7.8" x 40.1") Gross Weight: 62lbs (28.12kg) Net Weight: 38lbs (17.24kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details  
 † 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.  
 †† For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.

X11 WIO

X11 WIO  
1U 8x2.5" Drive Bays

X11 WIO  
1U 8x2.5" Drive Bays



MODEL	SYS-1029P-WT	SYS-1029P-WTR	SYS-1029P-WTRT
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).
Key Applications	<ul style="list-style-type: none"> <li>Web Server</li> <li>FireWall Applications</li> <li>Corporate- WINS, DNS, Print, Login Gateway, provisioning servers</li> <li>Compact Network Appliance</li> <li>Cloud Computing</li> </ul>	<ul style="list-style-type: none"> <li>Web Server</li> <li>FireWall Applications</li> <li>Corporate- WINS, DNS, Print, Login Gateway, provisioning servers</li> <li>Compact Network Appliance</li> <li>Cloud Computing</li> </ul>	<ul style="list-style-type: none"> <li>Web Server</li> <li>FireWall Applications</li> <li>Corporate- WINS, DNS, Print, Login Gateway, provisioning servers</li> <li>Compact Network Appliance</li> <li>Cloud Computing</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>3 PCIe and 1 Mezzanine cards</li> <li>1 NVMe M.2 Support</li> <li>Flexible I/O options</li> <li>Dedicated IPMI port</li> <li>8x 2.5" SAS3/SATA3 drive bays</li> <li>Supports 1 Slim DVD-ROM</li> </ul>	<ul style="list-style-type: none"> <li>3 PCIe and 1 Mezzanine cards</li> <li>1 NVMe M.2 Support</li> <li>Flexible I/O options</li> <li>Dedicated IPMI port</li> <li>8 2.5" SAS3/SATA3 drive bays</li> <li>Optional Slim DVD-ROM</li> </ul>	<ul style="list-style-type: none"> <li>3 PCIe and 1 Mezzanine cards</li> <li>1 NVMe M.2 Support</li> <li>Flexible I/O options</li> <li>Dedicated IPMI port</li> <li>10x 2.5" SAS3/SATA3 drive bays (2 SATA3/ SAS3/NVMe hybrid ports)</li> <li>Dual 10GBaseT LAN Ports</li> </ul>
Serverboard	SUPER● X11DDW-L	SUPER● X11DDW-L	SUPER● X11DDW-NT
Chipset	Intel® C621 chipset	Intel® C621 chipset	Intel® C622 chipset
System Memory (Max.)*	12 DIMM slots; Up to 3TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)	12 DIMM slots; Up to 3TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)	12 DIMM slots; Up to 3TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)
Expansion Slots	2 PCI-E 3.0 x16 (FHHL) slots, 1 PCI-E 3.0 x8 (LP) slot, 1 PCI-E 3.0 x16 Add-On-Module for SAS3 storage controller	2 PCI-E 3.0 x16 (FHHL) slots, 1 PCI-E 3.0 x8 (LP) slot, 1 PCI-E 3.0 x16 Add-On-Module for SAS3 storage controller	2 PCI-E 3.0 x16 (FHHL) slots, 1 PCI-E 3.0 x8 (LP) slot, 1 PCI-E 3.0 x16 Add-On-Module for SAS3 storage controller
Onboard Storage Controller	Intel® C621 controller for 14 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C621 controller for 14 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C622 controller for 14 SATA3 (6 Gbps) ports; RAID 0,1,5,10
Connectivity	Dual 1G LAN ports, 1 dedicated IPMI port, 4 rear USB 3.0 ports	Dual 1G LAN ports, 1 dedicated IPMI port, 4 rear USB 3.0 ports	Dual 10GBaseT LAN ports, 1 dedicated IPMI port, 4 rear USB3.0 ports, 2 front USB 3.0 ports
VGA/Audio	Onboard VGA	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; SPM; SSM; SUM; SuperDoctor® 5; Watchdog;	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	8x 2.5" hot-swap SATA3/SAS3 drive bays	8x 2.5" hot-swap SATA3/SAS3 drive bays	10x 2.5" hot-swap SATA3/SAS3 drive bays, 2x 2.5" hot-swap NVMe/SAS3/SATA3 hybrid drive bays
Peripheral Bays	Optional 1x slim DVD-ROM drive bay	Optional 1x slim DVD-ROM drive bay	N/A
Power Supply	600W high-efficiency (Platinum Level) multiple output power supply w/pmbus	Redundant 700/750W High-efficiency (Platinum Level) power supply	Redundant 700/750W high-efficiency (Platinum Level) power supply
Cooling System	4x 40x56mm counter-rotation PWM fan	4x 40x56mm counter-rotation PWM fan	4x 40x56mm counter-rotation PWM fan
Form Factor	1U 17.2" (437mm) x 1.7" (43mm) x 23.5" (597mm); Enclosure: 437 x 43 x 597mm (17.2" x 1.7" x 23.5") Gross Weight: 39lbs (17.69kg) Net Weight: 22lbs (9.98kg)	1U 17.2" (437mm) x 1.7" (43mm) x 23.5" (597mm); Enclosure: 437 x 43 x 597mm (17.2" x 1.7" x 23.5") Gross Weight: 39lbs (17.69kg) Net Weight: 25.5lbs (11.57kg)	1U 17.2" (437mm) x 1.7" (43mm) x 23.5" (597mm); Enclosure: 437 x 43 x 597mm (17.2" x 1.7" x 23.5") Gross Weight: 39lbs (17.69kg) Net Weight: 26lbs (11.79kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

<sup>†</sup> 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

<sup>††</sup> For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.

X11 WIO  
7 PCI-E 3.0



X11 WIO  
7 PCI-E 3.0, Dual 10GBaseT LAN



MODEL	SYS-6029P-WTR	SYS-6029P-WTRT
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).
Key Applications	<ul style="list-style-type: none"> <li>Web Server</li> <li>FireWall Applications</li> <li>Corporate- WINS, DNS, Print, Login</li> <li>Gateway, provisioning servers</li> <li>Compact Network Appliance</li> <li>Cloud Computing</li> </ul>	<ul style="list-style-type: none"> <li>Web Server</li> <li>FireWall Applications</li> <li>Corporate- WINS, DNS, Print, Login</li> <li>Gateway, provisioning servers</li> <li>Compact Network Appliance</li> <li>Cloud Computing</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Supports 6 PCIe and 1 Mezzanine cards</li> <li>1 NVMe M.2 Support</li> <li>Supports 1x Slim DVD-ROM and 1 COM &amp; 2 USB3.0 ports module</li> <li>8x 3.5" SAS3/SATA3 drive bays</li> <li>Dedicated IPMI port</li> </ul>	<ul style="list-style-type: none"> <li>Supports 5 PCIe and 1 Mezzanine cards</li> <li>1 NVMe M.2 Support</li> <li>Dual 10GBaseT LAN Ports</li> <li>Redundant 1200W Titanium Level Power Supply</li> <li>Dedicated IPMI port</li> <li>Optional 4x 2.5" NVMe SSD</li> </ul>
Serverboard	SUPER● X11DDW-L	SUPER● X11DDW-NT
Chipset	Intel® C621 chipset	Intel® C622 chipset
System Memory (Max.)*	12 DIMM slots; Up to 3TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)	12 DIMM slots; Up to 3TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)
Expansion Slots	4 PCI-E 3.0 x8(FHHL)slots, 2 PCI-E 3.0 x8(LP)slot, 1 PCI-E 3.0 x16 Add-On-Module for SAS3 storage controller	1 PCI-E 3.0 x16(FHHL)slot, 4 PCI-E 3.0 x8(2 FHHL, 2 LP)slots, 1 PCI-E 3.0 x16 Add-On-Module for SAS3 storage controller
Onboard Storage Controller	Intel® C621 controller for 14 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C622 controller for 14 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	Dual 1G LAN ports, 1 dedicated IPMI port, 4 rear USB 3.0 ports	Dual 10GBaseT LAN ports, 1 dedicated IPMI port, 4 rear USB3.0 ports
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	8x 3.5" hot-swap SATA3/SAS3 drive bays	12x 3.5" hot-swap SATA3/SAS3 drive bays (4x NVMe/SAS3/SATA3 hybrid drive bays)
Peripheral Bays	1x optional slim DVD-ROM drive bay	N/A
Power Supply	Redundant 800/1000W high-efficiency (Titanium Level) power supply	Redundant 1200W high-efficiency (Titanium Level) power supply
Cooling System	3x 80mm heavy duty fans with PWM fan speed control	3x 80mm heavy duty fans with PWM fan speed control
Form Factor	2U 17.2" (437mm) x 3.5" (89mm) x 25.5" (647mm); Enclosure: 437 x 89 x 648mm (17.2" x 3.5" x 25.5") Gross Weight: 62lbs (28.12kg) Net Weight: 35lbs (15.88kg)	2U 17.2" (437mm) x 3.5" (89mm) x 25.5" (647mm); Enclosure: 437 x 89 x 648mm (17.2" x 3.5" x 25.5") Gross Weight: 66lbs (29.94kg) Net Weight: 36lbs (16.33kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

<sup>†</sup> 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

<sup>††</sup> For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.



# ULTRA

1U Ultra  
10 SAS3 Drive Bays, Expander

1U Ultra  
10 SAS3 Drive Bays, Expander

1U Ultra  
Quad LAN



Ultra/W10

MODEL	SYS-1028U-E1CR4+	SYS-1028U-E1CRTP+	SYS-1028U-TR4+ SYS-1028U-TRT+ SYS-1028U-TR4T+
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4 / v3 product family with QPI up to 9.6 GT/s	Dual Intel® Xeon® Processor E5-2600 v4 / v3 product family with QPI up to 9.6 GT/s	Dual Intel® Xeon® Processor E5-2600 v4 / v3 product family with QPI up to 9.6 GT/s
Key Applications	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Expander Backplane</li> <li>Flexible LAN options</li> <li>24 DIMM sockets</li> <li>4 PCI-E Add-on cards</li> <li>10x 2.5" SAS/SATA drive bays</li> <li>160W CPU support</li> <li>Platinum Level Power Supply</li> <li>2 SATA DOM support with embedded power</li> </ul>	<ul style="list-style-type: none"> <li>Expander Backplane</li> <li>2 port 10G SFP+ and 2 port 1GBase-T connectivity</li> <li>24 DIMM sockets</li> <li>4 PCI-E Add-on cards</li> <li>10x 2.5" SAS/SATA drive bays</li> <li>160W CPU support</li> <li>Platinum Level Power Supply</li> <li>2 SATA DOM support with embedded power</li> </ul>	<ul style="list-style-type: none"> <li>Flexible LAN options</li> <li>24 DIMM sockets</li> <li>4 PCI-E Add-on cards</li> <li>10x 2.5" SAS/SATA drive bays</li> <li>160W CPU support</li> <li>Platinum Level Power Supply</li> <li>2 SATA DOM support with embedded power</li> </ul>
Serverboard	SUPER● X10DRU-i+	SUPER● X10DRU-i+	SUPER● X10DRU-i+
Chipset	Intel® C612 chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400 in 24 DIMM slots	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400 in 24 DIMM slots	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400 in 24 DIMM slots
Expansion Slots	2 PCI-E 3.0 x16(FH, 10.5"L); 2 PCI-E 3.0 x8(1 LP, 1 Internal LP)	2 PCI-E 3.0 x16(FH, 10.5"L); 2 PCI-E 3.0 x8(1 LP, 1 Internal LP)	2 PCI-E 3.0 x16(FH, 10.5"L); 2 PCI-E 3.0 x8(1 LP, 1 Internal LP)
Onboard Storage Controller	One of the following storage Add-on cards required: AOC-S3108L-H8iR-16DD (SAS3 HW RAID), AOC-S3008L-L8i (SAS3 SW RAID), AOC-S3008L-L8e (SAS3 HBA)	One of the following storage Add-on cards required: AOC-S3108L-H8iR-16DD (SAS3 HW RAID), AOC-S3008L-L8i (SAS3 SW RAID), AOC-S3008L-L8e (SAS3 HBA)	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	4 Gigabit Ethernet; 5 USB 3.0 ports (2 rear, 2 front, 1 Type A); 1 Serial Port	2 10G SFP+; 2 Gigabit Ethernet; 5 USB 3.0 ports (2 rear, 2 front, 1 Type A); 1 Serial Port	<b>-TR4+:</b> 4 Gigabit Ethernet; 5 USB 3.0 ports (2 rear, 2 front, 1 Type A); 1 Serial Port <b>-TRT+:</b> 2 10Gbase-T Ethernet; 5 USB 3.0 ports (2 rear, 2 front, 1 Type A); 1 Serial Port <b>-TR4T+:</b> 4 10Gbase-T Ethernet; 5 USB 3.0 ports (2 rear, 2 front, 1 Type A); 1 Serial Port
VGA/Audio	Aspeed AST2400 BMC	Aspeed AST2400 BMC	Aspeed AST2400 BMC
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	10 hot-swap 2.5" drive support via Expander	10 hot-swap 2.5" drive support via Expander	10 hot-swap 2.5" drive support
Peripheral Bays	N/A	N/A	N/A
Power Supply	Redundant 750W Platinum Level (94%+) Power Supplies with PMBus	Redundant 750W Platinum Level (94%+) Power Supplies with PMBus	Redundant 750W Platinum Level (94%+) Power Supplies with PMBus
Cooling System	5 heavy duty fans w/ Optimal Fan Speed Control; Optional 3 additional fans, 1 Air Shroud	6 heavy duty fans w/ Optimal Fan Speed Control; Optional 2 additional fans, 1 Air Shroud	4 heavy duty fans w/ Optimal Fan Speed Control; Optional 4 additional fans, 1 Air Shroud
Form Factor	1U Chassis; Enclosure: 437 x 43 x 707mm (17.2" x 1.7" x 27.82") Gross Weight: 41lbs (18.6kg) Net Weight: 26lbs (11.79kg)	1U Chassis; Enclosure: 437 x 43 x 707mm (17.2" x 1.7" x 27.82") Gross Weight: 41lbs (18.6kg) Net Weight: 26lbs (11.79kg)	1U Chassis; Enclosure: 437 x 43 x 724mm (17.2" x 1.7" x 28.5") Gross Weight: 48lbs (21.77kg) Net Weight: 36.5lbs (16.56kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# ULTRA

1U Ultra  
10 NVMe, 2.5" Drives



1U Ultra  
2 NVMe, 2.5" Drives



1U Ultra  
2 NVMe, 2.5" Drives



Ultra/W10

MODEL	SYS-1028U-TN10RT+	SYS-1028U-TNRTP+	SYS-1028U-TNR4T+ SYS-1028U-TNR4T+
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4 / v3 product family with QPI up to 9.6 GT/s	Dual Intel® Xeon® Processor E5-2600 v4 / v3 product family with QPI up to 9.6 GT/s	Dual Intel® Xeon® Processor E5-2600 v4 / v3 product family with QPI up to 9.6 GT/s
Key Applications	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Dual 10G BaseT [nid:3659]</li> <li>10 NVMe SSDs Support</li> <li>145W CPU support</li> <li>24 DIMM sockets</li> <li>3 PCI-E Add-on cards</li> <li>1000W Titanium Level Power Supply</li> <li>2 SATA DOMs Support with Embedded Power</li> </ul>	<ul style="list-style-type: none"> <li>Flexible LAN options</li> <li>24 DIMM sockets</li> <li>4 PCI-E Add-on cards</li> <li>2 NVMe/SATA3 hybrid ports</li> <li>Optional 8 SAS3 ports via AOC</li> <li>160W CPU support</li> <li>Platinum Level Power Supply</li> </ul>	<ul style="list-style-type: none"> <li>Flexible LAN options</li> <li>24 DIMM sockets</li> <li>4 PCI-E Add-on cards</li> <li>2 NVMe/SATA3 hybrid ports</li> <li>Optional 8 SAS3 ports via AOC</li> <li>160W CPU support</li> <li>Platinum Level Power Supply</li> </ul>
Serverboard	SUPER● X10DRU-i+	SUPER● X10DRU-i+	SUPER● X10DRU-i+
Chipset	Intel® C612 Chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400 in 24 DIMM slots	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400 in 24 DIMM slots	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400 in 24 DIMM slots
Expansion Slots	3 PCI-E 3.0 x8(2 FH, 10.5"L, LP)	2 PCI-E 3.0 x16(FH, 10.5"L); 2 PCI-E 3.0 x8(1 LP, 1 Internal LP)	2 PCI-E 3.0 x16(FH, 10.5"L); 2 PCI-E 3.0 x8(1 LP, 1 Internal LP)
Onboard Storage Controller	Intel® C612 controller with 10 SATA3 (6 Gbps) Ports; RAID 0,1,5,10;	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	2 10Gbase-T Ethernet 5 USB 3.0 ports (2 Rear, 2 Front, 1 Type A) 1 Serial Port	2 10G SFP+ Ethernet; 5 USB 3.0 ports (2 rear, 2 front, 1 Type A); 1 Serial Port	-TNR4T+: 2 10Gbase-T Ethernet; 5 USB 3.0 ports (2 rear, 2 front, 1 Type A); 1 Serial Port -TNR4T+: 4 10Gbase-T Ethernet; 5 USB 3.0 ports (2 rear, 2 front, 1 Type A); 1 Serial Port
VGA/Audio	Aspeed AST2400 BMC	Aspeed AST2400 BMC	Aspeed AST2400 BMC
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	10 Hot-Swappable 2.5" drive bays: 6 NVMe ports (NVMe from CPU1) 4 NVMe/SATA3 Hybrid Ports (NVMe from CPU2)	10 hot-swap 2.5" drive support: Default 8 SATA3 ports + 2 NVMe/SATA3 hybrid ports; Optional 8 SAS3 ports via AOC	2 PCI-E 3.0 x16(FH, 10.5"L); 2 PCI-E 3.0 x8(1 LP, 1 Internal LP)
Peripheral Bays	N/A	N/A	N/A
Power Supply	Redundant 1000W Titanium Level (96%+) Power Supplies with PMBus	Redundant 750W Platinum Level (94%+) Power Supplies with PMBus	Redundant 750W Platinum Level (94%+) Power Supplies with PMBus
Cooling System	8 Heavy Duty fans w/ Optimal Fan Speed Control , 1 Air Shroud	5 heavy duty fans w/ Optimal Fan Speed Control; Optional 3 additional fans, 1 Air Shroud	5 heavy duty fans w/ Optimal Fan Speed Control; Optional 3 additional fans, 1 Air Shroud
Form Factor	1U Chassis; Enclosure: 432 x 43 x 706mm (17.2" x 1.7" x 27.8") Gross Weight: 48lbs (21.77kg) Net Weight: 36.5lbs (16.56kg)	1U Chassis; Enclosure: 432 x 43 x 706mm (17.2" x 1.7" x 27.8") Gross Weight: 48lbs (21.77kg) Net Weight: 36.5lbs (16.56kg)	1U Chassis; Enclosure: 437 x 43 x 724mm (17.2" x 1.7" x 28.5") Gross Weight: 48lbs (21.77kg) Net Weight: 36.5lbs (16.56kg)

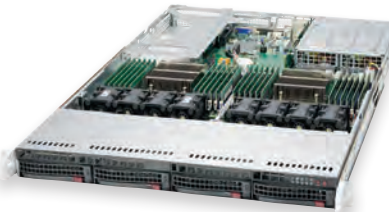
\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# ULTRA

1U Ultra

1U Ultra

2U Ultra  
2.5" Drives, NVMe, Expander



Ultra/W10

MODEL	SYS-6018U-TR4+ SYS-6018U-TRT+	SYS-6018U-TR4T+ SYS-6018U-TRTP+	SYS-2028U-E1CNRT+ SYS-2028U-E1CNR4T+
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4 / v3 product family with QPI up to 9.6 GT/s	Dual Intel® Xeon® Processor E5-2600 v4 / v3 product family with QPI up to 9.6 GT/s	Dual Intel® Xeon® Processor E5-2600 v4 / v3 product family with QPI up to 9.6 GT/s
Key Applications	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> <li>Hyperconverge Storage</li> <li>Database Processing &amp; Storage</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Flexible LAN options</li> <li>24 DIMM sockets</li> <li>4 PCI-E Add-on cards</li> <li>4 3.5" drive bays</li> <li>160W CPU support</li> <li>Platinum Level Power Supply</li> <li>2 SATA DOM support with embedded power</li> </ul>	<ul style="list-style-type: none"> <li>Flexible LAN options</li> <li>24 DIMM sockets</li> <li>4 PCI-E Add-on cards</li> <li>4 3.5" drive bays</li> <li>160W CPU support</li> <li>Platinum Level Power Supply</li> <li>2 SATA DOM support with embedded power</li> </ul>	<ul style="list-style-type: none"> <li>24 DIMM sockets</li> <li>24x 2.5" hot-swap drive bays</li> <li>4-port NVMe SSD Support</li> <li>160W CPU support</li> <li>Titanium Level Power Supply</li> <li>2 SATA DOM support with embedded power</li> </ul>
Serverboard	SUPER● X10DRU-i+	SUPER● X10DRU-i+	SUPER● X10DRU-i+
Chipset	Intel® C612 chipset	Intel® C612 chipset	Intel® C612 Chipset
System Memory (Max.)*	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400 in 24 DIMM slots	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400 in 24 DIMM slots	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400 in 24 DIMM slots
Expansion Slots	2 PCI-E 3.0 x16(FH, 10.5"L); 2 PCI-E 3.0 x8(1 LP, 1 Internal LP)	2 PCI-E 3.0 x16(FH, 10.5"L); 2 PCI-E 3.0 x8(1 LP, 1 Internal LP)	7 PCI-E 3.0 x8(5 FH, 10.5"L, 1 LP, 1 Internal LP)
Onboard Storage Controller	Intel® C612 controller for 4 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C612 controller for 4 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	One of the following storage Add-on cards required: AOC-S3108L-H8iR (SAS3 HW RAID), AOC-S3008L-L8i (SAS3 SW RAID), AOC-S3008L-L8e (SAS3 HBA)
Connectivity	<b>-TR4+:</b> 4 Gigabit Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port <b>-TRT+:</b> 2 port 10GBase-T Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port	<b>-TR4T+:</b> 4 10Gbase-T Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port <b>-TRTP+:</b> 2 port 10G SFP+ Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port	<b>-E1CNRT+:</b> 2 10Gbase-T Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port <b>-E1CNR4T+:</b> 4 10Gbase-T Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port
VGA/Audio	Aspeed AST2400 BMC	Aspeed AST2400 BMC	Aspeed AST2400 BMC
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	4 hot-swap 3.5" drive support	4 hot-swap 3.5" drive support	24 Hot-Swap 2.5" Drive Support with Expander; (including for 4 NVMe 2.5" drive support)
Peripheral Bays	N/A	N/A	N/A
Power Supply	Redundant 750W Platinum Level (94%+) Power Supplies with PMBus	Redundant 750W Platinum Level (94%+) Power Supplies with PMBus	Redundant 1000W Titanium Level (96%+) Power Supplies with PMBus
Cooling System	4 heavy duty fans w/ Optimal Fan Speed Control; Optional 4 additional fans, 1 Air Shroud	4 heavy duty fans w/ Optimal Fan Speed Control; Optional 4 additional fans, 1 Air Shroud	4 heavy duty fans w/ Optimal Fan Speed Control; 1 Air Shroud
Form Factor	1U Chassis; Enclosure: 437 x 43 x 754mm (17.2" x 1.7" x 29.7") Gross Weight: 41lbs (18.6kg) Net Weight: 26lbs (11.79kg)	1U Chassis; Enclosure: 437 x 43 x 754mm (17.2" x 1.7" x 29.7") Gross Weight: 41lbs (18.6kg) Net Weight: 26lbs (11.79kg)	2U Rackmount Server; Enclosure: 437 x 89 x 705mm (17.2" x 3.5" x 27.76") Gross Weight: 72lbs (32.66kg) Net Weight: 36lbs (16.33kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# ULTRA

2U Ultra  
2.5" Drives, NVMe, Titanium Level Power



2U Ultra  
2.5" Drives, NVMe, Titanium Level Power



Ultra/W10

MODEL	SYS-2028U-TNRT+ SYS-2028U-TNR4T+	SYS-2028U-TN24R4T+
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4 / v3 product family with QPI up to 9.6 GT/s	Dual Intel® Xeon® Processors E5-2600 v4/v3 with QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>24 DIMM sockets</li> <li>24x 2.5" hot-swap drive bays</li> <li>4-port NVMe SSD Support</li> <li>160W CPU support</li> <li>Titanium Level Power Supply</li> <li>2 SATA DOM support with embedded power</li> </ul>	<ul style="list-style-type: none"> <li>24 DIMM sockets</li> <li>145W CPU support</li> <li>3 PCI-E Add-on cards</li> <li>4 x 10G BaseT</li> <li>Redundant 1600W Titanium Level high-efficiency power supplies</li> <li>2 SATA DOM support with embedded power</li> </ul>
Serverboard	SUPER● X10DRU-i+	SUPER● X10DRU-i+
Chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400 in 24 DIMM slots	Up to 3TB ECC RDIMM/LRDIMM; DDR4 up to 2400MHz, in 24 DIMM slots
Expansion Slots	<b>-TNRT+:</b> 7 PCI-E 3.0 x8(5 FH, 10.5"L, 1 LP, 1 Internal LP) <b>-TNR4T+:</b> 6 PCI-E 3.0 x8(4 FH, 10.5"L, 1 LP, 1 Internal LP)	2 PCI-E 3.0 x16(2 FH, 10.5"L) 1 PCI-E 3.0 x8(1 LP, 6.6"L)
Onboard Storage Controller	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10	Intel® C612 controller with 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10
Connectivity	<b>-TNRT+:</b> 2 10Gbase-T Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port <b>-TNR4T+:</b> 4 10Gbase-T Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port	4 10Gbase-T Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port
VGA/Audio	Aspeed AST2400 BMC	1 VGA, 1 Aspeed AST2400 BMC
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Intel® Node Manager; IPMI2.0; NMI; SMCBU and SMM; SuperDoctor® 5; Watchdog
Drive Bays	24 hot-swap 2.5" drive support; 8 SATA3 + 4 NVMe; Optional 24 SAS3 drive support via AOCs	24 Hot-swap 2.5" NVMe Drive Bays; Optional Drive Support: 20 NVMe + 4 NVMe/SAS3; 2x 2.5" Rear Hot-swap Drive Bays (default SATA)
Peripheral Bays	N/A	N/A
Power Supply	Redundant 1000W Titanium Level (96%+) Power Supplies with PMBus	Redundant 1600W Titanium Level Power Supplies
Cooling System	4 heavy duty fans	4 heavy duty fans
Form Factor	2U Chassis; Enclosure: 437 x 89 x 705mm (17.2" x 3.5" x 27.76") Gross Weight: 72lbs (32.66kg) Net Weight: 36lbs (16.33kg)	2U Chassis; Enclosure: 89 x 437 x 705mm (3.5" x 17.2" x 27.76") Gross Weight: 72lbs (32.66kg) Net Weight: 36lbs (16.33kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# ULTRA

2U Ultra  
24x 2.5" Drives, Titanium Level Power

2U Ultra  
24x 2.5" Drives, Titanium Level Power

2U Ultra  
3.5" Drives, NVMe, Titanium Level Power



Ultra/W10

MODEL	SYS-2028U-TR4+ SYS-2028U-TRT+ SYS-2028U-TRTP+	SYS-2028U-TR4T+	SYS-6028U-TNRT+ SYS-6028U-TNR4T+
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4 / v3 product family with QPI up to 9.6 GT/s	Dual Intel® Xeon® Processor E5-2600 v4 / v3 product family with QPI up to 9.6 GT/s	Dual Intel® Xeon® Processor E5-2600 v4 / v3 product family with QPI up to 9.6 GT/s
Key Applications	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>8 PCI-E Add-on cards [nid:3716]</li> <li>24 DIMM sockets</li> <li>SAS3 and SATA3 Support</li> <li>160W CPU support</li> <li>Titanium Level Power Supply</li> <li>2 SATA DOM support with embedded power</li> <li>Flexible LAN Options</li> </ul>	<ul style="list-style-type: none"> <li>7 PCI-E Add-on cards [nid:12248]</li> <li>24 DIMM sockets</li> <li>SAS3 and SATA3 Support</li> <li>160W CPU support</li> <li>Titanium Level Power Supply</li> <li>2 SATA DOM support with embedded power</li> <li>Flexible LAN Options</li> </ul>	<ul style="list-style-type: none"> <li>Flexible LAN options</li> <li>24 DIMM sockets</li> <li>12x 3.5" hot-swap drive bays</li> <li>4-port NVMe SSD Support</li> <li>160W CPU support</li> <li>Titanium Level Power Supply</li> <li>2 SATA DOM support with embedded power</li> </ul>
Serverboard	SUPER● X10DRU-i+	SUPER● X10DRU-i+	SUPER● X10DRU-i+
Chipset	Intel® C612 chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400 in 24 DIMM slots	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400 in 24 DIMM slots	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400 in 24 DIMM slots
Expansion Slots	1 PCI-E 3.0 x16(FH, 10.5"L); 7 PCI-E 3.0 x8(5 FH, 10.5"L, 1 LP, 1 Internal LP)	1 PCI-E 3.0 x16(FH, 10.5"L); 6 PCI-E 3.0 x8(4 FH, 10.5"L, 1 LP, 1 Internal LP)	-TNRT+: 7 PCI-E 3.0 x8(5 FH, 10.5"L, 1 LP, 1 Internal LP) -TNR4T+: 6 PCI-E 3.0 x8(4 FH, 10.5"L, 1 LP, 1 Internal LP)
Onboard Storage Controller	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10; Optional 24 SAS3 drive support via AOCs	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10; Optional 24 SAS3 drive support via AOCs	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10
Connectivity	-TR4+: 4 Gigabit Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port -TRT+: 2 10Gbase-T Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port -TRTP+: 2 10G SFP+ Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port	4 10Gbase-T Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port	-TNRT+: 2 10Gbase-T Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port -TNR4T+: 4 10Gbase-T Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port
VGA/Audio	Aspeed AST2400 BMC	Aspeed AST2400 BMC	Aspeed AST2400 BMC
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	24 hot-swap 2.5" drive support	24 hot-swap 2.5" drive support	12 hot-swap 3.5" drive support; 8 SATA3 + 4 NVMe; Optional 12 SAS3 drive support via AOCs
Peripheral Bays	N/A	N/A	N/A
Power Supply	Redundant 1000W Titanium Level (96%+) Power Supplies with PMBus	Redundant 1000W Titanium Level (96%+) Power Supplies with PMBus	Redundant 1000W Titanium Level (96%+) Power Supplies with PMBus
Cooling System	4 heavy duty fans	4 heavy duty fans	4 heavy duty fans
Form Factor	2U Chassis; Enclosure: 437 x 89 x 705mm (17.2" x 3.5" x 27.76") Gross Weight: 72lbs (32.66kg) Net Weight: 36lbs (16.33kg)	2U Chassis; Enclosure: 437 x 89 x 705mm (17.2" x 3.5" x 27.76") Gross Weight: 72lbs (32.66kg) Net Weight: 36lbs (16.33kg)	2U Chassis; Enclosure: 89 x 437 x 723mm (3.5" x 17.2" x 28.46") Gross Weight: 72lbs (32.66kg) Net Weight: 36lbs (16.33kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# ULTRA

2U Ultra

2U Ultra

2U Ultra  
Remote Workstation

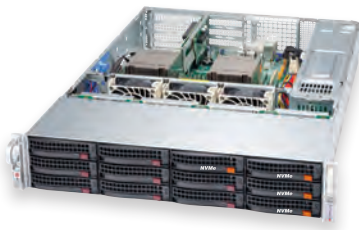


Ultra/M10

MODEL	SYS-6028U-TR4+ SYS-6028U-TRT+ SYS-6028U-TRTP+	SYS-6028U-TR4T+	SYS-6028UX-TR4
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4 / v3 product family with QPI up to 9.6 GT/s	Dual Intel® Xeon® Processor E5-2600 v4 / v3 product family with QPI up to 9.6 GT/s	Intel® Xeon® processor E5-2600 V4/V3 with UPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>High End Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>Remote Workstation</li> <li>Financial Market</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>8 PCI-E Add-on cards [nid:3716]</li> <li>2 SATA DOM support with embedded power [nid:3016]</li> <li>24 DIMM sockets</li> <li>12x 3.5" hot-swap SAS3/SATA3 drive bays</li> <li>160W CPU support</li> <li>Titanium Level Power Supply</li> <li>Flexible LAN Options</li> </ul>	<ul style="list-style-type: none"> <li>2 SATA DOM support with embedded power [nid:3016]</li> <li>24 DIMM sockets</li> <li>12x 3.5" hot-swap SAS3/SATA3 drive bays</li> <li>160W CPU support</li> <li>Titanium Level Power Supply</li> <li>Flexible LAN Options</li> </ul>	<ul style="list-style-type: none"> <li>Up to 4 double width GPU cards</li> <li>Up to 12 hot-swap 3.5" HDD</li> <li>Optional SAS3 and NVMe support</li> <li>Flexible LAN port options</li> </ul>
Serverboard	SUPER● X10DRU-i+	SUPER● X10DRU-i+	SUPER● X10DRU-X
Chipset	Intel® C612 chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400 in 24 DIMM slots	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400 in 24 DIMM slots	2TB Registered ECC (3DS), DDR4-2400MHz in 16 DIMM slots
Expansion Slots	1 PCI-E 3.0 x16(FH, 10.5"L); 7 PCI-E 3.0 x8(5 FH, 10.5"L, 1 LP, 1 Internal LP)	1 PCI-E 3.0 x16(FH, 10.5"L); 6 PCI-E 3.0 x8(4 FH, 10.5"L, 1 LP, 1 Internal LP)	3 PCI-E Gen 3.0 x16(full height 10.5" length) 3 PCI-E Gen 3.0 x8(1x in x16 slot full height 10.5" length, 1 low profile, 1 internal low profile)
Onboard Storage Controller	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10; Optional 12 SAS3 drive support	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10; Optional 12 SAS3 drive support	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10; Optional 12 SAS3 drive support; Optional 4 NVMe drive support via 2x AOC-SLG3-2E4
Connectivity	<p><b>-TR4+:</b> 4 Gigabit Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port</p> <p><b>-TRT+:</b> 2 10Gbase-T Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port</p> <p><b>-TRTP+:</b> 2 10G SFP+; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port</p>	4 10Gbase-T Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port	4 Gigabit Ethernet; 5 USB 3.0 ports (2 rear, 2 onboard header, 1 Type A); 1 Serial Port
VGA/Audio	Aspeed AST2400 BMC	Aspeed AST2400 BMC	Aspeed AST2400 BMC
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, SPM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	12 hot-swap 3.5" drive support	12 hot-swap 3.5" drive support	12 hot-swap 3.5" drives bays support
Peripheral Bays	N/A	N/A	N/A
Power Supply	Redundant 1000W Titanium Level (96%+) Power Supplies with PMBus	Redundant 1000W Titanium Level (96%+) Power Supplies with PMBus	1000W High-efficiency redundant (Titanium level) digital power supply
Cooling System	4 heavy duty fans	4 heavy duty fans	4 heavy duty fans w/ Optimal Fan Speed Control; 1 Air Shroud
Form Factor	2U Chassis; Enclosure: 437 x 89 x 723mm (17.2" x 3.5" x 28.46") Gross Weight: 72lbs (32.66kg) Net Weight: 36lbs (16.33kg)	2U Chassis; Enclosure: 437 x 89 x 723mm (17.2" x 3.5" x 28.46") Gross Weight: 72lbs (32.66kg) Net Weight: 36lbs (16.33kg)	2U Chassis; Enclosure: 437 x 89 x 648mm (17.2" x 3.5" x 25.5") Gross Weight: 72lbs (32.66kg) Net Weight: 36lbs (16.33kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

2U Short-Depth  
16 DIMMs, Up to 4 AOCs  
4 NVMe



Multi I/O  
11 PCI-E Slots



Multi I/O  
11 PCI-E Slots



MODEL	SYS-6028R-TDWNR	SYS-6038R-TXR	SYS-6048R-TXR
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s; CPU TDP support Up to 145W	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s; CPU TDP support up to 145W
Key Applications	<ul style="list-style-type: none"> <li>Data Center</li> <li>Cloud and Virtualization needs</li> <li>Hosting &amp; Application delivery</li> <li>Database Processing &amp; Storage</li> <li>Simulation &amp; Automation</li> </ul>	<ul style="list-style-type: none"> <li>Networking Telephony</li> <li>Surveillance DVR</li> <li>Industrial Server Solutions</li> <li>Head-node controller</li> </ul>	<ul style="list-style-type: none"> <li>Networking Telephony</li> <li>Surveillance DVR</li> <li>Industrial Server Solutions</li> <li>Head-node controller</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Redundant 920W <b>Platinum Level</b> high-efficiency power supplies</li> <li>IPMI 2.0 + KVM with Dedicated LAN</li> <li>Supports 16 DIMM DDR4-2133MHz</li> <li>Up to 4 add-on cards</li> <li><b>NVMe</b> Support</li> </ul>	<ul style="list-style-type: none"> <li>16 DIMM slots</li> <li>10x PCI-E 3.0 x8, 1x PCI-E 2.0 x4 (in x8)</li> <li>8x Hot-swap 3.5" HDD Bays and 2x 5.25" Drive Bays</li> <li>2 SATA DOMs Support with Embedded Power</li> <li>145W CPU support</li> </ul>	<ul style="list-style-type: none"> <li>Supports 16 DIMM DDR4-2133MHz</li> <li>Up to 11 PCI-E slots</li> <li>5 hot-swap 3.5" drives bays (SATA3 ports)</li> <li>3x 5.25" Peripheral Drive Bays</li> <li>2 SATA DOMs Support with Embedded Power</li> </ul>
Serverboard	SUPER● X10DDW-iN	SUPER● X10DRX	SUPER● X10DRX
Chipset	Intel® C612 Chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	3 PCI-E 3.0 x8 (FH/FL) & 1 PCI-E 3.0 (LP)	10 PCI-E 3.0 x8 (FH, FL), 1 PCI-E 2.0 x4 (in x8 slot)	10 PCI-E 3.0 x8 (FH, FL), 1 PCI-E 2.0 x4 (in x8 slot)
Onboard Storage Controller	Intel® C612 controller for 8 SATA3 (6Gbps) Ports; RAID 0,1,5,10	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10
Connectivity	Dual LAN with Intel® i350 Gigabit Ethernet Controllers	Dual LAN with Intel® i350 Gigabit Ethernet Controller	Dual LAN with Intel® i350 Gigabit Ethernet Controller
VGA/Audio	AST2400 VGA	AST2400 VGA	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	8x 3.5" SATA + 4x 2.5" <b>NVMe</b> drive bay	8x 3.5" hot-swap and 2x 5.25" drive bay	5x 3.5" hot-swap and 3x 5.25" peripheral drive bays
Peripheral Bays	N/A	1 optional Slim DVD-ROM bay	1 optional Slim DVD-ROM bay
Power Supply	Redundant 920W <b>Platinum Level</b> high-efficiency power supplies with I <sup>2</sup> C & PMBus	Redundant 1280W <b>Platinum Level</b> Digital power supplies w/PMBus supports	Redundant 600W power supplies
Cooling System	3x 80x80x38mm heavy duty counter-rotating fans with optimal fan speed control	3x middle fans & 1x rear exhaust fan	1x 92x38mm 4-pin PWM front intake fan 2x 80x38mm 4-pin PWM rear exhaust fans
Form Factor	2U Rackmount 437 x 89 x 647mm (17.2" x 3.5" x 25.5")	3U Rackmount 437 x 132 x 647mm (17.2" x 5.2" x 25.5")	4U Rackmount 437 x 178 x 525mm (17.2" x 7" x 20.68")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

WIO 1U



WIO 1U  
12Gbps SAS 3.0 HW RAID, Optional NVMe



MODEL	<b>SYS-6018R-WTR SYS-6018R-WTRT</b>	<b>SYS-1028R-WC1R SYS-1028R-WC1RT</b>
Processor Support	Intel® Xeon® processor E5-2600 v3, Intel® Xeon® processor E5-2600 v4. Dual Socket R3 (LGA 2011) supported, CPU TDP support Up to 145W, 1 QPI up to 9.6GT/s	Intel® Xeon® processor E5-2600 V3 with UPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Cloud and Virtualization needs</li> <li>Database Processing &amp; Storage</li> <li>Hosting &amp; Application delivery</li> <li>HPC cluster computer nodes</li> </ul>	<ul style="list-style-type: none"> <li>Disk Backup &amp; Recovery</li> <li>Downloads</li> <li>e-Business</li> <li>Email Server</li> <li>Enterprise Server</li> <li>Web Server</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>2 SATA DOM support with embedded power</li> <li>700W Gold Level High Efficiency Redundant</li> <li>Supports 16 DIMM DDR4 up to 2133MHz</li> <li>Up to 2 add-on cards</li> </ul>	<ul style="list-style-type: none"> <li>2 SATA DOM support with embedded power</li> <li>SAS3.0 (12Gbps) support</li> <li>Supports 16 DIMM DDR4 up to 2133MHz</li> <li>Up to 2 add-on cards</li> </ul>
Serverboard	-WTR: SUPER● X10DRW-i -WTRT: SUPER● X10DRW-iT	-WC1R: SUPER● X10DRW-i -WC1RT: SUPER● X10DRW-iT
Chipset	Intel® C612 chipset	Intel® C610 chipset
System Memory (Max.)*	Up to 1TB DDR4 up to 2133MHz, in 16 DIMM slots	Up to 1TB DDR4 up to 2133MHz, in 16 DIMM slots
Expansion Slots	2 PCI-E 3.0 x16(FHHL)	2 PCI-E 3.0 x16 (FHHL) 1 PCI-E 3.0 x8 Mezzanine for HBA cards
Onboard Storage Controller	ports; RAID ;	Broadcom 3108 SAS3 (12Gbs) HW RAID controller for 8 SAS3 (12Gbps) ports; RAID 0,1,5,6,10,50,60; 2GB DDR3 Cache; C610 controller for 2 SATA3 (6Gbps) ports; RAID 0,1;
Connectivity	-WTR: Dual LAN with Intel® i350 Gigabit Ethernet Controller -WTRT: Dual 10Gb Ethernet LAN with Intel® X540 Dual Port 10GBase-T	-WC1R: N/A -WC1RT: N/A
VGA/Audio	Aspeed AST2400 BMC	1 VGA, 1 Aspeed AST2400 BMC;
Management	Intel® Node Manager, IPMI2.0, NMI, SuperDoctor® 5, Watchdog	Intel® Node Manager; IPMI2.0; NMI; SuperDoctor® 5; Watchdog;
Drive Bays	4x 3.5" hot-swap SAS/SATA drive bays	10x 2.5" hot-swap SAS/SATA drive bay
Peripheral Bays	1 slim DVD-ROM drive (optional)	N/A
Power Supply	700W Redundant Gold Level high-efficiency power supplies	700W Redundant Gold Level high-efficiency power supplies with I2C & PMBus
Cooling System	5x 4cm heavy duty counter-rotating fans with air shroud & optimal fan speed control	5x 4cm heavy duty counter-rotating fans with air shroud & optimal fan speed control
Form Factor	1U Rackmount 437 x 43 x 650mm (17.2" x 1.7" x 25.6")	1U 17.2" (437mm) x 1.7" (43mm) x 23.5" (597mm)

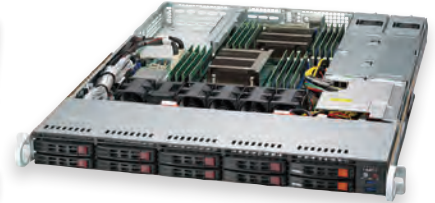
\* Please check with your Supermicro sales representative and website for compatibility and configuration details



WIO 1U  
Short-Depth 16.9" Compact

WIO 1U  
10 SATA3 2.5"

WIO  
NVMe Optimized



MODEL	SYS-1028R-WMR SYS-1028R-WMRT	SYS-1028R-WTR SYS-1028R-WTRT	SYS-1028R-WTNR SYS-1028R-WTNRT
Processor Support	Intel® Xeon® processor E5-2600 v3 family (up to 145W TDP **) Dual Socket R3 (LGA 2011)	Intel® Xeon® processor E5-2600 V3 with UPI up to 9.6GT/s	Intel® Xeon® processor E5-2600 v3, Intel® Xeon® processor E5-2600 v4. Dual Socket R3 (LGA 2011) supported, CPU TDP support Up to 145W, 1 QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>File/Print Server</li> <li>Application and data serving</li> <li>Clone of Server Clustering</li> <li>Business Critical Applications</li> </ul>	<ul style="list-style-type: none"> <li>Disk Backup &amp; Recovery</li> <li>Downloads</li> <li>e-Business</li> <li>Email Server</li> <li>Enterprise Server</li> <li>Web Server</li> </ul>	<ul style="list-style-type: none"> <li>Cloud and Virtualization needs</li> <li>Database Processing &amp; Storage</li> <li>Hosting &amp; Application delivery</li> <li>HPC cluster computer nodes</li> <li>Simulation &amp; Automation</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>support up to 2x AOCs</li> <li>Short-Short-Depth 16.9</li> </ul>	<ul style="list-style-type: none"> <li>16 DIMM support</li> <li>2 SATA DOM support with embedded power</li> <li>Supports 16 DIMM DDR4 up to 2133MHz</li> <li>Up to 4 add-on cards</li> </ul>	<ul style="list-style-type: none"> <li>Enterprise Performance Native NVMe</li> <li>Cost-effective Storage optimized</li> <li>8 SATA3 ports and 2 NVMe/SATA3 hybrid ports</li> <li>High-density, Enterprise Performance, Cost-effective</li> <li>16 DIMM support</li> </ul>
Serverboard	-WMR: SUPER● X10DRW-E -WMRT: SUPER● X10DRW-ET	-WTR: SUPER● X10DRW-i -WTRT: SUPER● X10DRW-IT	-WTNR: SUPER● X10DRW-N -WTNRT: SUPER● X10DRW-NT
Chipset	Intel® C612 chipset	Intel C612 Chipset	Intel® C612 chipset
System Memory (Max.)*	16x 288-pin DDR4 DIMM slots Up to 1TB ECC LRDIMM, 512GB ECC RDIMM	16 DIMM,1024GB Reg. ECC DDR4 up to 2133MHz	Up to Up to 512GB Registered ECC RDIMM, DDR4-2400MHz; Up to 2TB 3DS ECC LRDIMM, in 16 DIMM slots
Expansion Slots	2 PCI-E 3.0 x16 full-height, Half-length slots	2 PCI-E 3.0 x16(FHHL) 1 PCI-E 3.0 x8 Mezzanine for HBA cards	2x PCI-E 3.0 x16 full-height, Half-length slots
Onboard Storage Controller	10x SATA3 (6Gbps) ports	SATA3 (6Gbps); RAID 0, 1, 5, 10	Intel® C612 controller for SATA3 (6Gbps); RAID 0, 1, 5, 10
Connectivity	-WMR: 2x RJ45 Gigabit Ethernet LAN ports 1x RJ45 Dedicated IPMI LAN port -WMRT: Dual Ethernet LAN with Intel® X540 Dual Port 10GBase-T	-WTR: 2x RJ45 Gigabit Ethernet LAN ports -WTRT: Intel I350 Dual port Gigabit or 10Gbase-T X540 10GbE LAN	-WTNR: Intel® i350 Dual Port Gigabit Ethernet Controller -WTNRT: Intel® X540 Dual Port 10GBase-T
VGA/Audio	Aspeed AST2400 BMC	Aspeed AST2400 BMC	Aspeed AST2400 BMC
Management	Intel® Node Manager, IPMI2.0, NMI, SuperDoctor® 5, Watchdog	Built-in Server management tool (IPMI 2.0, KVM/media over LAN) with dedicated LAN port	Intel® Node Manager, IPMI2.0, NMI, SuperDoctor® 5, Watchdog
Drive Bays	2x 2.5" fixed with bracket	10x 2.5" hot-swap SAS/SATA drive bay	10x 2.5" hot-swap SAS/SATA drive bay
Peripheral Bays	N/A	N/A	N/A
Power Supply	PWS-406P-1R	PWS-706P-1R	PWS-706P-1R
Cooling System	4x 40x56mm PWM fan; 2x fans for AOC cooling ;	4x 40x56mm counter-rotation PWM fan;	4x 40x56mm counter-rotation PWM fan;
Form Factor	1U 17.2" (437mm) x 1.7" (43mm) x 16.9" (429mm)	1U 17.2" (437mm) x 1.7" (43mm) x 23.5" (597mm)	1U 17.2" (437mm) x 1.7" (43mm) x 23.5" (597mm); Enclosure: 437 x 43 x 597mm (17.2" " x 1.7" " x 23.5" " ) Gross Weight: 46 lbs/lbs (20.87kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



2U WIO  
16 DIMMs, 6 PCI-E 3.0x8



2U WIO  
16 DIMMs, 6 PCI-E 3.0x8  
Dual 10G LAN



MODEL	SYS-6028R-WTR	SYS-6028R-WTRT
Processor Support	Intel® Xeon® processor E5-2600 v3, Intel® Xeon® processor E5-2600 v4, Dual Socket R3 (LGA 2011) supported, CPU TDP support Up to 145W, 1 QPI up to 9.6GT/s	Intel® Xeon® processor E5-2600 v3, Intel® Xeon® processor E5-2600 v4, Dual Socket R3 (LGA 2011) supported, CPU TDP support Up to 145W, 1 QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Cloud and Virtualization needs</li> <li>Database Processing &amp; Storage</li> <li>Hosting &amp; Application delivery</li> <li>HPC cluster computer nodes</li> <li>Simulation &amp; Automation</li> </ul>	<ul style="list-style-type: none"> <li>Cloud and Virtualization needs</li> <li>Database Processing &amp; Storage</li> <li>Hosting &amp; Application delivery</li> <li>HPC cluster computer nodes</li> <li>Simulation &amp; Automation</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>2 SATA DOM support with embedded power</li> <li>740W Redundant Platinum Level high-efficiency power supplies</li> <li>Supports 16 DIMM DDR4 up to 2133MHz</li> <li>Up to 4 add-on cards</li> </ul>	<ul style="list-style-type: none"> <li>2x 10GBase-T Ports [nid:2349]</li> <li>2 SATA DOM support with embedded power</li> <li>740W Redundant Platinum Level high-efficiency power supplies</li> <li>Supports 16 DIMM DDR4 up to 2133MHz</li> <li>Up to 4 add-on cards</li> </ul>
Serverboard	SUPER● X10DRW-i	SUPER● X10DRW-IT
Chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 1TB DDR4 up to 2133MHz, in 16 DIMM slots	Up to 1TB DDR4 up to 2133MHz, in 16 DIMM slots
Expansion Slots	4 PCI-E 3.0 x8(2 FHFL, 2 FHHL)	4 PCI-E 3.0 x8(2 FHFL, 2 FHHL)
Onboard Storage Controller	Intel® C612 for 8 SATA3 (6Gbps); RAID 0, 1, 5, 10	Intel® C612 for 8 SATA3 (6Gbps); RAID 0, 1, 5, 10
Connectivity	Dual LAN with Intel® i350 Gigabit Ethernet Controller	Dual LAN with Intel® X540 10GBase-T Ethernet Controller
VGA/Audio	Aspeed AST2400 BMC	Aspeed AST2400 BMC
Management	Intel® Node Manager, IPMI2.0, NMI, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, NMI, SuperDoctor® 5, Watchdog
Drive Bays	8x 3.5" hot-swap SAS/SATA drive bays	8x 3.5" hot-swap SAS/SATA drive bays
Peripheral Bays	1 slim DVD-ROM drive (optional)	1 slim DVD-ROM drive (optional)
Power Supply	740W Redundant Platinum Level high-efficiency power supplies with I2C & PMBus	740W Redundant Platinum Level high-efficiency power supplies with I2C & PMBus
Cooling System	3x 8cm (7000 RPM) hot-swap PWM cooling fan;	3x 8cm (7000 RPM) hot-swap PWM cooling fan;
Form Factor	2U 17.2" (437mm) x 3.5" (89mm) x 25.5" (647mm)	2U 17.2" (437mm) x 3.5" (89mm) x 25.5" (647mm)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# X12 CloudDC

(For Complete System Only)

**NEW!**

3rd Gen Intel® Xeon® Scalable processors Supported



12x 3.5" NVMe/SAS/SATA Drives



4x 3.5" SAS/SATA Drives



MODEL	SYS-620C-TN12R	SYS-610C-TR
Processor Support	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA-4189 (Socket P+) supported TDP up to 270W; 3 UPI up to 11.2GT/s	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA-4189 (Socket P+) supported TDP up to 270W; 3 UPI up to 11.2GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Web Server, Firewall Application</li> <li>• Data Center Optimized, Value IaaS</li> <li>• Cloud Computing, Compact Server</li> <li>• DNS &amp; Gateway Servers, Firewall Application</li> <li>• CDN, Edge Nodes</li> </ul>	<ul style="list-style-type: none"> <li>• Web Server, Firewall Application</li> <li>• Data Center Optimized, Value IaaS</li> <li>• Cloud Computing, Compact Server</li> <li>• DNS &amp; Gateway Servers, Firewall Application</li> <li>• CDN, Edge Nodes</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• Dual AIOM with NCSI (OCP 3.0 NIC)</li> <li>• Dual NVMe M.2 (2280)</li> <li>• Dual sockets up to 76 cores and 270W TDP</li> <li>• Compact server with tool-less drive trays</li> <li>• Dual FHFLDW PCI-E 4.0 GPU support</li> <li>• Optional hot-swappable 2.5" rear drive bays</li> <li>• Flexible expansion with up to 2x PCI-E 4.0 x16 and 4x PCI-E 4.0 x8 (convertible to 2x PCI-E 4.0 x16) slots</li> <li>• Balanced architecture in compact chassis (25.6")</li> <li>• Up to 12x NVMe/SATA/SAS hybrid tool-less drive bays</li> <li>• 3.5" tool-less drive trays also support 2.5" drives</li> </ul>	<ul style="list-style-type: none"> <li>• Dual AIOM with NCSI (OCP 3.0 NIC)</li> <li>• Dual NVMe M.2 (2280)</li> <li>• Dual sockets up to 76 cores and 270W TDP</li> <li>• Compact server with tool-less drive trays</li> <li>• Optional fixed 2.5" 7 mm drive bays</li> <li>• Flexible expansion with up to 2x PCI-E 4.0 x16 slots</li> <li>• Balanced architecture in compact chassis (25.6")</li> <li>• Up to 4x SATA/SAS tool-less drive bays</li> <li>• 3.5" tool-less drive trays also support 2.5" drives</li> </ul>
Serverboard	SUPER● X12DDW-A6	SUPER● X12DDW-A6
Chipset	Intel® C621A	Intel® C621A
System Memory (Max.)	16 DIMM slots Up to 4 TB ECC RDIMM, DDR4-3200MHz Up to 4 TB ECC LRDIMM, DDR4-3200MHz Up to 4 TB Intel® DCPMM, DDR4-3200MHz	16 DIMM slots Up to 4 TB ECC RDIMM, DDR4-3200MHz Up to 4 TB ECC LRDIMM, DDR4-3200MHz Up to 4 TB Intel® DCPMM, DDR4-3200MHz
Expansion Slots	4 PCI-E 4.0 x16 FHHL slot(s) 2 PCI-E 4.0 x8 FHHL slot(s)	2 PCI-E 4.0 x16 FHHL slot(s)
Onboard Storage Controller	Intel® SATA	Intel® SATA
Connectivity		
VGA/Audio	1 VGA port	1 VGA port
Management	SuperDoctor® 5; Watch Dog; NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; IPMI 2.0; Redfish API; SCC	SuperDoctor® 5; Watch Dog; NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; IPMI 2.0; Redfish API; SCC
Drive Bays	12x 3.5" hot-swap NVMe/SATA/SAS hybrid drive bays; Optional RAID support via RAID controller AOC	4x 3.5" hot-swap SATA/SAS drive bays; Optional RAID support via RAID controller AOC
Peripheral Bays	None	2x 2.5" (optional)
Power Supply	Redundant 1200W Titanium level (96%)	Redundant 860W Platinum level (94%)
Cooling System	3x 8cm heavy duty fan(s)	6x 4cm heavy duty fan(s)
Form Factor	2U rackmount Enclosure: 437 x 89 x 648mm (17.2" x 3.5" x 25.5")	1U rackmount Enclosure: 437 x 43 x 650mm (17.2" x 1.7" x 25.6")

DCO/UP/Mainstream

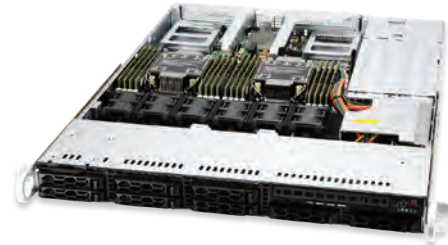
# X12 CloudDC

(For Complete System Only)

10x 2.5" NVMe/SAS/SATA Drives



8x 2.5" SAS/SATA Drives



**NEW!**

3rd Gen Intel® Xeon® Scalable processors Supported



DCO/UP/Mainstream

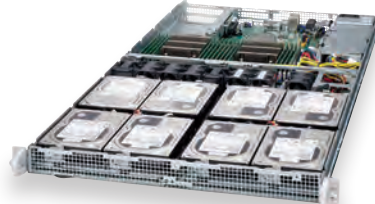
MODEL	SYS-120C-TN10R	SYS-120C-TR
Processor Support	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA-4189 (Socket P+) supported TDP up to 270W; 3 UPI up to 11.2GT/s	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA-4189 (Socket P+) supported TDP up to 270W; 3 UPI up to 11.2GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Web Server, Firewall Application</li> <li>• Data Center Optimized, Value IaaS</li> <li>• Cloud Computing, Compact Server</li> <li>• DNS &amp; Gateway Servers, Firewall Application</li> <li>• CDN, Edge Nodes</li> </ul>	<ul style="list-style-type: none"> <li>• Web Server, Firewall Application</li> <li>• Data Center Optimized, Value IaaS</li> <li>• Cloud Computing, Compact Server</li> <li>• DNS &amp; Gateway Servers, Firewall Application</li> <li>• CDN, Edge Nodes</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• Dual AIOM with NCSI (OCP 3.0 NIC)</li> <li>• Dual NVMe M.2 (2280)</li> <li>• Dual sockets up to 76 cores and 270W TDP</li> <li>• Compact server with tool-less drive trays</li> <li>• Flexible expansion with up to 2x PCI-E 4.0 x16 slots</li> <li>• Balanced architecture in compact chassis (23.5")</li> <li>• Up to 10x NVMe/SATA/SAS hybrid tool-less drive bays</li> </ul>	<ul style="list-style-type: none"> <li>• Dual AIOM with NCSI (OCP 3.0 NIC)</li> <li>• Dual NVMe M.2 (2280)</li> <li>• Dual sockets up to 76 cores and 270W TDP</li> <li>• Compact server with tool-less drive trays</li> <li>• Optional DVD ROM support</li> <li>• Flexible expansion with up to 2x PCI-E 4.0 x16 slots</li> <li>• Balanced architecture in compact chassis (23.5")</li> <li>• Up to 8x SATA/SAS tool-less drive bays</li> </ul>
Serverboard	SUPER● X12DDW-A6	SUPER● X12DDW-A6
Chipset	Intel® C621A	Intel® C621A
System Memory (Max.)	16 DIMM slots Up to 4 TB ECC RDIMM, DDR4-3200MHz Up to 4 TB ECC LRDIMM, DDR4-3200MHz Up to 4 TB Intel® DCPMM, DDR4-3200MHz	16 DIMM slots Up to 4 TB ECC RDIMM, DDR4-3200MHz Up to 4 TB ECC LRDIMM, DDR4-3200MHz Up to 4 TB Intel® DCPMM, DDR4-3200MHz
Expansion Slots	2 PCI-E 4.0 x16 FHHL slot(s)	2 PCI-E 4.0 x16 FHHL slot(s)
Onboard Storage Controller	Intel® SATA	Intel® SATA
Connectivity		
VGA/Audio	1 VGA port	1 VGA port
Management	SuperDoctor® 5; Watch Dog; NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; IPMI 2.0; Redfish API; SCC	SuperDoctor® 5; Watch Dog; NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; IPMI 2.0; Redfish API; SCC
Drive Bays	10x 2.5" hot-swap NVMe/SATA/SAS hybrid drive bays; Optional RAID support via RAID controller AOC	8x 2.5" hot-swap SATA/SAS drive bays; Optional RAID support via RAID controller AOC
Peripheral Bays	None	1x DVD-ROM (optional)
Power Supply	Redundant 860W Platinum level (94%)	Redundant 860W Platinum level (94%)
Cooling System	6x 4cm heavy duty fan(s)	6x 4cm heavy duty fan(s)
Form Factor	1U rackmount Enclosure: 437 x 43 x 597mm (17.2" x 1.7" x 23.5")	1U rackmount Enclosure: 437 x 43 x 597mm (17.2" x 1.7" x 23.5")



DCO

DCO

DCO



MODEL	SYS-6018R-TD	SYS-6018R-TD8	SYS-6018R-TDW
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Data Center</li> <li>Cloud and Virtualization needs</li> <li>Hosting &amp; Application delivery</li> <li>Database Processing &amp; Storage</li> <li>Simulation &amp; Automation</li> </ul>	<ul style="list-style-type: none"> <li>Data Center</li> <li>Cloud and Virtualization needs</li> <li>Hosting &amp; Application delivery</li> <li>Database Processing &amp; Storage</li> <li>Simulation &amp; Automation</li> </ul>	<ul style="list-style-type: none"> <li>Data Center</li> <li>Cloud and Virtualization needs</li> <li>Hosting &amp; Application delivery</li> <li>Database Processing &amp; Storage</li> <li>Simulation &amp; Automation</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>480W <b>Platinum Level</b> high-efficiency power supply</li> <li>IPMI 2.0 + KVM with Dedicated LAN</li> <li>Cost Effective</li> </ul>	<ul style="list-style-type: none"> <li>650W <b>Platinum Level</b> high-efficiency power supply</li> <li>IPMI 2.0 + KVM with Dedicated LAN</li> <li>16 DIMM DDR4-2133MHz</li> <li>Up to 3 add-on cards</li> <li>8x 3.5" &amp; 2x 2.5" Fixed SATA Drives</li> </ul>	<ul style="list-style-type: none"> <li>600W <b>Platinum Level</b> high-efficiency power supply</li> <li>IPMI 2.0 + KVM with Dedicated LAN</li> <li>16 DIMM DDR4-2133MHz</li> <li>Up to 3 add-on cards</li> </ul>
Serverboard	SUPER● X10DRD-L	SUPER● X10DDW-i	SUPER● X10DDW-i
Chipset	Intel® C612 Chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	Up to 1TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 8 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	1 PCI-E 3.0 x8 (Full-Height, Half-Length)	2 PCI-E 3.0 x16 (Full-Height, Half-Length) 1 PCI-E 3.0 (LP)	2 PCI-E 3.0 x16 (Full-Height, Half-Length) 1 PCI-E 3.0 (LP) 1 slot for SAS controller mezzanine card
Onboard Storage Controller	Intel® C612 controller for 6 SATA3 (6Gbps) ports; RAID 0,1,5,10	Intel® C612 controller for 10 SATA3 (6Gbps) ports; RAID 0,1,5,10	Intel® C612 controller for 4 SATA3 (6Gbps) Ports; RAID 0,1,5,10
Connectivity	Dual LAN with Intel® i350 Gigabit Ethernet controller	Dual LAN with Intel® i350 Gigabit Ethernet controller	Dual LAN with Intel® i350 Gigabit Ethernet controller
VGA/Audio	AST2400 VGA	AST2400 VGA	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	4x 3.5" hot-swap SATA HDD drive bays	8x 3.5" & 2x 2.5" Fixed SATA drive bays	4x 3.5" hot-swap SATA HDD drive bays
Peripheral Bays	1 slim DVD-ROM drive (optional)	N/A	1 slim DVD-ROM drive (optional)
Power Supply	480W <b>Platinum Level</b> high-efficiency power supply	650W <b>Platinum Level</b> high-efficiency power supply	600W <b>Platinum Level</b> high-efficiency power supply
Cooling System	2x blower + 1x 4cm fans with optimal fan speed control	6x 4cm heavy duty counter-rotating fans with optimal fan speed control	5x 4cm heavy duty counter-rotating fans with optimal fan speed control
Form Factor	1U Rackmount 437 x 43 x 650mm (17.2" x 1.7" x 25.6")	1U Rackmount 437 x 43 x 813mm (17.2" x 1.7" x 32")	1U Rackmount 437 x 43 x 650mm (17.2" x 1.7" x 25.6")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

DCO/UP/Mainstream

# X12 DP MAINSTREAM

**NEW!**

3rd Gen Intel® Xeon® Scalable processors Supported



DCO/UP/Mainstream

MODEL	SYS-220P-C9R	SYS-220P-C9RT	SYS-620P-TR
Processor Support	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA-4189 (Socket P+) supported TDP up to 270W;	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA-4189 (Socket P+) supported TDP up to 270W;	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA-4189 (Socket P+) supported TDP up to 270W;
Key Applications	<ul style="list-style-type: none"> <li>High Performance Computing</li> <li>Enterprise Server</li> <li>Data Center Optimized</li> <li>Database Processing and High Density Storage</li> <li>Application-Optimized Solutions</li> </ul>	<ul style="list-style-type: none"> <li>High Performance Computing</li> <li>Enterprise Server</li> <li>Data Center Optimized</li> <li>Database Processing and High Density Storage</li> <li>Application-Optimized Solutions</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Enterprise Server</li> <li>Data Center Optimized</li> <li>Application and data serving</li> <li>Model analysis</li> <li>Compute Intensive Applications</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>High end all-purpose 2U rackmount server</li> </ul>	<ul style="list-style-type: none"> <li>High end all-purpose 2U rackmount server</li> </ul>	<ul style="list-style-type: none"> <li>Cost effective all-purpose 2U rackmount server</li> </ul>
Serverboard	SUPERMICRO® X12DPI-N6	SUPERMICRO® X12DPI-NT6	SUPERMICRO® X12DPI-N6
Chipset	Intel® C621A	Intel® C621A	Intel® C621A
System Memory (Max.)	16 DIMM slots Up to 4TB Intel® Optane™ Persistent Memory, DDR4-3200MHz Up to 4TB ECC LRDIMM, DDR4-3200MHz Up to 4TB RDIMM, DDR4-3200MHz	16 DIMM slots Up to 18TB Intel® DCPMM, DDR4-2666MHz Up to 4TB ECC RDIMM/LRDIMM, DDR4-3200MHz	<ul style="list-style-type: none"> <li>16 DIMM slots</li> <li>Up to 4TB Intel® Optane™ Persistent Memory, DDR4-3200MHz</li> <li>Up to 4TB ECC LRDIMM, DDR4-3200MHz</li> <li>Up to 4TB RDIMM, DDR4-3200MHz</li> </ul>
Expansion Slots	4x PCI-E 4.0 x16 LP slot(s); 1x PCI-E 4.0 x8 LP slot(s)	4x PCI-E 4.0 x16 LP slot(s); 1x PCI-E 4.0 x8 LP slot(s)	<ul style="list-style-type: none"> <li>4x PCI-E 4.0 x16 LP slot(s); 2x PCI-E 4.0 x8 LP slot(s)</li> </ul>
Onboard Storage Controller	Intel® C621A Broadcom® 3908	Intel® C621A Broadcom® 3908	Intel® C621A
Connectivity	2x 1GbE port(s)	2x 10GbE port(s)	2x 1GbE port(s)
VGA/Audio	1 VGA port	1 VGA port	1 VGA port
Management	NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; Redfish API; IPMI2.0	NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; Redfish API; IPMI2.0	NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; Redfish API; IPMI2.0
Drive Bays	6x 2.5" hot-swap drive bays; 4x 2.5" NVMe optional	6x 2.5" hot-swap drive bays; 4x 2.5" NVMe optional	8x 3.5" hot-swap drive bays; 2x 2.5" NVMe fixed drives optional
Peripheral Bays	1x DVD (optional)	1x DVD (optional)	1x DVD (optional)
Power Supply	Redundant 1200W Titanium level (96%)	Redundant 1200W Titanium level (96%)	Redundant 1200W Titanium level (96%)
Cooling System	3 heavy duty fan(s)	3 heavy duty fan(s)	3 heavy duty fan(s)
Form Factor	2U rackmount Enclosure: 437 x 89 x 630mm (17.2" x 3.5" x 24.8")	2U rackmount Enclosure: 437 x 89 x 630mm (17.2" x 3.5" x 24.8")	2U rackmount Enclosure: 437 x 89 x 647mm (17.2" x 3.5" x 25.5")

# X12 DP MAINSTREAM

**NEW!**

3rd Gen Intel® Xeon® Scalable processors Supported



MODEL	SYS-620P-TRT	SYS-740P-TR	SYS-740P-TRT
Processor Support	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA-4189 (Socket P+) supported TDP up to 270W;	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA-4189 (Socket P+) supported TDP up to 270W;	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA-4189 (Socket P+) supported TDP up to 270W;
Key Applications	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Enterprise Server</li> <li>Data Center Optimized</li> <li>Application and data serving</li> <li>Model analysis</li> <li>Compute Intensive Applications</li> </ul>	<ul style="list-style-type: none"> <li>Enterprise Server</li> <li>Application and data serving</li> <li>Model analysis</li> <li>Compute Intensive Applications</li> <li>Office environment</li> </ul>	<ul style="list-style-type: none"> <li>Enterprise Server</li> <li>Application and data serving</li> <li>Model analysis</li> <li>Compute Intensive Applications</li> <li>Office environment</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Cost effective all-purpose 2U rackmount server</li> </ul>	<ul style="list-style-type: none"> <li>Cost-effective all-purpose tower server</li> </ul>	<ul style="list-style-type: none"> <li>Cost-effective all-purpose tower server</li> </ul>
Serverboard	SUPER● X12DPI-NT6	SUPER● X12DPI-N6	SUPER● X12DPI-NT6
Chipset	Intel® C621A	Intel® C621A	Intel® C621A
System Memory (Max.)	<ul style="list-style-type: none"> <li>16 DIMM slots</li> <li>Up to 18TB Intel® DCPMM, DDR4-2666MHz</li> <li>Up to 4TB ECC RDIMM/LRDIMM, DDR4-3200MHz</li> </ul>	16 DIMM slots Up to 4TB Intel® Optane™ Persistent Memory, DDR4-3200MHz Up to 4TB ECC LRDIMM, DDR4-3200MHz Up to 4TB RDIMM, DDR4-3200MHz	16 DIMM slots Up to 18TB Intel® DCPMM, DDR4-2666MHz Up to 4TB ECC RDIMM/LRDIMM, DDR4-3200MHz
Expansion Slots	<ul style="list-style-type: none"> <li>4x PCI-E 4.0 x16 LP slot(s); 2x PCI-E 4.0 x8 LP slot(s)</li> </ul>	4 PCI-E 4.0 x16 Full-height slot(s); 2 PCI-E 4.0 x8 Full-height slot(s)	4 PCI-E 4.0 x16 Full-height slot(s); 2 PCI-E 4.0 x8 Full-height slot(s)
Onboard Storage Controller	Intel® C621A	Intel® C621A	Intel® C621A
Connectivity	2x 10GbE port(s)	2x 1GbE port(s)	2x 10GbE port(s)
VGA/Audio	1 VGA port	1 VGA port	1 VGA port
Management	NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; Redfish API; IPMI2.0	NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; Redfish API; IPMI2.0	NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; Redfish API; IPMI2.0
Drive Bays	8x 3.5" hot-swap drive bays; 2x 2.5" NVMe fixed drives optional	8x 3.5" hot-swap drive bays; 2x 2.5" NVMe hybrid; 2.5" NVMe fixed drives optional	8x 3.5" hot-swap drive bays; 2x 2.5" NVMe hybrid; 2.5" NVMe fixed drives optional
Peripheral Bays	1x DVD (optional)	1x 5.25" DVD (optional)	1x 5.25" DVD (optional)
Power Supply	Redundant 1200W Titanium level (96%)	Redundant 1200W Titanium level (96%)	Redundant 1200W Titanium level (96%)
Cooling System	3 heavy duty fan(s)	3 heavy duty fan(s)	3 heavy duty fan(s)
Form Factor	2U rackmount Enclosure: 437 x 89 x 647mm (17.2" x 3.5" x 25.5")	Tower/4U rackmount Enclosure: 178 x 452 x 648mm (7" x 17.8" x 25.5")	Tower/4U rackmount Enclosure: 178 x 452 x 648mm (7" x 17.8" x 25.5")

DCO/UP/Mainstream

# DP MAINSTREAM

Data Center Optimized  
Onboard Dual SFP+

8x SAS3 (12Gbps) and  
8x SATA3 (6Gbps)

2U SAS3/SATA3  
Quad LAN, 24 DIMMs, 10GBase-T



DCO/UP/Mainstream

MODEL	SYS-6018R-TDTP SYS-6018R-TDTPR <i>(shown)</i>	SYS-2028R-C1R SYS-2028R-C1RT	SYS-2028R-C1R4+ SYS-2028R-C1RT4+
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Data Center</li> <li>Cloud and Virtualization needs</li> <li>Hosting &amp; Application delivery</li> <li>Database Processing &amp; Storage</li> <li>Simulation &amp; Automation</li> </ul>	<ul style="list-style-type: none"> <li>Application and data serving</li> <li>Business Critical Applications</li> <li>Compute Intensive Application</li> <li>Database Processing &amp; Storage</li> <li>DataCenter Applications</li> <li>Mission-critical applications</li> <li>Simulation &amp; Automation</li> </ul>	<ul style="list-style-type: none"> <li>Application and data serving</li> <li>Compute Intensive Application</li> <li>Database Processing &amp; Storage</li> <li>High Availability Storage Appliance Platform</li> <li>Hosting &amp; Application delivery</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>600W <b>Platinum Level</b> High-Efficiency Power Supply; or 500W Redundant <b>Platinum Level</b></li> <li>IPMI 2.0 + KVM with Dedicated LAN</li> <li>2x 10G SFP+ onboard</li> </ul>	<ul style="list-style-type: none"> <li>8x <b>SAS3</b> (12Gbps) and 8x SATA3 (6Gbps) 2.5" drives</li> <li>2 SATA DOM support with embedded power</li> <li>16 DIMM slots</li> <li>Redundant 920W <b>Platinum Level</b> high-efficiency</li> <li>Supports up to 7 expansion cards</li> </ul>	<ul style="list-style-type: none"> <li>8x 2.5" SAS/8x 2.5" SATA drive bays</li> <li>24 DIMM slots</li> <li>Redundant 920W <b>Platinum Level</b> high-efficiency</li> <li>3108 controller for 8 <b>SAS3</b> (12Gbps) hot-swappable 2.5" drives</li> <li>Up to 6 add-on cards</li> <li>2 SATA DOM support with built-in power</li> </ul>
Serverboard	SUPER● X10DRD-LTP	-C1R: SUPER● X10DRH-C -C1RT: SUPER● X10DRH-CT	-C1R4+: SUPER● X10DRC-LN4+ -C1RT4+: SUPER● X10DRC-T4+
Chipset	Intel® C612 Chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	Up to 1TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 8 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 24 DIMM slots
Expansion Slots	1 PCI-E 3.0 x8 (Full-Height, Half-Length)	1 PCI-E 3.0 x16; 6 PCI-E 3.0 x8 low profile add on cards.	2 PCI-E 3.0 x16; 3 PCI-E 3.0 x8; 1 PCI-E 2.0 x4 (in x8 slot) low profile add on cards
Onboard Storage Controller	Intel® C612 controller for 6 SATA3 (6Gbps) ports; RAID 0,1,5,10	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10; 3108 HW with 2G Cache controller for 8 <b>SAS3</b> (12Gbps) ports; RAID 0,1,5,6,10,50,60	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10; <b>SAS3</b> 3108 HW with 2G Cache controller for 8 <b>SAS3</b> (12Gbps) ports; RAID 0,1,5,6,10,50,60
Connectivity	Dual LAN with Intel® 82599ES 10 Gigabit Ethernet w/ SFP+	-C1R: Dual LAN with Intel® i350 Gigabit Ethernet Controllers; -C1RT: Dual 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector	-C1R4+: <b>Quad LAN</b> with Intel® i350 Gigabit Ethernet Controllers; -C1RT4+: <b>Quad</b> 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector
VGA/Audio	AST2400 VGA	AST2400 VGA	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	4x 3.5" hot-swap SATA HDD drive bays	8x 2.5" <b>SAS3</b> (12Gbps) and 8x 2.5" 6Gbps SATA3 (Total 16 hot-swap drives)	8x 2.5" 12Gbps <b>SAS3</b> and 8x 2.5" 6Gbps SATA3 (Total 16 hot-swap drives)
Peripheral Bays	1 slim DVD-ROM drive (optional)	USB Support: Rear: 2x3.0 + 2x2.0, Front: 2x2.0, and 1x Type A; optional DVD-ROM drive: support either 1x slim or 1x 5.25" DVD drive	USB Support: Rear: 2x 3.0 + 2x 2.0; Front: 2x 2.0, 1x Type A, optional 1x 5.25" DVD-ROM drive; support either 1x slim or 1x 5.25" DVD drive
Power Supply	-TDTP: 600W <b>Platinum Level</b> high-efficiency power supply -TDTPR: 500W Redundant <b>Platinum Level</b> high-efficiency power supplies	Redundant 920W <b>Platinum Level</b> (94%) High-Efficiency power supplies	Redundant 920W <b>Platinum Level</b> high-efficiency power supplies with I <sup>2</sup> C & PMBus
Cooling System	5x 4cm heavy duty counter-rotating fans with optimal fan speed control	3x 8cm high-performance PWM fans	3x 8cm high-performance PWM fans
Form Factor	1U Rackmount 437 x 43 x 650mm (17.2" x 1.7" x 25.6")	2U Rackmount 437 x 89 x 630mm (17.2" x 3.5" x 24.8")	2U Rackmount 437 x 89 x 630mm (17.2" x 3.5" x 24.8")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



# MAINSTREAM

Multi I/O, Maximum I/O Solutions  
11 PCI-E Slots

Cost-Optimized, DDR4 16x DIMMs,  
2x LAN Ports, 6x Add-on Cards

2U 8-bay Hot-swap  
3.5" HDDs w/ 16 DIMMs



MODEL	SYS-2028R-TXR	SYS-6028R-T SYS-6028R-TT	SYS-6028R-TR SYS-6028R-TRT
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Surveillance DVR</li> <li>Networking Telephony</li> <li>Industrial Server Solutions</li> <li>Head-node controller</li> <li>Flash Array Server</li> </ul>	<ul style="list-style-type: none"> <li>Cloud and Virtualization needs</li> <li>Hosting &amp; Application delivery</li> <li>Database processing &amp; Storage</li> <li>Simulation &amp; Automation</li> </ul>	<ul style="list-style-type: none"> <li>Cloud and Virtualization needs</li> <li>Hosting &amp; Application delivery</li> <li>Database processing &amp; Storage</li> <li>Simulation &amp; Automation</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>16 DIMM support DDR4-2400MHz</li> <li>10x PCI-E 3.0 x8, 1x PCI-E 2.0 x4 (in x8)</li> <li>16x Hot-swap 2.5" HDD Bays (default 8x HDD Bays) and 1x 5.25" Drive Bays</li> <li>2 SATA DOMs Support with Embedded Power</li> <li>Support 1 Slim DVD-ROM and 1 COM &amp; 2 USB3.0 ports module</li> <li>145W CPU support</li> </ul>	<ul style="list-style-type: none"> <li>16 DIMM slots</li> <li>650W Gold Level high-efficiency power supply</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>6x 3.5" hot-swap drive bays</li> <li>2 SATA DOM support with built-in power</li> </ul>	<ul style="list-style-type: none"> <li>16 DIMM slots</li> <li>Redundant 740W <b>Platinum Level</b> high-efficiency power supplies</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>8x 3.5" hot-swap SATA3 drive bays</li> <li>2 SATA DOM support with built-in power</li> </ul>
Serverboard	SUPER● X10DRX	-T: SUPER● X10DRi -TT: SUPER● X10DRi-T	-TR: SUPER● X10DRi -TRT: SUPER● X10DRi-T
Chipset	Intel® C612 Chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	10 Low Profile PCI-E 3.0 x8 1 Low Profile PCI-E 2.0 x4 (in x8 slot)	3 PCI-E 3.0 x16 (LP) 3 PCI-E 3.0 x8 (LP)	3 PCI-E 3.0 x16 (LP) 3 PCI-E 3.0 x8 (LP)
Onboard Storage Controller	Intel® C612 controller for 8 SATA3 (6Gbps) ports; RAID 0,1,5,10	Intel® C612 controller for 6 SATA3 (6Gbps) ports; RAID 0,1,5,10	Intel® C612 controller for 8 SATA3 (6Gbps) ports; RAID 0,1,5,10
Connectivity	Dual LAN with Intel® i350 Gigabit Ethernet controller;	-T: Dual LAN with Intel® i350 Gigabit Ethernet controller; or -TT: Dual 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector	-TR: Dual LAN with Intel® i350 Gigabit Ethernet controller; -TRT: Dual 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector
VGA/Audio	AST2400 VGA	AST2400 VGA	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	16x 2.5" hot-swap SATA3 drive bays (8x SATA3 ports by default)	6x 3.5" hot-swap drive bays	8x 3.5" hot-swap SATA3 drive bays
Peripheral Bays	1x slim DVD-ROM drive bay 1x USB + COM port tray 1x standard 5.25" drive bay	1 slim DVD/DVD-ROM drive (optional)	1 slim DVD-ROM drive (optional)
Power Supply	Redundant 1000W <b>Titanium Level</b> (96%) power supplies	650W high-efficiency power supply	Redundant 740W <b>Platinum Level</b> high-efficiency power supplies with I <sup>2</sup> C & PMBus
Cooling System	5x 8cm hot-swap PWM cooling fans with air shroud with optimal fan speed control	4x 8cm hot-swap PWM cooling fans with air shroud with optimal fan speed control	3x 8cm hot-swap PWM cooling fans with air shroud with optimal fan speed control
Form Factor	2U Rackmount 437 x 89 x 650mm (17.2" x 3.5" x 25.6")	2U Rackmount 437 x 89 x 648mm (17.2" x 3.5" x 25.6")	2U Rackmount 437 x 89 x 648mm (17.2" x 3.5" x 25.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

DCO/UP/Mainstream

# MAINSTREAM

4U Standalone/Rackmount  
SAS3, 7 PCI-E 3.0



4U Standalone/Rackmount  
SAS3, 24 DIMMs, Quad LAN



4U Standalone/Rackmount  
SAS3, 7 PCI-E 3.0



DCO/UP/Mainstream

MODEL	SYS-7048R-C1R	SYS-7048R-C1R4+	SYS-7048R-C1RT
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Big Data Analytics</li> <li>• Compute Intensive Storage Environments</li> <li>• DataCenter Applications</li> <li>• Simulation &amp; Automation</li> </ul>	<ul style="list-style-type: none"> <li>• Big Data Analytics</li> <li>• Compute Intensive Storage Environments</li> <li>• DataCenter Applications</li> <li>• Simulation &amp; Automation</li> </ul>	<ul style="list-style-type: none"> <li>• Big Data Analytics</li> <li>• Compute Intensive Storage Environments</li> <li>• DataCenter Applications</li> <li>• Simulation &amp; Automation</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 2 SATA DOM support with embedded power</li> <li>• 16 DIMM slots</li> <li>• 8x 3.5" SATA3/8x 2.5" SAS3 hot-swap drive bays</li> <li>• Redundant 920W Platinum Level high-efficiency</li> <li>• Independent power &amp; cooling control</li> <li>• SATA 3.0 (6Gbps) support</li> <li>• Supports up to 7 expansion cards</li> </ul>	<ul style="list-style-type: none"> <li>• 2 SATA DOM support with embedded power</li> <li>• 24 DIMM slots</li> <li>• 8x 2.5" SAS/8x 3.5" SATA hot-swap drive bays</li> <li>• Redundant 920W Platinum Level power</li> <li>• Up to 6 add-on cards</li> </ul>	<ul style="list-style-type: none"> <li>• 2 SATA DOM support with embedded power</li> <li>• 16 DIMM slots</li> <li>• 8x 3.5" SATA3/8x 2.5" SAS3 hot-swap drive bays</li> <li>• Redundant 920W Platinum Level high-efficiency</li> <li>• Independent power &amp; cooling control</li> <li>• SATA 3.0 (6Gbps) support</li> <li>• Supports up to 7 expansion cards</li> </ul>
Serverboard	SUPER● X10DRH-C	SUPER● X10DRC-LN4+	SUPER● X10DRH-CT
Chipset	Intel® C612 Chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 24 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	FH, FL support for 1 PCI-E 3.0 x16, 6 PCI-E 3.0 x8 add on cards	FH/FL support for 2 PCI-E 3.0 x16; 3 PCI-E 3.0 x8; 1 PCI-E 2.0 x4 (in x8 slot) add on cards	FH, FL support for 1 PCI-E 3.0 x16, 6 PCI-E 3.0 x8 add on cards
Onboard Storage Controller	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10; SAS3 3108 HW with 2G Cache controller for 8 SAS3 (12Gbps) ports; RAID 0,1,5,6,10,50,60	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10; SAS3 3108 HW with 2G Cache controller for 8 SAS3 (12Gbps) ports; RAID 0,1,5,6,10,50,60	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10; SAS3 3108 HW with 2G Cache controller for 8 SAS3 (12Gbps) ports; RAID 0,1,5,6,10,50,60
Connectivity	Dual LAN with Intel® i350 Gigabit Ethernet Controllers;	Quad LAN with Intel® i350 Gigabit Ethernet Controllers;	Dual 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector
VGA/Audio	AST2400 VGA	AST2400 VGA	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	8x 2.5" 12Gbps SAS3 hot-swap drives in mobile rack and 8x 3.5" 6Gbps SATA3 hot-swap drives	8x 2.5" 12Gbps SAS3 hot-swap drives in mobile rack and 8x 3.5" 6Gbps SATA3 hot-swap drives (Total 16x hot-swap drive bays)	8x 2.5" 12Gbps SAS3 hot-swap drives in mobile rack and 8x 3.5" 6Gbps SATA3 hot-swap drives
Peripheral Bays	USB Support: Rear: 2x3.0 + 2x2.0, Front 2x2.0 front, 1x Type A, optional 1x 5.25" DVD-ROM drive	USB Support: Rear: 2x3.0 + 2x2.0, Front 2x2.0 front, 1x Type A, optional 1x 5.25" DVD-ROM drive	USB Support: Rear: 2x3.0 + 2x2.0, Front 2x2.0 front, 1x Type A, optional 1x 5.25" DVD-ROM drive
Power Supply	Redundant 920W Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	Redundant 920W Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	Redundant 920W Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus
Cooling System	3x 8cm hot-swap redundant PWM cooling fans; 2x 2x 8cm hot-swap exhaust fans air shroud	3x 8cm hot-swap cooling fans and 2 x 8cm exhaust fans with air shroud with optimal fan speed control	3x 8cm hot-swap redundant PWM cooling fans; 2x 2x 8cm hot-swap exhaust fans air shroud
Form Factor	Tower/4U Rackmount 437 x 178 x 647mm (17.2" x 7" x 25.5")	Tower/4U Rackmount 452 x 178 x 648mm (17.8" x 7" x 25.5")	Tower/4U Rackmount 437 x 178 x 647mm (17.2" x 7" x 25.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# MAINSTREAM

4U Standalone/Rackmount  
SAS3, 24 DIMMs, Quad LAN



4U Standalone/Rackmount,  
16 DIMMs



4U Standalone/Rackmount,  
16 DIMMs



MODEL	SYS-7048R-C1RT4+	SYS-7048R-TR	SYS-7048R-TRT
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Big Data Analytics</li> <li>• Compute Intensive Storage Environments</li> <li>• DataCenter Applications</li> <li>• Simulation &amp; Automation</li> </ul>	<ul style="list-style-type: none"> <li>• Virtualization</li> <li>• Powerful multi tasking workstation (financial analysis, digital video editing, engineering design, scientific computing)</li> </ul>	<ul style="list-style-type: none"> <li>• Virtualization</li> <li>• Powerful multi tasking workstation (financial analysis, digital video editing, engineering design, scientific computing)</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 2 SATA DOM support with embedded power</li> <li>• 24 DIMM slots</li> <li>• 8x 2.5" SAS/8x 3.5" SATA hot-swap drive bays</li> <li>• Redundant 1000W <b>Titanium Level</b> power</li> <li>• Up to 6 add-on cards</li> </ul>	<ul style="list-style-type: none"> <li>• 16 DIMM slots</li> <li>• Redundant 920W <b>Platinum Level</b> high-efficiency power supplies</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• 8x 3.5" hot-swap SATA3 drive bays</li> <li>• 2 SATA DOM support with built-in power</li> </ul>	<ul style="list-style-type: none"> <li>• 16 DIMM slots</li> <li>• Redundant 920W <b>Platinum Level</b> high-efficiency power supplies</li> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• 8x 3.5" hot-swap SATA3 drive bays</li> <li>• 2 SATA DOM support with built-in power</li> </ul>
Serverboard	SUPER● X10DRC-T4+	SUPER● X10DRi	SUPER● X10DRi-T
Chipset	Intel® C612 Chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 24 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	FH/FL support for 2 PCI-E 3.0 x16; 3 PCI-E 3.0 x8; 1 PCI-E 2.0 x4 (in x8 slot) add on cards	3 PCI-E 3.0 x16 3 PCI-E 3.0 x8	3 PCI-E 3.0 x16 3 PCI-E 3.0 x8
Onboard Storage Controller	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10; SAS3 3108 HW with 2G Cache controller for 8 SAS3 (12Gbps) ports; RAID 0,1,5,6,10,50,60	Intel® C612 controller for 8 SATA3 (6Gbps) ports; RAID 0,1,5,10	Intel® C612 controller for 8 SATA3 (6Gbps) ports; RAID 0,1,5,10
Connectivity	<b>Quad</b> 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector	Dual LAN with Intel® i350 Gigabit Ethernet controller;	Dual 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector
VGA/Audio	AST2400 VGA	AST2400 VGA	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	8x 2.5" 12Gbps SAS3 hot-swap drives in mobile rack and 8x 3.5" 6Gbps SATA3 hot-swap drives (Total 16x hot-swap drive bays)	8x 3.5" hot-swap SATA3 drive bays	8x 3.5" hot-swap SATA3 drive bays
Peripheral Bays	USB Support: Rear: 2x3.0 + 2x2.0, Front 2x2.0 front, 1x Type A, optional 1x 5.25" DVD-ROM drive	90-degree rotatable module: 2 x 5.25" drive bays & 1x 3.5" drive bays; Optional DVD drive	90-degree rotatable module: 2 x 5.25" drive bays & 1x 3.5" drive bays; Optional DVD drive
Power Supply	Redundant 1000W <b>Titanium Level</b> high-efficiency power supplies with I <sup>2</sup> C & PMBus	Redundant 920W <b>Platinum Level</b> high-efficiency power supplies with I <sup>2</sup> C & PMBus	Redundant 920W <b>Platinum Level</b> high-efficiency power supplies with I <sup>2</sup> C & PMBus
Cooling System	3x 8cm hot-swap cooling fans and 2 x 8cm exhaust fans with air shroud with optimal fan speed control	3x 8cm hot-swap cooling fans and 2 x 8cm exhaust fans with air shroud with optimal fan speed control	3x 8cm hot-swap cooling fans and 2 x 8cm exhaust fans with air shroud with optimal fan speed control
Form Factor	Tower/4U Rackmount 452 x 178 x 648mm (17.8" x 7" x 25.5")	Tower/4U Rackmount 453 x 178 x 648mm (17.8" x 7" x 25.5")	Tower/4U Rackmount 453 x 178 x 648mm (17.8" x 7" x 25.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

DCO/UP/Mainstream

# X12 HYPER-E

(For Complete System Only)

**NEW!**

3rd Gen Intel® Xeon® Scalable processors Supported



Front I/O, DC Power  
Optimized for 5G and Telco



Front I/O, AC Power  
Optimized for 5G and Telco



DC/UP/Mainstream

MODEL	SYS-220HE-FTNRD	SYS-220HE-FTNR
Processor Support	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA-4189 (Socket P+) supported TDP up to 270W; 3 UPI up to 11.2GT/s	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA-4189 (Socket P+) supported TDP up to 270W; 3 UPI up to 11.2GT/s
Key Applications	<ul style="list-style-type: none"> <li>5G Core and Edge</li> <li>Telecom Micro Data Center</li> <li>AI Inference and Machine Learning</li> <li>Network Function Virtualization</li> <li>Cloud Computing</li> </ul>	<ul style="list-style-type: none"> <li>5G Core and Edge</li> <li>Telecom Micro Data Center</li> <li>AI Inference and Machine Learning</li> <li>Network Function Virtualization</li> <li>Cloud Computing</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>NEBS level 3 certified for telecommunication</li> <li>Front I/O, tool-less design</li> </ul>	<ul style="list-style-type: none"> <li>NEBS level 3 certified for telecommunication</li> <li>Front I/O, tool-less design</li> </ul>
Serverboard	SUPER● X12DHM-6	SUPER● X12DHM-6
Chipset	Intel® C621A	Intel® C621A
System Memory (Max.)	32 DIMM slots Up to 8TB ECC LRDIMM, DDR4-3200MHz Up to 8TB Intel® DCPMM, DDR4-3200MHz Up to 8TB ECC RDIMM, DDR4-3200MHz	32 DIMM slots Up to 8TB ECC LRDIMM, DDR4-3200MHz Up to 8TB Intel® DCPMM, DDR4-3200MHz Up to 8TB ECC RDIMM, DDR4-3200MHz
Expansion Slots	3 PCI-E 4.0 x16 DW FHFL or 6 x8 SW FHFL slot(s) PCI-E 4.0 x16 SW FHHL or 2 x8 SW FHHL slot(s)	3 PCI-E 4.0 x16 DW FHFL or 6 x8 SW FHFL slot(s) PCI-E 4.0 x16 SW FHHL or 2 x8 SW FHHL slot(s)
Onboard Storage Controller	Intel® SATA	Intel® SATA
Connectivity	1x 1Gb port(s) with Aspeed 2600 2x 25GbE SFP28 with Broadcom® BCM57414 (optional) 2x 100GbE QSFP28 with Broadcom® BCM57508 (optional) 2x 1GbE RJ45 with Intel® i350-AM2 (optional) 4x 1GbE C or 4x 1GbE SFP with Intel® i350-AM4 (optional) 2x 10GbE RJ45 with Intel® X550-AT2 (optional) 2x 10GbE SFP+ with Intel® X710-BM2 (optional) 4x 10GbE RJ45/SFP+ with Intel® X710-TM4 (optional) 4x 10GbE SFP+ with Intel® XL710-BM1 (optional) 4x 25GbE RJ45/SFP28 with Mellanox® CX-4 Lx EN Intel® X550-AT2 (optional)	1x 1Gb port(s) with Aspeed 2600 2x 25GbE SFP28 with Broadcom® BCM57414 (optional) 2x 100GbE QSFP28 with Broadcom® BCM57508 (optional) 2x 1GbE RJ45 with Intel® i350-AM2 (optional) 4x 1GbE C or 4x 1GbE SFP with Intel® i350-AM4 (optional) 2x 10GbE RJ45 with Intel® X550-AT2 (optional) 2x 10GbE SFP+ with Intel® X710-BM2 (optional) 4x 10GbE RJ45/SFP+ with Intel® X710-TM4 (optional) 4x 10GbE SFP+ with Intel® XL710-BM1 (optional) 4x 25GbE RJ45/SFP28 with Mellanox® CX-4 Lx EN Intel® X550-AT2 (optional)
VGA/Audio	1 VGA port	1 VGA port
Management	SuperDoctor® 5; Watch Dog; NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; IPMI 2.0; Redfish API	SuperDoctor® 5; Watch Dog; NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; IPMI 2.0; Redfish API
Drive Bays	6x 2.5" hot-swap NVMe/SATA/SAS drive bays; 6x 2.5" NVMe hybrid; Optional RAID support via RAID Controller AOC 2x M.2 slots M key for SSD via PCI-E & SATA interface, 2280/22110	6x 2.5" hot-swap NVMe/SATA/SAS drive bays; 6x 2.5" NVMe hybrid; Optional RAID support via RAID Controller AOC 2x M.2 slots M key for SSD via PCI-E & SATA interface, 2280/22110
Peripheral Bays	None	None
Power Supply	1300W Redundant -48v DC Power Supplies	2000W or 1200W AC redundant Titanium Level (typical 96%)
Cooling System	6x 6cm heavy duty fan(s)	6x 6cm heavy duty fan(s)
Form Factor	2U rackmount Enclosure: 436.88 x 88.9 x 574mm (17.2" x 3.5" x 22.6") Package: 598 x 247 x 938mm (23.5" x 9.7" x 36.9")	2U rackmount Enclosure: 436.88 x 88.9 x 574mm (17.2" x 3.5" x 22.6") Package: 598 x 247 x 938mm (23.5" x 9.7" x 36.9")

# X12 HYPER

(For Complete System Only)

Optimized for 5G and Telco



MODEL	SYS-220H-TN24R	SYS-620H-TN12R	SYS-120H-TNR
Processor Support	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA-4189 (Socket P+) supported TDP up to 270W; 3 UPI up to 11.2GT/s	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA-4189 (Socket P+) supported TDP up to 270W; 3 UPI up to 11.2GT/s	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA-4189 (Socket P+) supported TDP up to 270W; 3 UPI up to 11.2GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Software-Defined Storage</li> <li>• AI Inference and Machine Learning</li> <li>• Enterprise Server</li> <li>• Virtualization</li> <li>• Cloud Computing</li> </ul>	<ul style="list-style-type: none"> <li>• Virtualization</li> <li>• Software-defined Storage</li> <li>• AI Inference and Machine Learning</li> <li>• Cloud Computing</li> <li>• Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>• Virtualization</li> <li>• Software-defined Storage</li> <li>• AI Inference and Machine Learning</li> <li>• Cloud Computing</li> <li>• Enterprise Server</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• Tool-less system design for easy maintenance</li> <li>• Flexible networking options with AIOM/OCN NIC 3.0 support</li> <li>• 24x 2.5" hot-swap NVMe/SATA/SAS drive bays</li> </ul>	<ul style="list-style-type: none"> <li>• Flexible networking options with AIOM/OCN NIC 3.0 support</li> <li>• Tool-less system design for easy maintenance</li> <li>• 12x 3.5" hot-swap NVMe/SATA/SAS drive bays</li> </ul>	<ul style="list-style-type: none"> <li>• Storage configurations up to 12x 2.5" hot-swap NVMe/SATA/SAS drive bays</li> <li>• Flexible networking options with AIOM/OCN NIC 3.0 support</li> <li>• Tool-less system design for easy maintenance</li> </ul>
Serverboard	SUPER● X12DHM-6	SUPER● X12DHM-6	SUPER● X12DHM-6
Chipset	Intel® C621A	Intel® C621A	Intel® C621A
System Memory (Max.)	32 DIMM slots Up to 8TB ECC LRDIMM, DDR4-3200MHz Up to 8TB ECC RDIMM, DDR4-3200MHz Up to 8TB Intel® DCPMM, DDR4-3200MHz	32 DIMM slots Up to 8TB ECC LRDIMM, DDR4-3200MHz Up to 8TB Intel® DCPMM, DDR4-3200MHz Up to 8TB ECC RDIMM, DDR4-3200MHz	32 DIMM slots Up to 8TB ECC LRDIMM, DDR4-3200MHz Up to 8TB Intel® DCPMM, DDR4-3200MHz Up to 8TB ECC RDIMM, DDR4-3200MHz
Expansion Slots	Configurable PCI-E slot options up to 8 PCI-E 4.0 x8 or 4 PCI-E 4.0 x16 FH, 10.5"L	Configurable PCI-E slot options up to 8 PCI-E 4.0 x8 or 4 PCI-E 4.0 x16 FH, 10.5"L	3 PCI-E 4.0 x16 FH, 10.5"L
Onboard Storage Controller	Intel® SATA	Intel® SATA	Intel® SATA
Connectivity	2x 25GbE SFP28 with Broadcom® BCM57414 (optional) 2x 100GbE QSFP28 with Broadcom® BCM57508 (optional) 2x 1GbE RJ45 with Intel® i350-AM2 (optional) 4x 1GbE C or 4x 1GbE SFP with Intel® i350-AM4 (optional) 2x 10GbE RJ45 with Intel® X550-AT2 (optional) 2x 10GbE SFP+ with Intel® X710-BM2 (optional) 4x 10GbE RJ45/SFP+ with Intel® X710-TM4 (optional) 4x 10GbE SFP+ with Intel® XL710-BM1 (optional) 4x 25GbE RJ45/SFP28 with Mellanox® CX-4 Lx EN Intel® X550-AT2 (optional) via AIOM	2x 25GbE SFP28 with Broadcom® BCM57414 (optional) 2x 100GbE QSFP28 with Broadcom® BCM57508 (optional) 2x 1GbE RJ45 with Intel® i350-AM2 (optional) 4x 1GbE C or 4x 1GbE SFP with Intel® i350-AM4 (optional) 2x 10GbE RJ45 with Intel® X550-AT2 (optional) 2x 10GbE SFP+ with Intel® X710-BM2 (optional) 4x 10GbE RJ45/SFP+ with Intel® X710-TM4 (optional) 4x 10GbE SFP+ with Intel® XL710-BM1 (optional) 4x 25GbE RJ45/SFP28 with Mellanox® CX-4 Lx EN Intel® X550-AT2 (optional)	2x 25GbE SFP28 with Broadcom® BCM57414 (optional) 2x 100GbE QSFP28 with Broadcom® BCM57508 (optional) 2x 1GbE RJ45 with Intel® i350-AM2 (optional) 4x 1GbE C or 4x 1GbE SFP with Intel® i350-AM4 (optional) 2x 10GbE RJ45 with Intel® X550-AT2 (optional) 2x 10GbE SFP+ with Intel® X710-BM2 (optional) 4x 10GbE RJ45/SFP+ with Intel® X710-TM4 (optional) 4x 10GbE SFP+ with Intel® XL710-BM1 (optional) 4x 25GbE RJ45/SFP28 with Mellanox® CX-4 Lx EN Intel® X550-AT2 (optional)
VGA/Audio	1 VGA port		1 VGA port
Management	Intel® Node Manager; KVM with dedicated LAN; SuperDoctor® 5; Watch Dog; NMI; IPMI 2.0; SPM; SSM; SUM; Redfish API	SuperDoctor® 5; Watch Dog; NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; IPMI 2.0; Redfish API	SuperDoctor® 5; Watch Dog; NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; IPMI 2.0; Redfish API
Drive Bays	24x 2.5" hot-swap NVMe/SATA/SAS drive bays; Optional RAID support via RAID Controller AOC	12x 3.5" hot-swap NVMe/SATA/SAS drive bays; Optional RAID support via RAID Controller AOC	8x 2.5" hot-swap NVMe/SATA/SAS drive bays; Optional RAID support via RAID Controller AOC
Peripheral Bays	None	None	None
Power Supply	Redundant 1600W Titanium level (96%)		
Cooling System	4x 8cm heavy duty fan(s)	4x 8cm heavy duty fan(s)	8x 4cm heavy duty fan(s)
Form Factor	2U Rackmount Enclosure: 436.88 x 88.9 x 760mm (17.2" x 3.5" x 29.9") Package: 625 x 253 x 1154mm (24.6" x 9.96" x 45.43")	2U rackmount Enclosure: 436.88 x 88.9 x 803mm (17.2" x 3.5" x 31.6") Package: 605 x 256 x 947mm (23.81" x 10.07" x 37.28")	1U rackmount Enclosure: 437 x 43 x 746mm (17.2" x 1.7" x 29.36") Package: 605 x 205 x 1025mm (23.81" x 7.99" x 37.4")

DCO/UP/Mainstream

# X12 WORKSTATIONS

**NEW!**

3rd Gen Intel® Xeon® Scalable processors Supported



DP Workstation, 2-GPU Supported



DP Workstation, 2-GPU Supported



UP Workstation



DCO/UP/Mainstream

MODEL	SYS-740A-T	SYS-730A-I	SYS-540A-TR
Processor Support	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA-4189 (Socket P+) supported TDP up to 270W; 3 UPI	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA-4189 (Socket P+) supported TDP up to 270W; 3 UPI	3rd Gen Intel® Xeon® Scalable processors Single Socket LGA-4189 (Socket P+) supported TDP up to 270W; up to 11.2GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Rendering</li> <li>• CAD</li> <li>• Multimedia/Digital Content creation</li> <li>• Engineering/scientific research</li> </ul>	<ul style="list-style-type: none"> <li>• Rendering</li> <li>• CAD</li> <li>• Multimedia/Digital Content creation</li> <li>• Engineering/scientific research</li> </ul>	<ul style="list-style-type: none"> <li>• Deep Learning/AI/Machine Learning Development</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• Supports up to two double width active GPUs</li> <li>• Front accessible storage configurable up to 8x 2.5/3.5" hot-swap drive bays</li> <li>• Redundant Power Supplies</li> </ul>	<ul style="list-style-type: none"> <li>• Compact and quiet operation</li> <li>• Supports up to two double width active GPUs</li> <li>• New front bezel with keylock for added security</li> </ul>	<ul style="list-style-type: none"> <li>• Versatile: Full Tower or 4U Rack mount form factor</li> <li>• Powerful: Up to 4 double-width GPUs</li> <li>• Flexible: Supports either active &amp; passive GPUs</li> <li>• Robust: Features 7 PCI-E Gen 4 slots</li> </ul>
Serverboard	SUPER <sup>®</sup> X12DAI-N6	SUPER <sup>®</sup> X12DAI-N6	SUPER <sup>®</sup> X12SPA-TF
Chipset	Intel® C621A	Intel® C621A	Intel® C621A
System Memory (Max.)	16 DIMM slots Up to 4 TB ECC RDIMM, DDR4-3200MHz Up to 4 TB ECC LRDIMM, DDR4-3200MHz Up to 512GB Intel® DCPMM, DDR4-3200MHz	16 DIMM slots Up to 4 TB ECC RDIMM, DDR4-3200MHz Up to 4 TB ECC LRDIMM, DDR4-3200MHz Up to 512GB Intel® DCPMM, DDR4-3200MHz	16 DIMM slots Up to 4TB ECC LRDIMM, DDR4-3200MHz
Expansion Slots	5 PCI-E 4.0 x16 FHFL slot(s) PCI-E 4.0 x8 FHHL slot(s)	5 PCI-E 4.0 x16 FHFL slot(s) PCI-E 4.0 x8 FHHL slot(s)	7 PCI-E 3.0 x16 FHFL slot(s)
Onboard Storage Controller	Intel® SATA	Intel® SATA	Intel® C621A
Connectivity	2x 1GbE port(s)	2x 1GbE port(s)	1x 1GbE RJ45 port(s) with Intel® Ethernet Controller I210-AT 1x 10GbE RJ45 port(s) with Marvell AQC113C 1x 1GbE RJ45 port(s) with Realtek RTL8211F PHY (dedicated IPMI)
VGA/Audio	1 VGA port	1 VGA port	1 VGA port
Management	SuperDoctor® 5; Watch Dog; NMI; SUM; KVM with dedicated LAN; SPM; SSM; IPMI 2.0; Redfish API	SuperDoctor® 5; Watch Dog; NMI; SUM; KVM with dedicated LAN; SPM; SSM; IPMI 2.0; Redfish API	Watch Dog; SUM; SuperDoctor 5; IPMI 2.0; KVM with dedicated LAN; SPM
Drive Bays	8x 3.5" hot-swap SATA (SAS/NVMe optional) drive bays; Optional RAID support via RAID controller AOC	4x 3.5" NVMe/SATA drive bays	8x 3.5" hot-swap SATA drive bays
Peripheral Bays	3x 5.25" (optional)	2x 5.25" (optional)	3x 5.25"
Power Supply	Redundant 1200W Titanium level (96%)	1200W Platinum level (92%)	Redundant 2200W Titanium level (96%)
Cooling System	2x 8cm heavy duty fan(s)	2x 12cm heavy duty fan(s)	2x 8cm heavy duty fan(s)
Form Factor	4U Tower rackmount Enclosure: 178 x 452 x 647mm (7" x 17.8" x 25.5") Package: 356 x 625 x 795mm (14" x 24.6" x 31.3")	Mid-Tower rackmount Enclosure: 193 x 424 x 525.3mm (7.6" x 16.7" x 20.68") Package: 304 x 543 x 642mm (11.97" x 21.38" x 25.28")	Full-Tower rackmount Enclosure: 178 x 460 x 673mm (7" x 18.1" x 26.5") Package: 685.8 x 322.6 x 952.5mm (27" x 12.7" x 37.5")

# WORKSTATIONS

X11 SuperWorkstation  
Compact High-Performance



X11 SuperWorkstation  
High-Performance



X11 SuperWorkstation  
High-Performance



MODEL	SYS-7039A-I	SYS-7049A-T	SYS-5049A-TR
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).	Intel® Xeon® Scalable Processors, Intel® Xeon® W-3200 Processors. Single Socket LGA-3647 (Socket P) supported, CPU TDP support 205W TDP
Key Applications	<ul style="list-style-type: none"> <li>2D/3D and CAD Applications</li> <li>3D Rendering</li> <li>CAD/CAM/CAE</li> <li>Digital Content Creation</li> <li>Oil and Gas Simulation</li> <li>Research lab/National Lab</li> </ul>	<ul style="list-style-type: none"> <li>2D/3D and CAD Applications</li> <li>3D Rendering</li> <li>CAD/CAM/CAE</li> <li>Digital Content Creation</li> <li>Oil and Gas Simulation</li> <li>Research lab/National Lab</li> </ul>	<ul style="list-style-type: none"> <li>3D Simulation and Rendering</li> <li>Digital Content Creation</li> <li>Artificial Intelligence (AI)</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Whisper quiet and compact Multiple GPU support</li> <li>Whisper quiet and compact Multiple GPU support</li> <li>Versatile Storage with M.2, U.2 and SATA support</li> </ul>	<ul style="list-style-type: none"> <li>Tower or 4U Rackmount System Multiple GPU support</li> <li>Tower or 4U Rackmount System Multiple GPU support</li> <li>Versatile Storage with M.2, U.2 and SATA support</li> </ul>	<ul style="list-style-type: none"> <li>GPU optimized Single Socket 4U Workstation</li> <li>Supporting New Intel® Xeon® W-3200 Processors built for workstation</li> <li>High-Efficiency power supplies and flexible storage options</li> <li>11x Full-Height, Full-Length Expansion Slots Optimized for 4x Double Width GPU Solution</li> </ul>
Serverboard Chipset	SUPER● X11DAI-N Intel® C621 chipset	SUPER● X11DAI-N Intel C621	SUPER● X11SPA-T Intel® C621 chipset
System Memory (Max.)*	16 DIMM slots; Up to 4TB DDR4-2933 MHz† with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM†† (128/256/512GB)	16 DIMM slots; Up to 4TB DDR4-2933 MHz† with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM†† (128/256/512GB)	Intel® Xeon® Scalable Processors support up to 3TB 3DS ECC RDIMM, DDR4-2933MHz; up to 2TB 3DS ECC LRDIMM, DDR4-2933MHz; or 3TB DCPMM, DDR4-2666MHz, in 12 DIMM slots. Intel® Xeon® W-3200 Processors support up to 2TB 3DS ECC RDIMM/LRDIMM; up to 1TB 3DS RDIMM/LRDIMM. (Xeon® W-3200 doesn't support DCPMM.) 4 PCI-E 3.0 x16
Expansion Slots	4 PCI-E 3.0 x16; 2 PCI-E 3.0 x8	4 PCI-E 3.0 x16; 2 PCI-E 3.0 x8	3 PCI-E 3.0 x8 (in x16 slot) PCI-E x16 Slot#1 shares with M.2, Slot#2 shares with Slot#3 (NA/16,8/8), Slot#4 shares with Slot#5 (NA/16,8/8), Slot#6 shares with Slot#7 (NA/16,8/8) (16/NA/16/NA/16/NA/16 or 16/8/8/8/8/8)
Onboard Storage Controller	Intel® C621 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C621 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C621 controller for 8 SATA3 (6 Gbps) ports; RAID 0,1,5,10
Connectivity	Dual GbE LAN from C621	Dual GbE LAN from C621	Single LAN with Intel® Ethernet Controller I210-AT Single LAN with Aquantia® AQC107 10G Ethernet Controller
VGA/Audio	1 VGA D-Sub Connector	1 VGA D-Sub Connector	Single LAN with Realtek RTL8211E PHY (dedicated IPMI) Onboard VGA port supported by Aspeed AST2500 BMC and dedicated for IPMI
Management	Intel® Node Manager, IPMI2.0, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, SPM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	4x 3.5" fixed drive bay, optional 4x 2.5" fixed drive bay	8x 3.5" hot-swap SAS/SATA drive bays (SAS requires optional RAID card)	8x 3.5" hot-swap SAS/SATA drive bay with SGPIO
Peripheral Bays	2x 5.25 drive bays	3x 5.25 drive bays	90 degree rotatable drive cage 3x standard 5.25" drive bay 1x 3.5" internal fixed drive bay
Power Supply	1200W high-efficiency Platinum Level power supply	1200W high-efficiency Platinum Level power supply	2x 1U 2200W Titanium Redundant Power Supply W/ PMBus
Cooling System	1x 12cm rear exhaust fan; 1x 12cm (front) cooling fan	2 Super quiet PWM chassis fan & 1 Super quiet rear fan with Optimal Fan Speed Control	4x 92mm hot-swap fan(s) 2x 80mm rear hot-swap exhaust PWM fans
Form Factor	193 x 424 x 525mm (7.6" x 16.7" x 20.68")	178 x 452 x 648mm (7" x 17.8" x 25.5")	4U Tower 178 x 460 x 673mm (7" x 18.1" x 26.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

† 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

†† For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.

DCO/UP/Mainstream

# WORKSTATIONS

X11 SuperWorkstation  
High-Performance

X11 SuperServer®  
Cost Effective Workstation  
Great for 2D/3D CAD applications

X11 SuperWorkstation  
High Performance UP Workstation  
Ideal for 3D rendering applications



DCO/UP/Mainstream

MODEL	SYS-5049A-T	SYS-5039A-IL	SYS-5039A-I
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Single Socket P (LGA 3647) supported, CPU TDP support Up to 205W TDP. <i>Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).</i>	Intel® 7th/6th Gen Core i7/i5/i3 series, Intel® Celeron®, Intel® Pentium® processor Intel® Xeon® processor E3-1200 v6/v5 series Socket H4 (LGA 1151), supports up to 95W TDP	Intel® Xeon® W-21XX series,  Single Socket R4 (LGA 2066), supports up to 140W
Key Applications	<ul style="list-style-type: none"> <li>2D/3D and CAD Applications</li> <li>3D Animations</li> <li>CAD/CAM/CAE</li> <li>Digital Content Creation</li> <li>3D Rendering</li> </ul>	<ul style="list-style-type: none"> <li>2D/3D and CAD Applications</li> <li>Digital Content Creation</li> <li>CAD/CAM/CAE</li> </ul>	<ul style="list-style-type: none"> <li>2D/3D and CAD Applications</li> <li>3D Simulation and Rendering</li> <li>Digital Content Creation</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Tower or 4U Rackmount System</li> <li>Versatile Storage with M.2, U.2 and SATA support</li> <li>Multiple GPU support</li> </ul>	<ul style="list-style-type: none"> <li>Cost effective UP platform</li> <li>Rich I/O ports</li> <li>2 PCI 32bit 5V slots for legacy AOC support</li> </ul>	<ul style="list-style-type: none"> <li>Supports up to 18 cores, 36 threads and 512GB of memory</li> <li>Fast and versatile I/O and storage options</li> <li>Multi-GPU support</li> </ul>
Serverboard Chipset	SUPER● X11SPA-TF Intel® C621 chipset	SUPER● X11SAE	SUPER● X11SRA Intel® C422 chipset
System Memory (Max.)*	Up to Up to 3TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 3TB 3DS ECC LRDIMM, DDR4-2933MHz Or 3TB DCPMM, DDR4-2666MHz, in 12 DIMM slots	64GB Unbuffered ECC/non-ECC, DDR4-2400MHz in 4 DIMM slots	Up to 256GB Registered ECC RDIMM, DDR4-2666MHz; Up to 512GB Registered ECC LRDIMM, in 8 DIMM slots
Expansion Slots	4 PCI-E 3.0 x16, 3 PCI-E 3.0 x8 (in x16 slot), PCI-Ex16 Slot#1 shares with M.2, Slot#2 shares with Slot#3(NA/16,8/8), Slot#4 shares with Slot#5(NA/16,8/8), Slot#6 shares with Slot#7(NA/16,8/8)	2 PCI-E 3.0 x16 (x16/NA or x8/x8) 2 PCI-E 3.0 x1 (in x4) 2 PCI 32bit 5V slot	3 PCI-E 3.0 x16 (x8/x16/x16) 1 PCI-E 3.0 x4
Onboard Storage Controller	Intel® C621 controller for 8 SATA3 (6 Gbps) ports; RAID 0,1,5,10;		Intel® C422 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,10*IRST enabled, only SATA2 to SATA5 support RAID;
Connectivity	N/A	Single LAN with Intel® Ethernet Controller i210-AT Single LAN with Intel® PHY I219LM LAN controller	Single LAN with Intel® PHY I219LM LAN controller Single LAN with Aquantia 5G LAN chip AQC108
VGA/Audio	Aspeed AST2500 BMC	DVI - D port, 1 DP (DisplayPort), 1 HDMI port	
Management	IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, SPM, SUM, SuperDoctor® 5, Watchdog		AMT, SuperDoctor® 5, Watchdog
Drive Bays	8x 3.5" hot-swap SAS/SATA drive bay with SGPIO	4 Fixed 3.5" drive bays; Optional 4 internal 2.5" drive bays 2 external 5.25" drive bays	4 Fixed 3.5" drive bays; Optional 4 internal 2.5" drive bays 2 external 5.25" drive bays
Peripheral Bays	2x standard 5.25" drive bay 90 degree rotatable drive cage	1 3.5" external device bay	1 3.5" external device bay
Power Supply	PWS-1K25P-PQ		900W High-efficiency (80PLUS Gold) PS/2 Power Supply
Cooling System	2x 80mm PWM Chassis Middle Fans; 1x 92mm PWM Rear Fan;	1 12cm rear exhaust fan Optional 12cm front cooling fan	1 12cm rear exhaust fan Optional 12cm front cooling fan
Form Factor	4U 7" (178mm) x 17.8" (452mm) x 25.5" (647mm)		Mid-Tower 16.7" (424mm) x 7.6" (193mm) x 20.68" (525mm) Gross Weight: 35.5lbs Net Weight: 29.5lbs

\* Please check with your Supermicro sales representative and website for compatibility and configuration details





# WORKSTATIONS



X11 SuperWorkstation  
High-End Desktop  
Designed For Power Users



SuperWorkstation  
Thunderbolt Support,  
Supports 2 GPUs



SuperWorkstation  
Thunderbolt Support  
Supports 2 GPUs



MODEL	SYS-5039AD-I	SYS-7038A-I	SYS-7048A-T
Processor Support	Intel® Core™ X-series Processors. Socket R4 (LGA 2066), supports up to 165W TDP	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s (up to 160W)	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s (up to 160W)
Key Applications	<ul style="list-style-type: none"> <li>Professional VR and Gaming</li> <li>Digital Content Creation</li> <li>2D/3D and CAD Applications</li> </ul>	<ul style="list-style-type: none"> <li>2D/3D and CAD Applications</li> <li>3D Rendering</li> <li>CAD/CAM/CAE</li> <li>Digital Content Creation</li> <li>Digital Imaging</li> </ul>	<ul style="list-style-type: none"> <li>2D/3D and CAD Applications</li> <li>3D Rendering</li> <li>CAD/CAM/CAE</li> <li>Digital Content Creation</li> <li>Digital Imaging</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>CPU and Memory Overclocking Support</li> <li>Multi-GPU support</li> <li>IPMI 2.0 Management</li> </ul>	<ul style="list-style-type: none"> <li>Thunderbolt 2.0 AOC Support</li> <li>Support 2 double width GPUs + 1 single width graphic card</li> <li>6x USB 3.0 ports</li> <li>Up to 160W CPU support</li> </ul>	<ul style="list-style-type: none"> <li>Tower or 4U Rackmount System</li> <li>Thunderbolt 2.0 AOC Support</li> <li>Support 2 double-width + 1 single-width GPUs</li> <li>8x 3.5" hot-swap drive bays</li> <li>Up to 160W CPU support</li> </ul>
Serverboard	SUPER● C9X299-PGF	SUPER● X10DAi	SUPER● X10DAi
Chipset	Intel® X299 chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	Up to 128GB Unbuffered non-ECC UDIMM, DDR4-2666MHz, in 8 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	4 PCI-E 3.0 x16* and 1 PCIe3.0x1 slots *(8/NA/16/16 or 8/8/8/16); or (NA/4/8/16 with Skylake-X 28 Lanes); or (NA/4/4/8 with KabyLake-X CPUs).	3 PCI-E 3.0 x16 (2 double-width, 1 single-width), 2 PCI-E 3.0 x8 (1 in x16 slot), 1 PCI-E 3.0 x4 (1 in x16 slot), Support Thunderbolt 2.0 AOC	3 PCI-E 3.0 x16 (2 double-width, 1 single-width), 2 PCI-E 3.0 x8 (1 in x16 slot), 1 PCI-E 3.0 x4 (1 in x16 slot), Support Thunderbolt 2.0 AOC
Onboard Storage Controller	6 SATA3 (6 Gbps) ports; RAID 0,1,5,10	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10
Connectivity	Single LAN with Intel® Ethernet Controller I210-AT Single LAN with Aquantia 5G LAN chip AQC108	Dual LAN with Intel® i210 Gigabit Ethernet Controller	Dual LAN with Intel® i210 Gigabit Ethernet Controller
VGA/Audio	1 VGA	7.1 HD Audio	7.1 HD Audio
Management	IPMI 2.0	NMI, SuperDoctor® 5, Watchdog	NMI, SuperDoctor® 5, Watchdog
Drive Bays	6 3.5" fixed drive bays and 4 2.5" fixed drive bays	4x 3.5" internal fixed drive bays; optional 4x 2.5" internal fixed drive bays	8x 3.5" hot-swap SAS/SATA drive bay
Peripheral Bays	2 external 5.25" drive bays	2x standard 5.25" drive bays; 1x 3.5" device bay	3x standard 5.25" drive bays
Power Supply	750W High-efficiency (80PLUS Gold) PS/2 Power Supply	900W Gold Level Multi-Output Power Supply	1200W <b>Platinum Level</b> Multi-Output Power Supply
Cooling System	2 12cm front PWM intake fan; 1 12cm rear PWM exhaust fan	2x 12cm (1859 RPM)	2x 2800 RPM fan; 1x 2700 RPM fan
Form Factor	Mid-Tower 7.9" (200mm) x 18.1" (460mm) x 19.4" (493mm)	Mid-Tower 424 x 193 x 525mm (16.7" x 7.6" x 20.68")	Tower/4U Rackmount 452 x 178 x 647mm (17.8" x 7" x 25.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

DCO/UP/Mainstream

# X12 SUPERBLADE®

**NEW!**

3rd Gen Intel® Xeon® Scalable processors Supported



8U SuperBlade®



6U SuperBlade®



4U SuperBlade®



Enclosure	SBE-820H/C/J/L-822/622/422	SBE-610J-822/622/422	SBE-414J-422/222
Processor Blade	Up to 20 hot-pluggable half-height 1-socket or 2-socket blade servers Up to 10 hot-pluggable full-height 4-socket blade servers Mixing of blade servers in a single enclosure allowed	Up to 10 hot-pluggable 1-socket or 2-socket blade servers	Up to 14 hot-pluggable 2-socket blade servers
LED	Power LED, Fault LED	Power LED, Fault LED	Power LED, Fault LED
InfiniBand Switch	SBE-820H only • Single 200G HDR InfiniBand switch with add-on card SBE-820C/CB only • Single 100G EDR InfiniBand or Intel Omni-Path switch with add-on card	N/A	N/A
Ethernet Switch	SBE-820J/JB only • Up to 4 switches, 2 hot-pluggable 25G Ethernet switches and 2 hot-pluggable 25G Ethernet switches with add-on card SBE-820H/C/CB only • Up to 2 hot-pluggable 25G Ethernet switches SBE-820L only • Up to 2 hot-pluggable 10G Ethernet switches	• Up to 4 hot-pluggable 25G/10G/1G Ethernet switches	• Up to 2 hot-pluggable 25G/10G/1G Ethernet switches
Chassis Management Module (CMM)	Up to 2 CMM for remote system management with software	Up to 2 CMM for remote system management with software	Single CMM for remote system management with software
Available Models	SBE-820H/C/J/L-822 • 8x 2200W Titanium power supplies SBE-820H/C/J/L-622 • 6x 2200W Titanium power supplies SBE-820H/C/J/L-422 • 4x 2200W Titanium power supplies SBE-820H/C/J/L-622S • 6x 2200W Platinum long-life power supplies + 2 long-life cooling fans SBE-820H/C/J/L-820D • 8x 2000W DC power supplies SBE-820H/C/J/L-820D • 4x 2000W DC power supplies + 4 cooling fans SBE-820CB/JB-422 • 4x 2200W Titanium power supplies + 4x 1200W BBP modules	SBE-610J-822 • 8x 2200W Titanium power supplies SBE-610J-622 • 6x 2200W Titanium power supplies SBE-610J-422 • 4x 2200W Titanium power supplies SBE-610J-622S • 6x 2200W Platinum long-life power supplies + 2 long-life cooling fans SBE-610JB-422 • 4x 2200W Titanium power supplies + 4x 1200W BBP modules	SBE-414J-422 • 4x 2200W Titanium power supplies SBE-414J-222 • 2x 2200W Titanium power supplies
Rack Unit	8U	6U	4U
Dimensions (H x W x D)	356 x 447 x 813mm (14" x 17.6" x 32")	267 x 447 x 813mm (10.5" x 17.6" x 32")	178 x 447 x 813mm (7" x 17.6" x 32")

Blade

# X12 SUPERBLADE®

(For Complete System Only)



8U/20-Blade w/ 3 SATA or 2 NVMe



8U/20-Blade w/ 2 SATA/NVMe



8U/20-Blade w/ 2 SAS/NVMe



4U/14-Blade w/ 2 SATA/NVMe



MODEL	SBI-420P-1T3N	Liquid Cooling (OEM SKU*)	SBI-420P-1C2N	SBI-420P-4T2N
Processor Support	3rd Gen Intel® Xeon® Scalable processors; Dual Socket supported TDP up to 220W; 3 UPI	3rd Gen Intel® Xeon® Scalable processors; Dual Socket supported TDP up to 270W; 3 UPI	3rd Gen Intel® Xeon® Scalable processors; Dual Socket supported TDP up to 220W; 3 UPI	3rd Gen Intel® Xeon® Scalable processors; Dual Socket supported TDP up to 165W; 3 UPI
Key Applications	• HPC, Hybrid Cloud, EDA, Virtualization, Health, Financial Services	• HPC, Hybrid Cloud, EDA, Virtualization, Health, Financial Services	• HPC, Hybrid Cloud, EDA, Virtualization, Health, Financial Services	• HPC, Hybrid Cloud, EDA, Virtualization, Health, Financial Services
Outstanding Features	• Air cooling • Advanced networking (InfiniBand, OmniPath)	• Direct liquid cooling • Advanced networking (InfiniBand, OmniPath)	• High performance, high density • Advanced networking (InfiniBand, OmniPath) • SAS with hardware RAID 1	• Value and density optimized • High performance
Serverboard	SUPER® B12DPT-6	SUPER® B12DPT-6	SUPER® B12DPT-6	SUPER® B12DPT-6
Chipset	Intel® C621A	Intel® C621A	Intel® C621A	Intel® C621A
System Memory (Max.)	16 DIMM slots Up to 4 TB ECC RDIMM, DDR4-3200MHz Up to 4 TB ECC LRDIMM, DDR4-3200MHz Up to 2 TB Intel® DCPMM, DDR4-3200MHz	16 DIMM slots Up to 4 TB ECC RDIMM, DDR4-3200MHz Up to 4 TB ECC LRDIMM, DDR4-3200MHz Up to 2 TB Intel® DCPMM, DDR4-3200MHz	16 DIMM slots Up to 4 TB ECC RDIMM, DDR4-3200MHz Up to 4 TB ECC LRDIMM, DDR4-3200MHz Up to 2 TB Intel® DCPMM, DDR4-3200MHz	16 DIMM slots Up to 512GB VLP RDIMM, DDR4-3200MHz
Expansion Slots	1 PCI-E 4.0 x16 slot for mezzanine option	1 PCI-E 4.0 x16 slot for mezzanine option	1 PCI-E 4.0 x16 slot for mezzanine option	N/A
Onboard Storage Controller	Intel® PCH 3.0 SATA Controller	Intel® PCH 3.0 SATA Controller	Broadcom® 3108 SAS Controller	Intel PCH 3.0 SATA Controller
Connectivity	Dual-port 25GbE LOM Mezzanine option for 2x25GbE, 200G/100G InfiniBand	Dual-port 25GbE LOM Mezzanine option for 2x25GbE, 200G/100G InfiniBand	Dual-port 25GbE LOM Mezzanine option for 2x25GbE, 200G/100G InfiniBand	Dual-port 25GbE LOM
VGA/Audio	One VGA connector and one COM port on KVM dongle	One VGA connector and one COM port on KVM dongle	One VGA connector and one COM port on KVM dongle	KVM over IP, Virtual Media over LAN
Management	Redundant Chassis Management Modules, Blade Network Manager, Open Industry Standard IPMI, Redfish APIs	Redundant Chassis Management Modules, Blade Network Manager, Open Industry Standard IPMI, Redfish APIs	Redundant Chassis Management Modules, Blade Network Manager, Open Industry Standard IPMI, Redfish APIs	Redundant Chassis Management Modules, Blade Network Manager, Open Industry Standard IPMI, Redfish APIs
Drive Bays	1x M.2 NVMe 2x U.2 NVMe/SATA and 1x SATA Optional mezzanine 4x M.2 NVMe	1x M.2 NVMe 2x U.2 NVMe/SATA Optional mezzanine 4x M.2 NVMe	1x M.2 NVMe 2x U.2 NVMe/SAS/SATA Optional mezzanine 4x M.2 NVMe	1x M.2 NVMe 2x U.2 NVMe/SATA
Peripheral Bays	N/A	N/A	N/A	N/A
Power Supply	Up to 8x 2200W Titanium Level power supplies	Up to 8x 2200W Titanium Level power supplies	Up to 8x 2200W Titanium Level power supplies	Up to 4x 2200W Titanium Level power supplies
Cooling System	Up to 8x fans 3x System fan modules (optional)	Up to 8x fans 3x System fan modules	Up to 8x fans 3x System fan modules (optional)	4x PSU fans 3x System fan modules
Form Factor	8U Enclosure Up to 20x half-height blades	8U Enclosure Up to 20x half-height blades	8U Enclosure Up to 20x half-height blades	4U Enclosure Up to 14x blades

Blade

\* Contact Supermicro for more information

# X12 SUPERBLADE®

(For Complete System Only)

**NEW!**

3rd Gen Intel® Xeon® Scalable processors Supported



6U/10-Blade w/ 2 SAS/NVMe



6U/10-Blade w/ 2 SATA/NVMe



6U/10-Blade w/ 3 SAS or 2 NVMe



6U/10-Blade w/ 3 SATA/NVMe



MODEL	SBI-610P-1C2N	SBI-610P-1T2N	SBI-620P-1C3N	SBI-620P-1T3N
Processor Support	3rd Gen Intel® Xeon® Scalable processor; Single Socket supported; TDP up to 270W	3rd Gen Intel® Xeon® Scalable processor; Single Socket supported; TDP up to 270W	3rd Gen Intel® Xeon® Scalable processors; Dual Socket supported; TDP up to 270W; 3UPI	3rd Gen Intel® Xeon® Scalable processors; Dual Socket supported; TDP up to 270W; 3UPI
Key Applications	• HPC, Hybrid Cloud, EDA, Virtualization, Health, Financial Services	• HPC, Hybrid Cloud, EDA, Virtualization, Health, Financial Services	• HPC, Hybrid Cloud, EDA, Virtualization, Health, Financial Services	• HPC, Hybrid Cloud, EDA, Virtualization, Health, Financial Services
Outstanding Features	<ul style="list-style-type: none"> <li>• High performance 1S with max memory footprint</li> <li>• 2 PCI-E 4.0 x16 slots for GPUs, or industry-standard PCI-E cards</li> <li>• SAS with hardware RAID 1</li> </ul>	<ul style="list-style-type: none"> <li>• High performance 1S with max memory footprint</li> <li>• 2 PCI-E 4.0 x16 slots for GPUs, or industry-standard PCI-E cards</li> <li>• Support up to 4x 25GbE networks</li> </ul>	<ul style="list-style-type: none"> <li>• High performance 2S with max memory footprint</li> <li>• Support up to 4x 25GbE networks</li> <li>• SAS with hardware RAID 0/1/5</li> </ul>	<ul style="list-style-type: none"> <li>• High performance 2S with max memory footprint</li> <li>• Support up to 4x 25GbE networks</li> </ul>
Serverboard	SUPER® B12SPE	SUPER® B12SPE	SUPER® B12DPE	SUPER® B12DPE
Chipset	Intel C621A	Intel C621A	Intel C621A	Intel C621A
System Memory (Max.)	16 DIMM slots; Up to 4TB Intel® DCPMM, DDR4-3200MHz; Up to 4TB ECC LRDIMM, DDR4-3200MHz; Up to 4TB ECC RDIMM, DDR4-3200MHz	16 DIMM slots; Up to 4TB Intel® DCPMM, DDR4-3200MHz; Up to 4TB ECC LRDIMM, DDR4-3200MHz; Up to 4TB ECC RDIMM, DDR4-3200MHz	32 DIMM slots; Up to 8TB Intel® DCPMM, DDR4-3200MHz; Up to 8TB ECC LRDIMM, DDR4-3200MHz; Up to 8TB ECC RDIMM, DDR4-3200MHz	32 DIMM slots; Up to 8TB Intel® DCPMM, DDR4-3200MHz; Up to 8TB ECC LRDIMM, DDR4-3200MHz; Up to 8TB ECC RDIMM, DDR4-3200MHz
Expansion Slots	2 PCI-E 4.0 x16 slots 1 PCI-E 4.0 x16 slot for high-speed networking mezzanine connector	2 PCI-E 4.0 x16 slots 1 PCI-E 4.0 x16 slot for high-speed networking mezzanine connector	1 PCI-E 4.0 x16 slot for high-speed networking mezzanine connector	1 PCI-E 4.0 x16 slot for high-speed networking mezzanine connector
Onboard Storage Controller	Broadcom 3108 SAS Controller	Intel PCH 3.0 SATA Controller	Broadcom 3108 SAS Controller	Intel PCH 3.0 SATA Controller
Connectivity	Dual-port 25GbE LOM Mezzanine option for 2x25GbE	Dual-port 25GbE LOM Mezzanine option for 2x25GbE	Dual-port 25GbE LOM Mezzanine option for 2x25GbE	Dual-port 25GbE LOM Mezzanine option for 2x25GbE
VGA/Audio	KVM over IP, Virtual Media over LAN	KVM over IP, Virtual Media over LAN	KVM over IP, Virtual Media over LAN	KVM over IP, Virtual Media over LAN
Management	Redundant Chassis Management Modules, Blade Network Manager, Open Industry Standard IPMI, Redfish APIs	Redundant Chassis Management Modules, Blade Network Manager, Open Industry Standard IPMI, Redfish APIs	Redundant Chassis Management Modules, Blade Network Manager, Open Industry Standard IPMI, Redfish APIs	Redundant Chassis Management Modules, Blade Network Manager, Open Industry Standard IPMI, Redfish APIs
Drive Bays	2x U.2 NVMe/SAS/SATA 1x M.2 NVMe/SATA	2x U.2 NVMe/SATA 1x M.2 NVMe/SATA 2x M.2 NVMe	2x U.2 NVMe/SAS/SATA 1x U.2 SAS/SATA	3x U.2 NVMe/SATA
Peripheral Bays	N/A	N/A	N/A	N/A
Power Supply	Up to 8x 2200W Titanium Level power supplies	Up to 8x 2200W Titanium Level power supplies	Up to 8x 2200W Titanium Level power supplies	Up to 8x 2200W Titanium Level power supplies
Cooling System	Up to 8x fans	Up to 8x fans	Up to 8x fans	Up to 8x fans
Form Factor	6U Enclosure Up to 10x blades	6U Enclosure Up to 10x blades	6U Enclosure Up to 10x blades	6U Enclosure Up to 10x blades

Blade

# X12 GPU

(For Complete System Only)

4U HGXA1008-GPU



4U 10-GPU



4U 4-GPU



MODEL	SYS-420GP-TNAR SYS-420GP-TNAR+	SYS-420GP-TNR	SYS-740GP-TNRT
Processor Support	3rd Gen Intel® Xeon® Scalable processors Dual Socket LG-4189 (Socket P+) supported TDP up to 270W; 3 UPI up to 11.2GT/s	3rd Gen Intel® Xeon® Scalable processors Dual Socket LG-4189 (Socket P+) supported TDP up to 270W; 3 UPI up to 11.2GT/s	3rd Gen Intel® Xeon® Scalable processors Dual Socket LG-4189 (Socket P+) supported TDP up to 270W; 3 UPI up to 11.2GT/s
Key Applications	<ul style="list-style-type: none"> <li>High Performance Computing</li> <li>AI/Deep Learning Training</li> </ul>	<ul style="list-style-type: none"> <li>High Performance Computing</li> <li>Rendering</li> <li>VDI</li> <li>AI/Deep Learning Training</li> </ul>	<ul style="list-style-type: none"> <li>Scientific Virtualization</li> <li>High Performance Computing</li> <li>Rendering</li> <li>AI/Deep Learning Training</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>High density 4U system with NVIDIA® HGX™ A100 8-GPU</li> <li>Highest GPU communication using NVIDIA® NVLINK™ + NVIDIA® NVSwitch™</li> <li>8 NIC for GPU direct RDMA (1:1 GPU Ratio)</li> <li>4 NVMe for GPU direct storage</li> <li>2 M.2 NVMe and SATA</li> <li>AIOM / OCP 3.0 Support</li> </ul>	<ul style="list-style-type: none"> <li>AIOM / OCP 3.0 Support</li> <li>Up to 10 double width, full length GPUs</li> <li>Flexible GPU support: active &amp; passive GPUs</li> <li>Thermal performance with separate GPU &amp; CPU Zones</li> <li>2 M.2 NVMe</li> <li>2x USB 3.0</li> </ul>	<ul style="list-style-type: none"> <li>2 M.2 NVMe and SATA</li> <li>Flexible GPU support: active &amp; passive GPUs</li> <li>Up to 4 double width GPUs</li> <li>Flexible I/O support: 7 PCI-E slots</li> </ul>
Serverboard	SUPER® X12DGO-6	SUPER® X12DPG-OA6	SUPER® X12DPG-QT
Chipset	Intel® C621A	Intel® C621A	Intel® C621A
System Memory (Max.)	16 DIMM slots Up to 8TB ECC LRDIMM, DDR4-3200MHz	32 DIMM slots Up to 8TB ECC LRDIMM, DDR4-3200MHz	16 DIMM slots Up to 4TB ECC LRDIMM, DDR4-3200MHz
Expansion Slots	10 PCI-E 4.0 X16 LP Slots	12 PCI-E 4.0 X16 FHFL Slots	6 PCI-E 4.0 X16 FHFL Slots, PCI-E 4.0 X 8 LP Slots
Onboard Storage Controller	Intel® SATA	Intel® SATA	Intel® SATA
Connectivity	2x 10GbE RJ45 with Intel® X550-AT2 (optional)	2x 1GbE RJ45 port(s) with Intel® Ethernet Controller I350	2x 10GbE RJ45 port(s)
VGA/Audio	1 VGA port	1 VGA port	1 VGA port
Management	SuperDoctor® 5; Watch Dog; NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; IPMI 2.0; Redfish API	SuperDoctor® 5; Watch Dog; NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; IPMI 2.0; Redfish API	SuperDoctor® 5; Watch Dog; NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; IPMI 2.0; Redfish API
Drive Bays	6x 2.5" hot-swap NVMe/SATA/SAS drive bays;	16x 2.5" hot-swap SATA/SAS, 8x 2.5" Hot-swap NVMe drive bays;	8x 3.5" hot-swap NVMe/SATA/SAS Support drive bays; 8x 2.5" NVMe hybrid;
Peripheral Bays	None	None	None
Power Supply	-TNAR: Redundant 2200W Titanium level (96%) -TNAR+: Redundant 3000W Titanium level (96%)	Redundant 2000W Titanium level (80%)	2200W Titanium level (96%)
Cooling System	4 heavy duty fan(s)	8 heavy duty fan(s)	4 heavy duty fan(s)
Form Factor	4U rackmount Enclosure: 446 x 174 x 900mm (17.6" x 6.9" x 35.4") Package: 695 x 750 x 1140mm (27.4" x 29.5" x 44.9")	4U rackmount Enclosure: 437 x 178 x 737mm (17.2" x 7" x 29") Package: 362 x 675 x 1042mm (27" x 26.57" x 41")	Full-Tower rackmount Enclosure: 178 x 460 x 673mm (7" x 18.1" x 26.5") Package: 685.8 x 322.6 x 952.5mm (27" x 12.7" x 37.5")

GPU

# X12 GPU

(For Complete System Only)



2U 6-GPU



1U 4-GPU



MODEL	SYS-220GP-TNR	SYS-120GQ-TNRT
Processor Support	3rd Gen Intel® Xeon® Scalable processors Dual Socket LG-4189 (Socket P+) supported TDP up to 270W; 3 UPI up to 11.2GT/s	3rd Gen Intel® Xeon® Scalable processors Dual Socket LG-4189 (Socket P+) supported TDP up to 220W; 3 UPI up to 11.2GT/s
Key Applications	<ul style="list-style-type: none"> <li>Scientific Virtualization</li> <li>High Performance Computing</li> <li>VDI</li> <li>AI/Deep Learning Training</li> </ul>	<ul style="list-style-type: none"> <li>Scientific Virtualization</li> <li>High Performance Computing</li> <li>Rendering</li> <li>AI/Deep Learning Training</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>AIOM / OCP 3.0 Support</li> <li>2x Front USB 3.0</li> <li>Up to 6 double width GPUs</li> <li>Flexible I/O support: 8 PCI-E Slots &amp; AIOM Support</li> <li>2xM.2 with internal adaptor</li> </ul>	<ul style="list-style-type: none"> <li>Flexible GPU support: active &amp; passive GPUs</li> <li>Up to 4 double width GPUs</li> <li>Highest density GPU system</li> <li>2x Front USB 3.0</li> </ul>
Serverboard	SUPERMICRO® X12DPG-AR	SUPERMICRO® X12DGQ-R
Chipset	Intel® C621A	Intel® C621A
System Memory (Max.)	16 DIMM slots Up to 4TB ECC LRDIMM, DDR4-3200MHz Up to 4TB ECC RDIMM, DDR4-3200MHz	16 DIMM slots Up to 4TB ECC LRDIMM, DDR4-3200MHz Up to 4TB ECC RDIMM, DDR4-3200MHz
Expansion Slots	6 PCI-E 4.0 x16 FHFL Slots 2 PCI-E 4.0 x8 Slots or PCI-E 4.0 x16 slot PCI-E 4.0	4 PCI-E 4.0 X16 FHFL Slots, 2 PCI-E 4.0 X16 LP Slots
Onboard Storage Controller	Intel® SATA	Intel® SATA
Connectivity	via AIOM	2x 10GbE RJ45 port(s)
VGA/Audio	1 VGA port	1 VGA port
Management	SuperDoctor® 5; Watch Dog; NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; IPMI 2.0; Redfish API	SuperDoctor® 5; Watch Dog; NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; IPMI 2.0; Redfish API
Drive Bays	10x 2.5" hot-swap NVMe/SATA/SAS drive bays; 2x 2.5" NVMe dedicated;	2x 2.5" hot-swap NVMe/SATA, 2x fixed SATA drive bays; 2x 2.5" NVMe dedicated;
Peripheral Bays	None	None
Power Supply	Redundant 2600W Titanium level (96%)	Redundant 2000W Titanium level (96%)
Cooling System	5 heavy duty fan(s)	9 heavy duty fan(s)
Form Factor	2U rackmount Enclosure: 437 x 89 x 787mm (17.2" x 3.5" x 31") Package: 279.4 x 673.1 x 1130.3mm (26.5" x 11" x 44.5")	1U rackmount Enclosure: 437 x 43 x 894mm (17.2" x 1.7" x 35.2") Package: 203.2 x 609.6 x 1168.4mm (24" x 8" x 46")

GPU

# GPU

X11 UP GPU  
2 GPUs in 1U

X11 UP GPU  
2 GPUs in 1U

X11 GPU  
3 GPUs in 1U



MODEL	SYS-1019GP-TT	SYS-5019GP-TT	SYS-1029GP-TR
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Single Socket P (LGA 3647) supported, CPU TDP support 205W. <i>Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).</i>	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Single Socket P (LGA 3647) supported, CPU TDP support 205W. <i>Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).</i>	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket LGA-3647 (Socket P) supported, CPU TDP support Up to 205W TDP, 3 UPI up to 10.4 GT/s. <i>Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).</i>
Key Applications	<ul style="list-style-type: none"> <li>HPC cluster computer nodes</li> </ul>	<ul style="list-style-type: none"> <li>HPC cluster computer nodes</li> </ul>	<ul style="list-style-type: none"> <li>2D/3D and CAD Applications</li> <li>3D Rendering</li> <li>Astrophysics</li> <li>Chemistry</li> <li>Cloud and Virtualization needs</li> <li>Cloud Computing</li> <li>3x Double Width GPU cards in 1U</li> <li>4x Single Width GPU cards</li> <li>GPU health monitoring with fan speed control</li> <li>16 DIMM slots</li> <li>4x 2.5" hot-swap drive bays</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>3x 3.5" SAS/SATA drive bays</li> <li>512GB DDR3 SDRAM</li> <li>1400W Platinum Level high-efficiency power supply</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> </ul>	<ul style="list-style-type: none"> <li>3x 3.5" SAS/SATA drive bays</li> <li>512GB DDR3 SDRAM</li> <li>1400W Platinum Level high-efficiency power supply</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> </ul>	<ul style="list-style-type: none"> <li>3x Double Width GPU cards in 1U</li> <li>4x Single Width GPU cards</li> <li>GPU health monitoring with fan speed control</li> <li>16 DIMM slots</li> <li>4x 2.5" hot-swap drive bays</li> </ul>
Serverboard	SUPER● X11SPG-TF	SUPER● X11SPG-TF	SUPER● X11DPG-SN
Chipset	Intel® C621 chipset	Intel® C621 chipset	Intel® C621 chipset
System Memory (Max.)*	Up to Up to 1.5TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 1.5TB 3DS ECC LRDIMM, DDR4-2933MHz, in 6 DIMM slots	Up to Up to 1.5TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 1.5TB 3DS ECC LRDIMM, DDR4-2933MHz, in 6 DIMM slots	16 DIMM slots; Up to 4TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)
Expansion Slots	1 PCI-E 3.0 x16 Center Right Hand Slot, 1 PCI-E 3.0 x16 Left Riser Slot, 1 PCI-E 3.0 x16 Right Riser Slot	1 PCI-E 3.0 x16 Center Right Hand Slot, 1 PCI-E 3.0 x16 Left Riser Slot, 1 PCI-E 3.0 x16 Right Riser Slot	4 PCI-E 3.0 x16; 1 PCI-E 3.0 x8 (in x16) low profile slot
Onboard Storage Controller	Intel® C621 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C621 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C621 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	2x 10GBase-T ports; Intel® X540 10GBase-T	2x 10GBase-T ports; Intel® X540 10GBase-T	N/A
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	6x 2.5" hot-swap SAS/SATA drive bay	3x 3.5" hot-swap SAS/SATA	2x 2.5" hot-swap NVMe/SAS/SATA drive bays; 2x 2.5" hot-swap SAS/SATA drive bays
Peripheral Bays	1x slim DVD-ROM drive bay 1x USB + COM port tray	N/A	N/A
Power Supply	1400W Platinum Level high-efficiency power supplies with I2C & PMBus	1400W Platinum Level high-efficiency power supplies with I2C & PMBus	1600W Platinum level efficiency redundant power supplies
Cooling System	8x 4cm high-performance counter-rotating PWM fans with optimal fan speed control;	8x 4cm high-performance counter-rotating PWM fans with optimal fan speed control;	10 x 4cm heavy duty counter-rotating fans with air shroud & optimal fan speed control
Form Factor	1U 17.2" (437mm) x 1.7" (43mm) x 28.5" (724mm)	1U 17.2" (437mm) x 1.7" (43mm) x 28.2" (716mm)	1U 17.2" (437mm) x 1.7" (43 mm) x 30.6" (777 mm)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

<sup>†</sup> 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

<sup>††</sup> For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.

GPU

# GPU

X11 GPU  
2U



X11 GPU  
8 V100 GPUs in 4U



X11 GPU  
8 Tesla P100 GPUs in 4U



MODEL	SYS-2029GP-TR	SYS-4029GP-TVRT	SYS-4029GP-TXRT
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket LGA-3647 (Socket P) supported, CPU TDP support Up to 205W TDP, 3 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed <i>Cascade Lake Refresh</i> ).	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket LGA-3647 (Socket P) supported, CPU TDP support Up to 205W TDP, 3 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed <i>Cascade Lake Refresh</i> ).	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket LGA-3647 (Socket P) supported, CPU TDP support Up to 205W TDP, 3 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed <i>Cascade Lake Refresh</i> ).
Key Applications	<ul style="list-style-type: none"> <li>2D/3D and CAD Applications</li> <li>3D Rendering</li> <li>Astrophysics</li> <li>Chemistry</li> <li>Cloud and Virtualization needs</li> <li>Cloud Computing</li> </ul>	<ul style="list-style-type: none"> <li>Artificial Intelligence</li> <li>Big Data Analytics</li> <li>High-performance computing</li> <li>Research lab/National Lab</li> <li>Astrophysics</li> <li>Business Intelligence</li> <li>Support 8 Tesla V100 with 300GB/s NVLINK Support up to 205W CPU</li> <li>Support 8 Tesla V100 with 300GB/s NVLINK Support GPU Direct RDMA</li> <li>Support 8 NVMe SSD</li> <li>Support up to 205W CPU</li> <li>Optimized cooling with no GPU pre-heat</li> <li>2200W Redundant Titanium Level high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>Artificial Intelligence</li> <li>Big Data Analytics</li> <li>High-performance computing</li> <li>Research lab/National Lab</li> <li>Astrophysics</li> <li>Business Intelligence</li> <li>Support up to 205W CPU Support 8 Tesla P100 with 160GB/s NVLINK</li> <li>Support up to 205W CPU</li> <li>Support GPU Direct RDMA</li> <li>2000W (2+2) Redundant Titanium Level Power Supplies with PMBus</li> <li>Support 8 NVMe SSD</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>10x 2.5" hot-swap drive bays</li> <li>16 DIMM sockets</li> <li>GPU health monitoring with fan speed control</li> <li>High-density, Enterprise Performance, Cost-effective</li> </ul>		<ul style="list-style-type: none"> <li>Support up to 205W CPU Support 8 Tesla P100 with 160GB/s NVLINK</li> <li>Support up to 205W CPU</li> <li>Support GPU Direct RDMA</li> <li>2000W (2+2) Redundant Titanium Level Power Supplies with PMBus</li> <li>Support 8 NVMe SSD</li> </ul>
Serverboard	SUPER● X11DPG-SN	SUPER● X11DGO-TX11DGO-T	SUPER● X11DGO-T
Chipset	Intel® C621 chipset	Intel® C621 chipset	Intel® C621 chipset
System Memory (Max.)*	16 DIMM slots; Up to 4TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)	24 DIMM slots; Up to 6TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)	24 DIMM slots; Up to 6TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)
Expansion Slots	6 PCI-E x16 slots; 1 PCI-E x8 (in x16) low profile slot	4 x PCI-E Gen3 x16 (GPU tray for GPU Direct RDMA); 2 x PCI-E Gen3 x16 (CPU tray)	4 x PCI-E Gen3 x16 (GPU tray for GPU Direct RDMA); 2 x PCI-E Gen3 x16 (CPU tray)
Onboard Storage Controller	Intel® C621 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C621 controller for 8 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C621 controller for 8 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	N/A	2x 10GBase-T ports; Intel® X540 10GBase-T	N/A
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	IPMI2.0; SPM; SUM; SuperDoctor® 5;	IPMI2.0; SPM; SUM; SuperDoctor® 5;
Drive Bays	8x 2.5" hot-swap SAS/SATA drive bays; 2x 2.5" hot-swap NVMe/SAS/SATA drive bays	16x 2.5" Hot-swap SATA/SAS drives; Supports 8 NVMe Drives	16x 2.5" Hot-swap SATA/SAS drives; Supports 8 NVMe Drives
Peripheral Bays	N/A	N.A	N.A
Power Supply	2000W Platinum level (94%) efficiency redundant power supplies	2200W(2+2) Redundant Power Supplies Titanium Level (96%+)	2000W(2+2) Redundant Power Supplies Titanium Level (96%+)
Cooling System	5x 8cm heavy duty fans with optimal fan speed control	8x 92mm Cooling Fans	8x 92mm Cooling Fans
Form Factor	2U 17.2" (437mm) x 3.5" (89 mm) x 31" (787 mm)	447 x 178 x 805mm (17.6" x 7.0" x 31.7")	4U Rackmount; Enclosure: 447 x 178 x 805mm (17.6" x 7.0" x 31.7") Gross Weight: 135lbs (61.23kg) Net Weight: 80lbs (36.29kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

<sup>†</sup> 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

<sup>††</sup> For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.



# GPU

4U X11 GPU Optimized  
4U 8/10 GPUs



4U X11 GPU Optimized  
4U 8/10 GPUs



4U X11 GPU  
4U 8GPU under single root system  
(Cascade mode)



MODEL	SYS-4029GP-TRT	SYS-4029GP-TRT2	SYS-4029GP-TRT3
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket LGA-3647 (Socket P) supported, CPU TDP support Up to 205W TDP, 3 UPI up to 10.4 GT/s. <i>Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).</i>	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket LGA-3647 (Socket P) supported, CPU TDP support Up to 205W TDP, 3 UPI up to 10.4 GT/s. <i>Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).</i>	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket LGA-3647 (Socket P) supported, CPU TDP support Up to 205W TDP, 3 UPI up to 10.4 GT/s. <i>Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).</i>
Key Applications	<ul style="list-style-type: none"> <li>3D Rendering</li> <li>Astrophysics</li> <li>Chemistry</li> <li>Cloud and Virtualization needs</li> <li>Cloud Computing</li> <li>Compute Intensive Application</li> </ul>	<ul style="list-style-type: none"> <li>3D Rendering</li> <li>Astrophysics</li> <li>Chemistry</li> <li>Cloud and Virtualization needs</li> <li>Cloud Computing</li> <li>Compute Intensive Application</li> </ul>	<ul style="list-style-type: none"> <li>Artificial Intelligence</li> <li>Deep Learning Training</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>24 DIMM sockets</li> <li>24x 2.5" SATA drives</li> <li>Support up to 8 GPUs</li> <li>Dual root system</li> <li>Optimized cooling with no GPU pre-heat</li> </ul>	<ul style="list-style-type: none"> <li>24 DIMM sockets</li> <li>24x 2.5" SATA drives</li> <li>Support up to 8 GPUs</li> <li>Dual root system</li> <li>Optimized cooling with no GPU pre-heat</li> </ul>	<ul style="list-style-type: none"> <li>Supports 8 GPU under one root &amp; cascade mode</li> <li>Optimized for GPU Direct RDMA</li> <li>Support up to 8 GPUs</li> <li>24x 2.5" hot-swap drive bays</li> <li>24 DIMM sockets</li> <li>Optimized cooling with no GPU pre-heat</li> <li>Single root system (cascade mode)</li> </ul>
Serverboard	SUPER● X11DPG-OT-CPU	SUPER● X11DPG-OT-CPU	SUPER● X11DPG-OT-CPU
Chipset	Intel® C622 chipset	Intel® C622 chipset	Intel® C622 chipset
System Memory (Max.)*	24 DIMM slots; Up to 6TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)	24 DIMM slots; Up to 6TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)	24 DIMM slots; Up to 6TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)
Expansion Slots	8 x PCI-E Gen.3 x16 support up to 8 double width GPU 2 x PCI-E Gen.3 x8 1 x PCI-E Gen.2 x4	11 PCI-E 3.0 x16 (FH, FL); 1 PCI-E 3.0 x8 (FH, FL, in x16 slot);	11 PCI-E 3.0 x16 (FH, FL); 1 PCI-E 3.0 x8 (FH, FL, in x16 slot);
Onboard Storage Controller	Intel® C622 controller for 8 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C622 controller for 8 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C622 controller for 8 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	2x 10GBase-T ports; Intel® X540 10GBase-T	2x 10GBase-T ports; Intel® X540 10GBase-T	2x 10GBase-T ports; Intel® X540 10GBase-T
VGA/Audio	1x VGA, Aspeed AST2500 BMC	1x VGA, Aspeed AST2500 BMC	1 VGA, 1 Aspeed AST2500 BMC
Management	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	24x 2.5" Hot-swap SATA/SAS drives	24x 2.5" Hot-swap SATA/SAS drives	22x 2.5" SATA/SAS drive bays; 2x 2.5" NVMe/SATA/SAS drive bays
Peripheral Bays	N.A	N.A	N/A
Power Supply	4 x 2000W Redundant Titanium Level high-efficiency power supplies with I2C & PMBus	4 x 2000W Redundant Titanium Level high-efficiency power supplies with I2C & PMBus	4x 2000W Redundant (2+2) Titanium Level high-efficiency power supplies
Cooling System	8x 92mm heavy duty counter-rotating fans with air shroud & optimal fan speed control	8x 92mm heavy duty counter-rotating fans with air shroud & optimal fan speed control	8x 92mm heavy duty counter-rotating fans with air shroud & optimal fan speed control
Form Factor	437 x 178 x 737mm (17.2" x 7.0" x 29")	437 x 178 x 737mm (17.2" x 7.0" x 29")	4U

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

<sup>†</sup> 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

<sup>††</sup> For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.

GPU

# GPU

4U X11 GPU  
20 Single Width GPUs



Workstation  
4U GPU



MODEL	SYS-6049GP-TRT	SYS-7049GP-TRT
Processor Support	<p>2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors.</p> <p>Dual Socket LGA-3647 (Socket P) supported, CPU TDP support Up to 205W TDP, 3 UPI up to 10.4 GT/s.</p> <p>Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed <i>Cascade Lake Refresh</i>).</p>	<p>2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors.</p> <p>Dual Socket LGA-3647 (Socket P) supported, CPU TDP support Up to 205W TDP, 3 UPI up to 10.4 GT/s.</p> <p>Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed <i>Cascade Lake Refresh</i>).</p>
Key Applications	<ul style="list-style-type: none"> <li>Artificial Intelligence</li> <li>Deep Learning Inference</li> <li>Video Transcoding</li> </ul>	<ul style="list-style-type: none"> <li>Scientific Virtualization</li> <li>High Performance Computing</li> <li>High-End GPU workstation</li> <li>Bio-Informatics</li> <li>Machine Learning</li> <li>Computer Aided Design</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Support up to 20 GPUs</li> <li>24x 3.5" Hot-swap drive bays</li> <li>24 DIMM sockets</li> <li>Optimized cooling with no GPU pre-heat</li> </ul>	<ul style="list-style-type: none"> <li>Support up to 4 GPUs/Coprocessors</li> <li>2200W Redundant Titanium Level high-efficiency power supplies</li> <li>16 DIMM slots</li> <li>8 Hot-Swap 3.5" SATA/SAS Drives</li> <li>7.1 HD Audio Header</li> </ul>
Serverboard	SUPER● X11DPG-OT-CPUX11DPG-OT-CPU	SUPER● X11DPG-QT
Chipset	Intel® C622 chipset	Intel® C621 chipset
System Memory (Max.)*	24 DIMM slots; Up to 6TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)	16 DIMM slots; Up to 4TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)
Expansion Slots	20 PCI-E 3.0 x16 support up to 20 single width GPU; 1 PCI-E 3.0 x8 (FH, FL in x16 slot)	6 PCI-E 3.0 x16 Slots; 1 PCI-E x4(in x8 slot)
Onboard Storage Controller	Intel® C622 controller for 8 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C621 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	2x 10GBase-T ports; Intel® X540 10GBase-T	2 10GBase-T ports; Intel® X550 10GBase-T
VGA/Audio	1x VGA, Aspeed AST2500 BMC	Aspeed AST2500
Management	Intel® Node Manager, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, IPMI2.0, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager; Redfish API; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5;
Drive Bays	24x 3.5" Hot-swap drives	8 Hot-swap 3.5" Drive Bays; (2x SATA3 ports default)
Peripheral Bays	N.A	N/A
Power Supply	2000W (2+2) redundant Titanium Level (96%+) power supplies	2200W redundant Titanium Level power supplies
Cooling System	8x 92mm RPM Hot-Swappable Cooling Fans	4 heavy duty fans, 4 exhaust fans, and 2 active heat sink w/ Optimal Fan Speed Control
Form Factor	4U Rackmount; Enclosure: 437 x 178 x 737mm (17.2" x 7.0" x 29") Gross Weight: 135lbs (61.23kg) Net Weight: 80lbs (36.29kg)	4U Rackmount/Workstation 462 x 178 x 673mm (18.2" x 7.0" x 26.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

<sup>†</sup> 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

<sup>††</sup> For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.

# GPU

X11 GPU  
10U System with 16 GPUs using  
NVLink and NVSwitch

1U X10 GPU

1U X10 GPU



MODEL	SYS-9029GP-TNVRT	SYS-1018GR-T	SYS-5018GR-T
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket LGA-3647 (Socket P) supported, CPU TDP support Up to 205W TDP, 3 UPI up to 10.4 GT/s. <i>Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).</i>	Intel® Xeon® Processor E5-1600 V3 Intel® Xeon® processor E5-2600 V3	Intel® Xeon® Processor E5-1600 V3 Intel® Xeon® processor E5-2600 V3
Key Applications	<ul style="list-style-type: none"> <li>Artificial Intelligence</li> <li>Deep Learning Training</li> <li>High Performance Computing</li> <li>Autonomous Vehicle Technology</li> </ul>	<ul style="list-style-type: none"> <li>HPC cluster computer nodes</li> </ul>	<ul style="list-style-type: none"> <li>HPC cluster computer nodes</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>NVSwitch &amp; NVLink Based Performance</li> <li>Support up to 16 GPUs</li> <li>Supports NVLink and NVSwitch technologies</li> <li>16 NVMe 2.5" hot-swap drive bays</li> <li>16 PCIe Gen 3.0 x16 LP slots for RDMA via EDR</li> </ul>	<ul style="list-style-type: none"> <li>3x 3.5" SAS/SATA drive bays</li> <li>512GB DDR3 SDRAM</li> <li>1400W Platinum Level high-efficiency power supply</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>UID LED</li> </ul>	<ul style="list-style-type: none"> <li>3x 3.5" SAS/SATA drive bays</li> <li>512GB DDR3 SDRAM</li> <li>1400W Platinum Level high-efficiency power supply</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>UID LED</li> </ul>
Serverboard	SUPER● X11DPG-HGX2	SUPER● X10SRG-F	SUPER● X10SRG-F
Chipset	Intel® C621 chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	24 DIMM slots; Up to 6TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)	Up to 512GB Registered ECC, DDR4-2133MHz in 8 DIMM slots	Up to 512GB Registered ECC, DDR4-2133MHz in 8 DIMM slots
Expansion Slots	16 PCI-E 3.0 x16 for RDMA via IB EDR; 2 PCI-E 3.0 x16 on MB	2 PCI-E 3.0 x16; 1 PCI-E 3.0 x8;	2 PCI-E 3.0 x16; 1 PCI-E 3.0 x8;
Onboard Storage Controller	Intel® C621 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	Dual LAN with 10GBase-T with Intel® X540 10GbE Controller	N/A	N/A
VGA/Audio	1x VGA, Aspeed AST2500 BMC	1 VGA	1 VGA
Management	Intel® Node Manager, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager; IPMI2.0; NMI; SMCBU and SMM; SuperDoctor III; Watchdog;	Intel® Node Manager; IPMI2.0; NMI; SMCBU and SMM; SuperDoctor III; Watchdog;
Drive Bays	16 hot-swap NVMe 2.5" drive bays; 6 hot-swap SATA 2.5" drive bays	3x 3.5" hot-swap SAS/SATA	3x 3.5" hot-swap SAS/SATA
Peripheral Bays	N/A	1x slim DVD-ROM drive bay 1x USB + COM port tray	1x slim DVD-ROM drive bay 1x USB + COM port tray
Power Supply	6x 3000W Redundant (5+1) Titanium Level Power Supplies	1400W Redundant Platinum Level high-efficiency power supplies with I2C & PMBus	1400W Redundant Platinum Level high-efficiency power supplies with I2C & PMBus
Cooling System	6x 80mm Hot-swap PWM Fans; 8x 92mm hot-swap fan;	8x 4cm high-performance counter-rotating PWM fans with optimal fan speed control;	8x 4cm high-performance counter-rotating PWM fans with optimal fan speed control;
Form Factor	10U Rackmount 437 x 452 x 705mm(17.2" x 17.8" x 27.75")	1U 17.2" (437mm) x 1.7" (43mm) x 28.2" (716mm)	1U 17.2" (437mm) x 1.7" (43mm) x 28.2" (716mm)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

<sup>†</sup> 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

<sup>††</sup> For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake) only. Contact your Supermicro sales rep for more info.

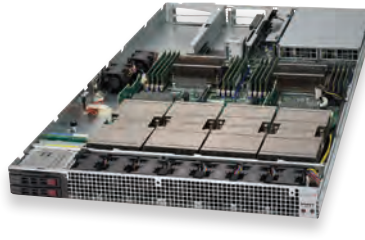
GPU

# GPU

1U 4-GPU



1U 4 Pascal GPUs



1U 4-GPU



MODEL	SYS-1028GQ-TR SYS-1028GQ-TRT	SYS-1028GQ-TXR SYS-1028GQ-TXRT	SYS-1028GQ-TVRT
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4 product family with QPI up to 9.6 GT/s	Dual Intel® Xeon® Processor E5-2600 V4 (Broadwell) product family with QPI up to 9.6 GT/s
Key Applications	<ul style="list-style-type: none"> <li>HPC cluster computer nodes</li> <li>2D/3D and CAD Applications</li> <li>High-performance computing</li> <li>Oil &amp; Gas</li> <li>Cloud and Virtualization needs</li> <li>Astrophysics</li> </ul>	<ul style="list-style-type: none"> <li>Artificial Intelligence</li> <li>Big Data Analytics</li> <li>High-performance computing</li> <li>Research lab/National Lab</li> <li>Astrophysics</li> <li>Business Intelligence</li> <li>Supports up to 4 Pascal GPUs with 80GB/s NVLink</li> </ul>	<ul style="list-style-type: none"> <li>Artificial Intelligence</li> <li>Big Data Analytics</li> <li>High-performance computing</li> <li>Research lab/National Lab</li> <li>Astrophysics</li> <li>Business Intelligence</li> <li>Supports up to 4 Nvidia Tesla V100 SXM2 GPUs in 1U</li> <li>Enables 300GB/s GPU-to-GPU NVLink</li> <li>Optimized for GPUDirect RDMA</li> <li>Supports 2000W Redundant Titanium Power Supplies</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>GPU health monitoring with fan speed control</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Up to 4 double width GPU cards in 1U</li> <li>Supports 16 DIMM DDR4-2133MHz</li> <li>2000W Redundant <b>Platinum Level</b> high-efficiency power supplies</li> <li>4x 2.5" SATA drives</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>GPU health monitoring with fan speed control</li> </ul>	<ul style="list-style-type: none"> <li>Optimized for GPUDirect RDMA</li> <li>145W CPU support</li> <li>16 DIMM support</li> <li>(96%) Power Supplies</li> <li>2x 2.5" Hot-Swap HDD and internal 2x 2.5" HDD</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>GPU health monitoring with fan speed control</li> </ul>	<ul style="list-style-type: none"> <li>Supports up to 4 Nvidia Tesla V100 SXM2 GPUs in 1U</li> <li>Enables 300GB/s GPU-to-GPU NVLink</li> <li>Optimized for GPUDirect RDMA</li> <li>Supports 2000W Redundant Titanium Power Supplies</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>GPU health monitoring with fan speed control</li> </ul>
Serverboard	SUPER® X10DGQ	SUPER® X10DGQ	SUPER® X10DGQ
Chipset	Intel® C612 Chipset	Intel® C612 Chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 2TB ECC LRDIMM/RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	4 PCI-E 3.0 x16 slots (4x GPU opt.) 2 PCI-E 3.0 x8 (in x16) low profile slot	3 PCI-E by 16 slots 1 PCI-E by 8 low profile slot	3 x PCI-E by 16 slots; 1 x PCI-E by 8 low profile slots
Onboard Storage Controller	Intel® C612 controller for 4 SATA3 (6Gbps) Ports; RAID 0,1,5,10	Intel® C612 controller for 4 SATA3 (6Gbps) Ports; RAID 0,1,5,10	Intel® C612 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	-TR: Dual LAN with Intel® i350 Gigabit Ethernet controller -TRT: Dual 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector	-TXR: Dual LAN with Intel® i350 Gigabit Ethernet controller -TXRT: Dual 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector	Dual LAN with Intel X540 Gigabit Ethernet controller; Matrox G200ew graphics
VGA/Audio	AST2400 VGA	AST2400 VGA	1 VGA, 1 Aspeed AST2400 BMC
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Intel® Node Manager; IPMI2.0; NMI; SPM; SUM; SuperDoctor® 5; Watchdog;
Drive Bays	2x 2.5" hot-swap SATA drive bays; 2x 2.5" internal HDDs	2x 2.5" hot-swap SATA drive bays; 2x 2.5" internal HDDs	2x 2.5" hot-swap SAS/SATA drive bay; 2x 2.5" internal HDDs
Peripheral Bays	N/A	N/A	N/A
Power Supply	Redundant 2000W <b>Platinum Level</b> high-efficiency power supplies	Redundant 2000W <b>Titanium Level</b> high-efficiency power supplies	2000W Redundant Titanium level efficiency redundant power supplies
Cooling System	9x 4cm heavy duty counter-rotating PWM fans with air shroud with optimal fan speed control	9x 4cm heavy duty counter-rotating PWM fans with air shroud with optimal fan speed control	8 x 4cm heavy duty counter-rotating fans with air shroud & optimal fan speed control
Form Factor	1U Rackmount 437 x 43 x 894mm (17.2" x 1.7" x 35.2")	1U Rackmount 437 x 43 x 894mm (17.2" x 1.7" x 35.2")	437 x 43 x 894mm (17.2" x 1.7" x 35.2")

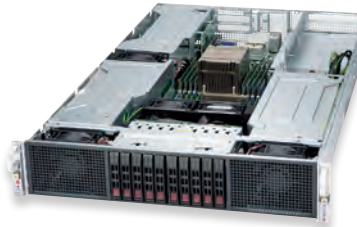
\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# GPU

1U 3-GPU

2U GPU  
Tesla® Kepler Ready!

2U GPU  
Tesla® Kepler Ready!



MODEL	SYS-1028GR-TR SYS-1028GR-TRT	SYS-2028GR-TR SYS-2028GR-TRT	SYS-2028GR-TRH SYS-2028GR-TRHT
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>• 2D/3D and CAD Applications</li> <li>• 3D Rendering</li> <li>• Astrophysics</li> <li>• Chemistry</li> <li>• Cloud and Virtualization needs</li> <li>• Cloud Computing</li> <li>• Financial Analysis</li> <li>• High-performance computing</li> <li>• Oil &amp; Gas</li> </ul>	<ul style="list-style-type: none"> <li>• 2D/3D and CAD Applications</li> <li>• 3D Rendering</li> <li>• Astrophysics</li> <li>• Chemistry</li> <li>• Cloud and Virtualization needs</li> <li>• Cloud Computing</li> <li>• Financial Analysis</li> <li>• High-performance computing</li> <li>• Oil &amp; Gas</li> </ul>	<ul style="list-style-type: none"> <li>• 2D/3D and CAD Applications</li> <li>• 3D Rendering</li> <li>• Astrophysics</li> <li>• Chemistry</li> <li>• Cloud and Virtualization needs</li> <li>• Cloud Computing</li> <li>• Financial Analysis</li> <li>• High-performance computing</li> <li>• Oil &amp; Gas</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• Supports 16 DIMM DDR4-2133MHz</li> <li>• 4x 2.5" SATA drives</li> <li>• GPU health monitoring with fan speed control</li> <li>• Up to 3 GPUs cards in 1U</li> </ul>	<ul style="list-style-type: none"> <li>• Up to 6 PCI-E 3.0 x16 slots support 6 double-width GPU cards</li> <li>• 10x 2.5" SAS/SATA drive bays</li> <li>• 16 DIMM slots</li> <li>• GPU health monitoring with fan speed control</li> <li>• High-density, Enterprise Performance, Cost-effective</li> </ul>	<ul style="list-style-type: none"> <li>• Up to 6 PCI-E 3.0 x16 slots support 6 double-width GPU cards</li> <li>• 10x 2.5" SAS/SATA drive bays</li> <li>• 16 DIMM slots</li> <li>• GPU health monitoring with fan speed control</li> <li>• High-density, Enterprise Performance, Cost-effective</li> </ul>
Serverboard	-TR: SUPER● X10DRG-H -TRT: SUPER● X10DRG-HT	-TR: SUPER● X10DRG-H -TRT: SUPER● X10DRG-HT	-TRH: SUPER● X10DRG-H -TRHT: SUPER● X10DRG-HT
Chipset	Intel® C612 Chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	3 PCI-E 3.0 x16 slots (3x GPUs opt.) 1 PCI-E 3.0 x8 (in x16) low profile slot	4x PCI-E 3.0 x16 slots (GPU opt.); 1 x PCI-E 3.0 x8 (in x16) low profile slot;	6x PCI-E 3.0 x16 slots (GPU opt.); 1x PCI-E 3.0 x8 (in x16) low profile slot
Onboard Storage Controller	Intel® C612 controller for 4 SATA3 (6Gbps) Ports; RAID 0,1,5,10	Intel® C612 controller for 10 SATA3 (6Gbps) ports; RAID 0,1,5,10	Intel® C612 controller for 10 SATA3 (6Gbps) ports; RAID 0,1,5,10
Connectivity	-TR: Dual LAN with Intel® i350 Gigabit Ethernet controller -TRT: Dual 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector	-TR: Dual LAN with Intel® i350 Gigabit Ethernet controller -TRT: Dual 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector	-TRH: Dual LAN with Intel® i350 Gigabit Ethernet controller -TRHT: Dual 10Gb Ethernet LAN with Intel® X540 and 10GBase-T Connector
VGA/Audio	AST2400 VGA	AST2400 VGA	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	4x 2.5" hot-swap SAS/SATA drive bays	10 x 2.5" hot-swap SAS/SATA drive bay	10 x 2.5" hot-swap SAS/SATA drive bay
Peripheral Bays	N/A	N/A	N/A
Power Supply	Redundant 1600W <b>Platinum Level</b> high-efficiency power supplies	Redundant 2000W <b>Platinum Level</b> high-efficiency power supplies	Redundant 2000W <b>Platinum Level</b> high-efficiency power supplies
Cooling System	10x 4cm heavy duty counter-rotating PWM fans with air shroud with optimal fan speed control	5x 8cm heavy duty fans with optimal fan speed control	5x 8cm heavy duty fans with optimal fan speed control
Form Factor	1U Rackmount 437 x 43 x 777mm (17.2" x 1.7" x 30.6")	2U Rackmount 437 x 89 x 787mm (17.2" x 3.5" x 31")	2U Rackmount 437 x 89 x 787mm (17.2" x 3.5" x 31")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

GPU

# GPU

GPU  
TwinPro/TwinPro2



4U 8-GPU



MODEL	SYS-5028TK-HTR	SYS-4028GR-TR SYS-4028GR-TRT
Processor Support	Quad set of Coprocessor (codename Knights Landing); optional integrated Intel <sup>®</sup> Omni-Path fabric	Dual Intel <sup>®</sup> Xeon <sup>®</sup> Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>HPC/Cluster</li> <li>Financial Analysis</li> <li>Oil and Gas Simulation</li> </ul>	<ul style="list-style-type: none"> <li>3D Rendering</li> <li>Astrophysics</li> <li>Chemistry</li> <li>Cloud and Virtualization needs</li> <li>Cloud Computing</li> <li>Compute Intensive Application</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>2 low-profile PCI-E x16 slots</li> <li>Intel<sup>®</sup> Omni-Path fabric support</li> <li>4 hot swappable nodes in 2U</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> </ul>	<ul style="list-style-type: none"> <li>Up to 8 GPUs in 4U</li> <li>24 DIMM slots</li> <li>24x 2.5" SATA drives</li> <li>GPU health monitoring with fan speed control</li> <li>4x 1600W Redundant <b>Platinum Level</b> power supplies</li> </ul>
Serverboard	SUPER <sup>®</sup> K1SPi	-TR: SUPER <sup>®</sup> X10DRG-O+-CPU, X10DRG-O-PCI-E -TRT: SUPER <sup>®</sup> X10DRG-OT+-CPU, X10DRG-O-PCI-E
Chipset	Intel <sup>®</sup> C612 Chipset	Intel <sup>®</sup> C612 chipset
System Memory (Max.)*	Quad set of up to 384GB ECC LRDIMM, 192GB ECC RDIMM, DDR4-2400MHz in 6 DIMM slots	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 24 DIMM slots
Expansion Slots	Quad set of 2 PCI-E x16 (LP)	8x PCI-E 3.0 x16 (support up to 8 double width GPUs) 2x PCI-E 3.0 x8 1x PCI-E 2.0 x4
Onboard Storage Controller	Quad set of Intel <sup>®</sup> C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10	Intel <sup>®</sup> C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10
Connectivity	Quad set of Dual LAN with Intel <sup>®</sup> i350 Gigabit Ethernet controller	-TR: Dual LAN with Intel <sup>®</sup> i350 Gigabit Ethernet Controller; -TRT: Dual IAN with Intel <sup>®</sup> X540 10GBase-T Ethernet Controller
VGA/Audio	AST2400 VGA	AST2400 VGA
Management	Quad set of IPMI 2.0 + KVM with dedicated LAN	IPMI 2.0 + KVM with dedicated LAN, Intel <sup>®</sup> Node Manager, SUM, SPM, SSM, SuperDoctor <sup>®</sup> 5, Watchdog
Drive Bays	Quad set of 3x 3.5" hot-swap SATA drive bays	24x hot-swap 2.5" SAS/SATA drive bays
Peripheral Bays	1x slim DVD-ROM drive bay 2x USB 2.0 ports (option)	N/A
Power Supply	Redundant 2000W <b>Platinum Level</b> high-efficiency Power Supplies with I <sup>2</sup> C & PMBus	Four 1600W (2+2) Redundant <b>Platinum Level</b> high-efficiency power supplies with I <sup>2</sup> C & PMBus
Cooling System	4x 8cm heavy duty PWM fans with air shroud and optimal fan speed control	8x 92mm RPM Hot-Swappable Cooling Fans
Form Factor	2U Rackmount 438 x 88 x 762mm (17.25" x 3.47" x 30")	4U Rackmount 437 x 178 x 737mm (17.2" x 7" x 29")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

\* 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

\*\* For 2nd Gen Intel<sup>®</sup> Xeon<sup>®</sup> Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.

# GPU

4U 10-GPU  
Under single CPU root



4U 10-GPU  
Under single CPU root



4U 8-GPU



MODEL	SYS-4028GR-TR2	SYS-4028GR-TRT2	SYS-4028GR-TXR
Processor Support	Intel® Xeon® processor E5-2600 V4 with UPI up to 9.6GT/s	Intel® Xeon® processor E5-2600 V4 with UPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 V4 (Broadwell) product family with UPI up to 9.6 GT/s
Key Applications	<ul style="list-style-type: none"> <li>Artificial Intelligence</li> <li>Big Data Analytics</li> <li>High-performance computing</li> <li>Research lab/National Lab</li> <li>Astrophysics</li> <li>Business Intelligence</li> </ul>	<ul style="list-style-type: none"> <li>Artificial Intelligence</li> <li>Big Data Analytics</li> <li>High-performance computing</li> <li>Research lab/National Lab</li> <li>Astrophysics</li> <li>Business Intelligence</li> </ul>	<ul style="list-style-type: none"> <li>Artificial Intelligence</li> <li>Big Data Analytics</li> <li>High-performance computing</li> <li>Research lab/National Lab</li> <li>Astrophysics</li> <li>Business Intelligence</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>24x 2.5" SATA drives</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>24 DIMM sockets</li> <li>Supports 8 GPU under one CPU Root</li> <li>Optimized for GPUDirect RDMA</li> </ul>	<ul style="list-style-type: none"> <li>Supports 8 GPU under one CPU Root</li> <li>Optimized for GPUDirect RDMA</li> <li>24x 2.5" SATA drives</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>24 DIMM sockets</li> </ul>	<ul style="list-style-type: none"> <li>Support 8 Tesla P100 with 80GB/s NVLINK</li> <li>Support GPUDirect RDMA</li> <li>Support 8 NVMe SSD</li> <li>Support up to 160W CPU</li> <li>Optimized cooling with no GPU pre-heat</li> <li>2000W (2+2) Redundant Titanium Level Power Supplies with PMBus</li> </ul>
Serverboard	SUPER● X10DRG-OT+-CPU	SUPER● X10DRG-OT+-CPU	SUPER● X10DRG-O+-CPU
Chipset	Intel® C612 chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 3TB DDR4-2400MHz in 24 DIMM slots	Up to 3TB DDR4-2400MHz in 24 DIMM slots	Up to 3TB ECC 3DS LRDIMM, 2TB ECC RDIMM
Expansion Slots	11 PCI-E 3.0 x16(FH, FL); 1 PCI-E 3.0 x8(FH, FL, in x16 slot);	11 PCI-E 3.0 x16(FH, FL); 1 PCI-E 3.0 x8(FH, FL, in x16 slot);	4x PCI-E 3.0 x16, 2x PCI-E 3.0 x8
Onboard Storage Controller	Intel® C612 chipset supports SATA3 (6Gbps) with RAID 0, 1, 5, 10	Intel® C612 chipset supports SATA3 (6Gbps) with RAID 0, 1, 5, 10	Intel® C612 chipset SATA3 (6Gbps)
Connectivity	Dual 1GbE LAN ports and 1x Dedicated IPMI portDual LAN with Intel I350 Gigabit Ethernet controller; Matrox G200ew graphics	Dual LAN with 10GBase-T with Intel® X540 10GbE Controller and 1x Dedicated IPMI portDual LAN with 10GBase-T with Intel® X540 10GbE Controller; Matrox G200ew graphics	Dual LAN with Intel® i350 GbE LAN Controller
VGA/Audio	Aspeed AST2400 BMC	Aspeed AST2400 BMC	Aspeed AST2400 BMC
Management	IPMI2.0, SPM, SUM, SuperDoctor® 5	IPMI2.0, SPM, SUM, SuperDoctor® 5	IPMI2.0; SPM; SUM; SuperDoctor® 5;
Drive Bays	24 x 2.5" HDD drives	24 x 2.5" HDD drives	16x 2.5" Hot-swap SATA/SAS drives; Supports 8 NVMe Drives
Peripheral Bays	N/A	N/A	N/A
Power Supply	4 x 2000W Redundant Titanium Level high-efficiency power supplies with I2C & PMBus	4 x 2000W Redundant Titanium Level high-efficiency power supplies with I2C & PMBus	2000W(2+2) Redundant Power Supplies Titanium Level (96%+)
Cooling System	8x 92mm heavy duty counter-rotating fans with air shroud & optimal fan speed control	8x 92mm heavy duty counter-rotating fans with air shroud & optimal fan speed control	8x 92mm Cooling Fans
Form Factor	4U	4U	4U Rackmount; Enclosure: 447 x 178 x 805mm (17.6" x 7.0" x 31.7") Gross Weight: 135lbs (61.23kg) Net Weight: 80lbs (36.29kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

GPU

# GPU

4U 8-GPU

4U X10 GPU

SuperWorkstation  
Thunderbolt Support  
Supports 4 GPUs



MODEL	SYS-4028GR-TXRT	SYS-4028GR-TVRT	SYS-7048GR-TR
Processor Support	Intel® Xeon® processor E5-2600 v4 product family with QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 V4 (Broadwell) product family with UPI up to 9.6 GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Artificial Intelligence</li> <li>Big Data Analytics</li> <li>High-performance computing</li> <li>Research lab/National Lab</li> <li>Astrophysics</li> <li>Business Intelligence</li> </ul>	<ul style="list-style-type: none"> <li>Artificial Intelligence</li> <li>Big Data Analytics</li> <li>High-performance computing</li> <li>Research lab/National Lab</li> <li>Astrophysics</li> <li>Business Intelligence</li> </ul>	<ul style="list-style-type: none"> <li>HPC cluster computer nodes</li> <li>Simulation and Creation Design</li> <li>Imaging and Computer Vision</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Support 8 Tesla P100 with 80GB/s NVLINK</li> <li>Support GPUDirect RDMA</li> <li>Support 8 NVMe SSD</li> <li>Support up to 160W CPU</li> <li>Optimized cooling with no GPU pre-heat</li> <li>2000W (2+2) Redundant Titanium Level Power Supplies with PMBus</li> </ul>	<ul style="list-style-type: none"> <li>Support 8 Tesla V100 GPUs with 300GB/s NVLink</li> <li>Support GPUDirect RDMA</li> <li>Support 8 NVMe SSD</li> <li>Support up to 160W CPU</li> <li>Optimized cooling with no GPU pre-heat</li> <li>2000W (2+2) Redundant Titanium Level Power Supplies with PMBus</li> </ul>	<ul style="list-style-type: none"> <li>16 DIMM slots</li> <li>2000W Redundant Titanium Level high-efficiency power supplies</li> <li>16 DIMM slots</li> <li>8 Hot-swap 3.5" SATA/SAS drive bays</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>7.1 HD Audio Header</li> <li>4 x PCI-E 3.0 x16 slots, 2 x PCI-E 3.0 x8 (1 in x16), 1 x PCI-E 2.0 x4 (in x8)</li> </ul>
Serverboard	SUPER● X10DRG-OT+-CPU	SUPER●	SUPER● X10DRG-Q
Chipset	Intel® C612 Chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 3TB DDR4-2400MHz in 24 DIMM slots	Up to 3TB ECC 3DS LRDIMM, 2TB ECC RDIMM	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	4 x PCI-E 3.0 x16 2 x PCI-E 3.0 x8	4x PCI-E 3.0 x16, 2x PCI-E 3.0 x8	4 PCI-E 3.0 x16 (double-width), 2 PCI-E 3.0 x8 (1 in x16 slot), 1 PCI-E 2.0 x4 (in x8), Support Thunderbolt 2.0 AOC
Onboard Storage Controller	Intel® C612 controller for 4 SATA3 (6Gbps) Ports; RAID 0,1,5,10	Intel® C612 chipset SATA3 (6Gbps)	Intel® C612 AHCI controller for 8 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	Dual LAN with 10GBase-T with Intel® X540 10GbE Controller; Dual LAN with Intel® I350 Gigabit Ethernet controller	N/A	Dual LAN with Intel® i350 Gigabit Ethernet Controllers
VGA/Audio	Matrox G200ew graphics	Dual LAN with Intel® x540 Ethernet Controller;	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI2.0; SPM; SUM; SuperDoctor® 5;	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	24 x 2.5" HDD drive bays	16x 2.5" Hot-swap SATA/SAS drives; Supports 8 NVMe Drives	8x hot-swap 3.5" SAS/SATA drive bays
Peripheral Bays	N/A	N/A	3x 5.25" drive bays in storage module - rotates 90° for Rackmount, 1x 3.5" fixed drive bay
Power Supply	4x 2000W Redundant Titanium Level (96%+) high-efficiency power supplies with I <sup>2</sup> C & PMBus	2000W(2+2) Redundant Power Supplies Titanium Level (96%+)	2000W Redundant Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMBus
Cooling System	8x 92mm heavy duty counter-rotating fans with air shroud & optimal fan speed control	8x 92mm Cooling Fans	4x 92x38mm 4-pin PWM Middle Cooling Fans, 2x 80x38mm 4-pin PWM Rear Exhaust Fans
Form Factor	4U Rackmount 447 x 178 x 805mm (17.6" x 7.0" x 31.7")	4U Rackmount; Enclosure: 447 x 178 x 805mm (17.6" x 7.0" x 31.7") Gross Weight: 135lbs (61.23kg) Net Weight: 80lbs (36.29kg)	4U Tower 462 x 178 x 673mm (18.2" x 7" x 26.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



# X12 STORAGE

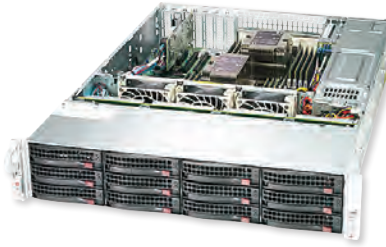
(For Complete System Only)



1U 12x Drives



2U 12x Drives



2U 16x Drives



MODEL	SSG-610P-ACR12N4H SSG-610P-ACR12N4L	SSG-620P-ACR12H SSG-620P-ACR12L	SSG-620P-ACR16H SSG-620P-ACR16L
Processor Support	3rd Gen Intel® Xeon® Scalable processors Dual Socket LG-4189 (Socket P+) supported TDP up to 205W; up to 11.2GT/s	3rd Gen Intel® Xeon® Scalable processors Dual Socket LG-4189 (Socket P+) supported TDP up to 270W; up to 11.2GT/s	3rd Gen Intel® Xeon® Scalable processors Dual Socket LG-4189 (Socket P+) supported TDP up to 270W; up to 11.2GT/s
Key Applications	<ul style="list-style-type: none"> <li>Database Applications</li> <li>Hyperscale Data Center</li> <li>Object Storage</li> <li>Big Data Analytics</li> <li>Scale-Out Density</li> <li>Hadoop &amp; Ceph storage solutions</li> <li>Scale-out NAS</li> </ul>	<ul style="list-style-type: none"> <li>Appliance Optimized Storage Building Blocks</li> <li>Enterprise Database Applications</li> <li>Big Data Analytic and HPC</li> <li>On Premise Converged Infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>Appliance Optimized Storage Building Blocks</li> <li>Enterprise Database Applications</li> <li>Big Data Analytic and HPC</li> <li>On Premise Converged Infrastructure</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Hardware RAID supported for 12x 3.5" drives</li> <li>Server remote management: IPMI 2.0/KVM over LAN/Media over LAN</li> <li>Dual socket 3rd Gen Intel® Xeon® Scalable processors, up to 72 Cores</li> <li>16 ECC DDR4-3200:LRDIMM/RDIMM;</li> <li>2 PCI-E 4.0 X16 Slots + 1 PCI-E 4.0 x8 Slots</li> <li>1 PCI-E 4.0 x8 AIOM slot</li> <li>12 Hot-swap 3.5" SAS3/SATA3 drive bays</li> <li>4 Front EDSFF Short Slots + 2 SATA NVMe Slots</li> <li>2 x 25G SFP+ onboard</li> </ul>	<ul style="list-style-type: none"> <li>16 ECC DDR4-3200: LRDIMM/RDIMM; +2 Intel® DCPMM</li> <li>4 PCI-E 4.0 x16 Slots + 2 PCI-E 4.0 x8 Slots</li> <li>Server remote management: IPMI 2.0/KVM over LAN/Media over LAN</li> <li>2x 10GBase-T LAN ports</li> <li>Dual socket 3rd Gen Intel® Xeon® Scalable processors, up to 72 Cores</li> <li>16 ECC DDR4-3200:LRDIMM/RDIMM; +2 Intel® DCPMM</li> <li>12 Hot-swap 3.5" NVMe/SAS3/SATA3 drive bays</li> <li>Onboard 1 M.2 NVMe/SATA</li> </ul>	<ul style="list-style-type: none"> <li>Dual socket 3rd Gen Intel® Xeon® Scalable processors, up to 72 Cores</li> <li>16 ECC DDR4-3200:LRDIMM/RDIMM; +2 DCPMM</li> <li>4 PCI-E 4.0 X16 Slots + 2 PCI-E 4.0 x8 Slots</li> <li>Server remote management: IPMI 2.0/KVM over LAN/Media over LAN</li> <li>3 Hot-swap 8cm redundant PWM fans</li> <li>2x 10GBase-T LAN ports with X710-TM4</li> <li>1600W Redundant Power Supplies Titanium Level (96%)</li> <li>12 Hot-swap 3.5" Hybrid NVMe/SAS3/SATA3 drive bays+ 4 SAS3/SATA3 Drive Bays; on board 1 M.2 NVMe</li> <li>- ACR16H: Broadcom 3916 Controller</li> <li>- ACR16L: Broadcom 3816 Controller</li> </ul>
Serverboard Chipset	SUPERMICRO X12DPD-A6M25 Intel® C621A	SUPERMICRO X12DPI-NT6 Intel® C621A	SUPERMICRO X12DPI-NT6 Intel® C621A
System Memory (Max.)	16 DIMM slots Up to 4TB ECC RDIMM/LRDIMM, DDR4-3200MHz	16 DIMM slots Up to 18TB Intel® DCPMM, DDR4-2666MHz Up to 4TB ECC RDIMM/LRDIMM, DDR4-3200MHz	16 DIMM slots Up to 18TB Intel® DCPMM, DDR4-2666MHz Up to 4TB ECC RDIMM/LRDIMM, DDR4-3200MHz
Expansion Slots	PCI-E 4.0 x16 AIOM slot(s) 2 PCI-E 4.0 x16 LP slot(s) PCI-E 4.0 x8 LP slot(s)	4 PCI-E 4.0 x16 LP slot(s) 2 PCI-E 4.0 x8 LP slot(s)	4 PCI-E 4.0 x16 LP slot(s) 2 PCI-E 4.0 x8 LP slot(s)
Onboard Storage Controller	-ACR12N4H: M.2 interface: 2x 2280 NVMe/SATA -ACR12N4L: M.2 interface: 2x 2280 NVMe/SATA	-ACR12H: Intel® SATA Broadcom® 3916 -ACR12L: Intel® SATA Broadcom® 3816	-ACR16H: Intel® SATA Broadcom® 3916 -ACR16L: Intel® SATA Broadcom® 3816
Connectivity	2x 25GbE SFP28 port(s) with Mellanox	2x 10GbE RJ45 port(s) with Intel® Ethernet Controller X550	2x 10GbE RJ45 port(s) with Intel® Ethernet Controller X550
VGA/Audio Management	1 VGA port SuperDoctor® 5; Watch Dog; NMI; SUM; IPMI 2.0	1 VGA port SuperDoctor® 5; Watch Dog; NMI; SUM; IPMI 2.0	1 VGA port SuperDoctor® 5; Watch Dog; NMI; SUM; IPMI 2.0
Drive Bays	12x 3.5" hot-swap SATA3/SAS3 drive bays; 2x 2.5" 7mm hot-swap hybrid NVMe/SATA drive bays	12x 3.5" hot-swap NVMe/SATA/SAS drive bays; 4x 3.5" NVMe hybrid; Optional RAID support via RAID/HBA controller AOC	16x 3.5" hot-swap NVMe/SATA/SAS drive bays; 4x 3.5" NVMe hybrid; Optional RAID support via RAID/HBA controller AOC
Peripheral Bays	None	None	None
Power Supply	Redundant 800W Platinum level (94%)	Redundant 1200W Titanium level (96%)	Redundant 1600W Titanium level (96%)
Cooling System	6x 4cm heavy duty fan(s)	3x 8cm heavy duty fan(s)	4x 8cm heavy duty fan(s)
Form Factor	1U rackmount Enclosure: (17.6" x 1.7" x 37") Package: (27" x 12" x 53.15")	2U rackmount Enclosure: (17.3" x 3.5" x 25.5") Package: (27" x 12" x 35")	2U rackmount Enclosure: (17.3" x 3.5" x 27.75") Package: (27" x 12" x 39")

# X12 STORAGE

(For Complete System Only)

**NEW!**

3rd Gen Intel® Xeon® Scalable processors Supported



2U Simply Double, 24x Drives



4U 24x Drives



4U 36x Drives



MODEL	SSG-620P-E1CR24H SSG-620P-E1CR24L	SSG-640P-E1CR24H SSG-640P-E1CR24L	SSG-640P-E1CR36H SSG-640P-E1CR36L
Processor Support	3rd Gen Intel® Xeon® Scalable processors Dual Socket LG-4189 (Socket P+) supported TDP up to 250W; up to 11.2GT/s	3rd Gen Intel® Xeon® Scalable processors Dual Socket LG-4189 (Socket P+) supported TDP up to 270W; up to 11.2GT/s	3rd Gen Intel® Xeon® Scalable processors Dual Socket LG-4189 (Socket P+) supported TDP up to 270W; up to 11.2GT/s
Key Applications	<ul style="list-style-type: none"> <li>Appliance Optimized Storage Building Blocks</li> <li>Corporate Database</li> <li>Database Processing &amp; Storage</li> <li>HPC, Data Center</li> <li>iSCSI SAN</li> <li>Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>Enterprise Server</li> <li>iSCSI SAN</li> <li>HPC, Data Center</li> <li>Database Processing &amp; Storage</li> <li>Corporate Database</li> <li>Appliance Optimized Storage Building Blocks</li> </ul>	<ul style="list-style-type: none"> <li>Enterprise Server</li> <li>iSCSI SAN</li> <li>HPC, Data Center</li> <li>Database Processing &amp; Storage</li> <li>Corporate Database</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Support dual Intel® Xeon Scalable CPUs</li> <li>Server remote management: IPMI 2.0/KVM over LAN/Media over LAN</li> <li>High Density platform in 2U rack size</li> <li>Flexible storage media and controller configurations, and support tiering storage (HDD/SSD)</li> <li>Enterprise serviceability with hot-swappable drives and power supplies</li> <li>24 Hot-swap 3.5" SAS3/SATA3 drive bays + 4 NVMe/SATA3 Rear Drive Bays</li> </ul>	<ul style="list-style-type: none"> <li>4 PCI-E 4.0 x16 Slots + 2 PCI-E 4.0 x8 Slots</li> <li>Server remote management: IPMI 2.0/KVM over LAN/Media over LAN</li> <li>Dual socket 3rd Gen Intel® Xeon® Scalable processors, up to 72 Cores</li> <li>16 ECC DDR4-3200:LRDIMM/RDIMM; +2 Intel® DCPMM</li> <li>24 Hot-swap 3.5" SAS3/SATA3 drive bays</li> <li>On board 1 M.2 NVMe/SATA</li> </ul>	<ul style="list-style-type: none"> <li>4 PCI-E 4.0 x16 Slots + 2 PCI-E 4.0 x8 Slots</li> <li>Server remote management: IPMI 2.0/KVM over LAN/Media over LAN</li> <li>Dual socket 3rd Gen Intel® Xeon® Scalable processors, up to 72 Cores</li> <li>16 ECC DDR4-3200:LRDIMM/RDIMM; +2 Intel® DCPMM</li> <li>Onboard 1 M.2 NVMe/SATA</li> <li>32 Hot-swap 3.5" SAS3/SATA3 drive bays + 4 NVMe/ SAS3/SATA3 Drive Bays</li> </ul>
Serverboard	SUPER® X12DSC+	SUPER® X12DPI-NT6	SUPER® X12DPI-NT6
Chipset	Intel® C621A	Intel® C621A	Intel® C621A
System Memory (Max.)	16 DIMM slots Up to 4TB ECC RDIMM/LRDIMM, DDR4-3200MHz	16 DIMM slots Up to 18TB Intel® DCPMM, DDR4-2666MHz Up to 4TB ECC RDIMM/LRDIMM, DDR4-3200MHz	16 DIMM slots Up to 18TB Intel® DCPMM, DDR4-2666MHz Up to 4TB ECC RDIMM/LRDIMM, DDR4-3200MHz
Expansion Slots	PCI-E 4.0 x16 AIOM slot(s) 3 PCI-E 4.0 x16 LP slot(s)	4 PCI-E 4.0 x16 LP slot(s) 2 PCI-E 4.0 x8 LP slot(s)	4 PCI-E 4.0 x16 LP slot(s) 2 PCI-E 4.0 x8 LP slot(s)
Onboard Storage Controller	-E1CR24HL: Intel® SATA Broadcom® 3916 -E1CR24L: Intel® SATA Broadcom® 3816	-E1CR24H: Intel® SATA Broadcom® 3916 -E1CR24L: Intel® SATA Broadcom® 3816	-E1CR36H: Intel® SATA Broadcom® 3916 -E1CR36L: Intel® SATA Broadcom® 3816
Connectivity	2x 10GbE RJ45 port(s) with Intel® Ethernet Controller X550	2x 10GbE RJ45 port(s) with Intel® Ethernet Controller X550	2x 10GbE RJ45 port(s) with Intel® Ethernet Controller X550
VGA/Audio	1 VGA port	1 VGA port	1 VGA port
Management	SuperDoctor® 5; Watch Dog; NMI; IPMI 2.0; SUM	SuperDoctor® 5; Watch Dog; NMI; SUM; IPMI 2.0	SuperDoctor® 5; Watch Dog; NMI; SUM; IPMI 2.0
Drive Bays	24x 3.5" hot-swap Simply Double drive bays; Optional RAID support via RAID/HBA Controller AOC	24x 3.5" hot-swap NVMe/SATA/SAS drive bays; Optional RAID support via RAID/HBA controller AOC	36x 3.5" hot-swap NVMe/SATA/SAS drive bays; 4x 3.5" NVMe hybrid; Optional RAID support via RAID/HBA controller AOC
Peripheral Bays	None	None	None
Power Supply	Redundant 1600W Titanium level (96%)	Redundant 1200W Titanium level (96%)	Redundant 1200W Titanium level (96%)
Cooling System	5x 8cm heavy duty fan(s)	5x 8cm heavy duty fan(s)	5x 8cm heavy duty fan(s)
Form Factor	2U Rackmount Enclosure: 437 x 89 x 866.14mm (17.2" x 3.5" x 34")	4U rackmount Enclosure: (17.2" x 7" x 26.5") Package: (27" x 15" x 39")	4U rackmount Enclosure: (17.2" x 7" x 27.5") Package: (27" x 15" x 39")

Storage

# X12 STORAGE

(For Complete System Only)



4U 60x Top-loading



4U 90x Top-loading



MODEL	SSG-640SP-E1CR60	SSG-640SP-E1CR90
Processor Support	3rd Gen Intel® Xeon® Scalable processors Dual Socket LG-4189 (Socket P+) supported TDP up to 250W; up to 11.2GT/s	3rd Gen Intel® Xeon® Scalable processors Dual Socket LG-4189 (Socket P+) supported TDP up to 250W; up to 11.2GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Big Data &amp; Analytics, Data Lake</li> <li>• HPC and AI/ML Workloads</li> <li>• Telco &amp; Cloud Service Providers</li> <li>• Financial Services &amp; Healthcare Image Archives</li> <li>• Content Repositories</li> <li>• Government Data Protection</li> </ul>	<ul style="list-style-type: none"> <li>• Big Data &amp; Analytics, Data Lake</li> <li>• HPC and AI/ML Workloads</li> <li>• Telco &amp; Cloud Service Providers</li> <li>• Financial Services &amp; Healthcare Image Archives</li> <li>• Content Repositories</li> <li>• Government Data Protection</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• Single Node High density, 2 rear mirrored boot drives, 4 NVMe SSD drives for caching</li> <li>• Drive Controller support via Broadcom® 3916 HW RAID or 3816 IT Mode</li> <li>• Server remote management: IPMI 2.0 / KVM over LAN / Media over LAN</li> <li>• Excellent Serviceability with Modular Design</li> </ul>	<ul style="list-style-type: none"> <li>• Single Node High density, 2 rear mirrored boot drives, 4 NVMe SSD drives for caching</li> <li>• Drive Controller support via Broadcom® 3916 HW RAID or 3816 IT Mode</li> <li>• Server remote management: IPMI 2.0 / KVM over LAN / Media over LAN</li> <li>• Excellent Serviceability with Modular Design</li> </ul>
Serverboard	SUPER® X12DSC-6	SUPER® X12DSC-6
Chipset	Intel® C621A	Intel® C621A
System Memory (Max.)	16 DIMM slots Up to 4TB ECC RDIMM/LRDIMM, DDR4-3200MHz	16 DIMM slots Up to 4TB ECC RDIMM/LRDIMM, DDR4-3200MHz
Expansion Slots	3 PCI-E 4.0 x16 LP slot(s)	3 PCI-E 4.0 x16 LP slot(s)
Onboard Storage Controller	Intel® SATA Broadcom® 3616	Intel® SATA Broadcom® 3616
Connectivity	2x 10GbE RJ45 port(s) with X550	2x 10GbE RJ45 port(s) with X550
VGA/Audio	1 VGA port	1 VGA port
Management	SuperDoctor® 5; Watch Dog; NMI; SUM; IPMI 2.0	SuperDoctor® 5; Watch Dog; NMI; SUM; IPMI 2.0
Drive Bays	60x 3.5" hot-swap SATA3/SAS3 drive bays; Optional RAID support via RAID/HBA controller AOC 2x 2.5" 7mm hot-swap hybrid NVMe/SATA drive bays	90x 3.5" hot-swap SATA3/SAS3 drive bays; Optional RAID support via RAID/HBA controller AOC 2x 2.5" 7mm hot-swap hybrid NVMe/SATA drive bays
Peripheral Bays	None	None
Power Supply	Redundant 2000W Titanium level (96%)	Redundant 2600W Titanium level (96%)
Cooling System	6x 8cm heavy duty fan(s)	6x 8cm heavy duty fan(s)
Form Factor	4U rackmount Enclosure: (17.6" x 7" x 34.1") Package: (31.89" x 29.92" x 44.88")	4U rackmount Enclosure: (17.6" x 7" x 42.1") Package: (35.82" x 29.92" x 53.15")

Storage

# X12 STORAGE

(For Complete System Only)



4U 60x Top-loading



4U 90x Top-loading



MODEL	SSG-640SP-DE1CR60	SSG-640SP-DE1CR90
Processor Support	3rd Gen Intel® Xeon® Scalable processors Dual Socket LG-4189 (Socket P+) supported TDP up to 250W; up to 11.2GT/s	3rd Gen Intel® Xeon® Scalable processors Dual Socket LG-4189 (Socket P+) supported TDP up to 250W; up to 11.2GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Big Data &amp; Analytics, Data Lake</li> <li>• HPC and AI/ML Workloads</li> <li>• Telco &amp; Cloud Service Providers</li> <li>• Financial Services &amp; Healthcare Image Archives</li> <li>• Content Repositories</li> <li>• Government Data Protection</li> </ul>	<ul style="list-style-type: none"> <li>• Big Data &amp; Analytics, Data Lake</li> <li>• HPC and AI/ML Workloads</li> <li>• Telco &amp; Cloud Service Providers</li> <li>• Financial Services &amp; Healthcare Image Archives</li> <li>• Content Repositories</li> <li>• Government Data Protection</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• Drive Controller support via Broadcom® 3916 HW RAID or 3816 IT Mode</li> <li>• Server remote management: IPMI 2.0 / KVM over LAN / Media over LAN</li> <li>• Excellent Serviceability with Modular Node Design</li> </ul>	<ul style="list-style-type: none"> <li>• Drive Controller support via Broadcom® 3916 HW RAID or 3816 IT Mode</li> <li>• Server remote management: IPMI 2.0 / KVM over LAN / Media over LAN</li> <li>• Excellent Serviceability with Modular Node Design</li> </ul>
Serverboard	SUPER® X12DSC-6	SUPER® X12DSC-6
Chipset	Intel® C621A	Intel® C621A
System Memory (Max.)	16 DIMM slots Up to 4TB ECC RDIMM/LRDIMM, DDR4-3200MHz	16 DIMM slots Up to 4TB ECC RDIMM/LRDIMM, DDR4-3200MHz
Expansion Slots	3 PCI-E 4.0 x16 LP slot(s)	3 PCI-E 4.0 x16 LP slot(s)
Onboard Storage Controller	Intel® SATA Broadcom® 3616	Intel® SATA Broadcom® 3616
Connectivity	2x 10GbE RJ45 port(s) with X550	2x 10GbE RJ45 port(s) with X550
VGA/Audio	1 VGA port	1 VGA port
Management	SuperDoctor® 5; Watch Dog; NMI; SUM; IPMI 2.0	SuperDoctor® 5; Watch Dog; NMI; SUM; IPMI 2.0
Drive Bays	60x 3.5" hot-swap SATA3/SAS3 drive bays; Optional RAID support via RAID/HBA controller AOC 4x 2.5" 7mm hot-swap hybrid NVMe/SATA drive bays	90x 3.5" hot-swap SATA3/SAS3 drive bays; Optional RAID support via RAID/HBA controller AOC 4x 2.5" 7mm hot-swap hybrid NVMe/SATA drive bays
Peripheral Bays	None	None
Power Supply	Redundant 2600W Titanium level (96%)	Redundant 2600W Titanium level (96%)
Cooling System	6x 8cm heavy duty fan(s)	6x 8cm heavy duty fan(s)
Form Factor	4U rackmount Enclosure: (17.6" x 7" x 34.1") Package: (31.89" x 29.92" x 44.88")	4U rackmount Enclosure: (17.6" x 7" x 42.1") Package: (35.82" x 29.92" x 53.15")

Storage

# X12 STORAGE

(For Complete System Only)



4U 60x Top-loading



4U 90x Top-loading



MODEL	SSG-640SP-DE2CR60	SSG-640SP-DE2CR90
Processor Support	3rd Gen Intel® Xeon® Scalable processors Dual Socket LG-4189 (Socket P+) supported TDP up to 250W; up to 11.2GT/s	3rd Gen Intel® Xeon® Scalable processors Dual Socket LG-4189 (Socket P+) supported TDP up to 250W; up to 11.2GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Big Data &amp; Analytics, Data Lake</li> <li>• HPC and AI/ML Workloads</li> <li>• Telco &amp; Cloud Service Providers</li> <li>• Financial Services &amp; Healthcare Image Archives</li> <li>• Content Repositories</li> <li>• Government Data Protection</li> </ul>	<ul style="list-style-type: none"> <li>• Big Data &amp; Analytics, Data Lake</li> <li>• HPC and AI/ML Workloads</li> <li>• Telco &amp; Cloud Service Providers</li> <li>• Financial Services &amp; Healthcare Image Archives</li> <li>• Content Repositories</li> <li>• Government Data Protection</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• Drive Controller support via Broadcom® 3916 HW RAID or 3816 IT Mode</li> <li>• Server remote management: IPMI 2.0 / KVM over LAN / Media over LAN</li> <li>• Excellent Serviceability with Modular Node Design</li> </ul>	<ul style="list-style-type: none"> <li>• Drive Controller support via Broadcom® 3916 HW RAID or 3816 IT Mode</li> <li>• Server remote management: IPMI 2.0 / KVM over LAN / Media over LAN</li> <li>• Excellent Serviceability with Modular Node Design</li> </ul>
Serverboard	SUPER® X12DSC-6	SUPER® X12DSC-6
Chipset	Intel® C621A	Intel® C621A
System Memory (Max.)	16 DIMM slots Up to 4TB ECC RDIMM/LRDIMM, DDR4-3200MHz	16 DIMM slots Up to 4TB ECC RDIMM/LRDIMM, DDR4-3200MHz
Expansion Slots	3 PCI-E 4.0 x16 LP slot(s)	3 PCI-E 4.0 x16 LP slot(s)
Onboard Storage Controller	Intel® SATA Broadcom® 3616	Intel® SATA Broadcom® 3616
Connectivity		
VGA/Audio	1 VGA port	1 VGA port
Management	SuperDoctor® 5; Watch Dog; NMI; SUM; IPMI 2.0	SuperDoctor® 5; Watch Dog; NMI; SUM; IPMI 2.0
Drive Bays	60x 3.5" hot-swap SATA3/SAS3 drive bays; Optional RAID support via HBA controller AOC 4x 2.5" 7mm hot-swap hybrid NVMe/SATA drive bays	90x 3.5" hot-swap SATA3/SAS3 drive bays; Optional RAID support via HBA controller AOC 4x 2.5" 7mm hot-swap hybrid NVMe/SATA drive bays
Peripheral Bays	None	None
Power Supply	Redundant 2600W Titanium level (96%)	Redundant 2600W Titanium level (96%)
Cooling System	6x 8cm heavy duty fan(s)	6x 8cm heavy duty fan(s)
Form Factor	4U rackmount Enclosure: (17.6" x 7" x 34.1") Package: (31.89" x 29.92" x 44.88")	4U rackmount Enclosure: (17.6" x 7" x 42.1") Package: (35.82" x 29.92" x 53.15")

Storage

# STORAGE

MegaDC - 1U Compute  
Compact Server with  
Onboard 25G Networking and AIOM



MegaDC - 1U Storage  
Top-loading Storage Featuring  
the New Internal Drawer Design



MODEL	SSG-1129P-ACR10N4L	SSG-6119P-ACR12N4L
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket LGA-3647 (Socket P) supported, CPU TDP support Up to 205W TDP, 2 UPI up to 10.4 GT/s. <i>Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).</i>	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket LGA-3647 (Socket P) supported, CPU TDP support Up to 205W TDP, 2 UPI up to 10.4 GT/s. <i>Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).</i>
Key Applications	<ul style="list-style-type: none"> <li>Front End Server</li> <li>Enterprise Server</li> <li>Scale-Out NAS</li> <li>Object Storage</li> <li>Infrastructure</li> <li>Data Center</li> </ul>	<ul style="list-style-type: none"> <li>Object Storage</li> <li>Big Data Analytics</li> <li>Scale-Out Density</li> <li>Data Center</li> <li>Hadoop &amp; Ceph storage solutions</li> <li>Database Applications</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>1x PCIe3.0 x16 slot for AIOM</li> <li>Broadcom® 3216 SAS3 IT mode controller</li> <li>10x 2.5" SAS3/SATA3 drive bays (4x NVMe/SAS3/SATA3 hybrid ports)</li> <li>2x M.2 NVMe/SATA up to 80mm</li> <li>Dual 25Gb SFP28 on board</li> </ul>	<ul style="list-style-type: none"> <li>1x PCIe3.0 x16 slot for AIOM</li> <li>12x 3.5" hot-swap SAS3/SATA3 drive bays with Broadcom 3224/3216 SAS3 IT mode controller</li> <li>4x 2.5" 7mm hot-swap NVMe/SATA drive bays</li> <li>2x M.2 NVMe/SATA up to 80mm</li> <li>Front Panel HDD Locate LED</li> <li>Internal Cable Arm</li> </ul>
Serverboard	SUPER● X11DPD-M25	SUPER● X11DPD-M25
Chipset	Intel® C621 chipset	Intel® C621 chipset
System Memory (Max.)*	Up to Up to 3TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 3TB 3DS ECC LRDIMM, DDR4-2933MHz, in 16 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only)	Up to Up to 3TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 3TB 3DS ECC LRDIMM, DDR4-2933MHz, in 16 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only)
Expansion Slots	1 PCI-E 3.0 x16 (HBA Add-On-Module), 1 PCI-E 3.0 x16 Left Riser Slot, 1 PCI-E 3.0 x8 Right Riser Slot, 1 PCI-E 3.0 x16 (AIOM)	1 PCI-E 3.0 x16 (HBA Add-On-Module), 1 PCI-E 3.0 x16 Left Riser Slot, 1 PCI-E 3.0 x8 Right Riser Slot, 1 PCI-E 3.0 x16 (AIOM)
Onboard Storage Controller	Intel® C621 controller for 12 SATA3 (6 Gbps) ports; RAID 0,1,5,10	Intel® C621 controller for 12 SATA3 (6 Gbps) ports; RAID 0,1,5,10
Connectivity	N/A	N/A
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	10x 2.5" hot-swap SAS3/SATA3 drive bays with 4x NVMe/SAS3/SATA3 hybrid ports (OEM SKU supports 10x 2.5" all hybrid ports)	12x 3.5" hot-swap SAS3/SATA3 drive bays and 4x 2.5" 7mm hot-swap NVMe/SATA drive bays
Peripheral Bays	N/A	N/A
Power Supply	800W 1U Platinum redundant power supply	800W 1U Platinum redundant power supply
Cooling System	6x 40x40x56mm 20.5K-17.6K RPM Counter-rotating Fan	6x 40x40x56mm 20.5K-17.6K RPM Counter-rotating Fan
Form Factor	1U 17.2" (437mm) x 1.7" (43mm) x 23.5" (597mm)	1U 17.6" (447mm) x 1.7" (43mm) x 37" (940mm)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details  
 † 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

# STORAGE

MegaDC - 2U GPU  
2 Double-Wide (FHFL)  
Active and Passive-Cooled GPUs

MegaDC - 2U I/O  
Flexible I/O  
5 Low-profile Cards

MegaDC - 2U Compute  
3.5" Storage with  
Optional SAS3 AOC



MODEL	SSG-6129P-ACR12N4G	SSG-6129P-ACR12N4L+**	SSG-6129P-ACR12N4L
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket LGA-3647 (Socket P) supported, CPU TDP support Up to 205W TDP, 2 UPI up to 10.4 GT/s. <i>Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).</i>	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket LGA-3647 (Socket P) supported, CPU TDP support Up to 205W TDP, 2 UPI up to 10.4 GT/s. <i>Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).</i>	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket LGA-3647 (Socket P) supported, CPU TDP support Up to 205W TDP, 2 UPI up to 10.4 GT/s. <i>Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).</i>
Key Applications	<ul style="list-style-type: none"> <li>GPU accelerated compute</li> <li>GPU Computing</li> <li>Data Center</li> <li>High End Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>Data Center</li> <li>Big Data Analytics</li> </ul>	<ul style="list-style-type: none"> <li>Database Processing &amp; Storage</li> <li>Data Center</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>1x PCIe3.0 x16 slot for AIOM</li> <li>12x 3.5" hot-swap SAS3/SATA3 drive bays</li> <li>2x M.2 NVMe/SATA up to 80mm</li> <li>Dual GPU support</li> <li>Full Height, Full Length GPU</li> <li>Dual 25Gb SFP28 on board</li> </ul>	<ul style="list-style-type: none"> <li>1x PCIe3.0 x16 slot for AIOM</li> <li>12x 3.5" hot-swap SAS3/SATA3 drive bays</li> <li>2x M.2 NVMe/SATA up to 80mm</li> </ul>	<ul style="list-style-type: none"> <li>1x PCIe3.0 x16 slot for AIOM</li> <li>12x 3.5" hot-swap SAS3/SATA3 drive bays</li> <li>2x M.2 NVMe/SATA up to 80mm</li> </ul>
Serverboard	SUPER® X11DPD-M25	SUPER® X11DPD-M25	SUPER® X11DPD-M25
Chipset	Intel® C621 chipset	Intel® C621 chipset	Intel® C621 chipset
System Memory (Max.)*	Up to Up to 3TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 3TB 3DS ECC LRDIMM, DDR4-2933MHz, in 16 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only)	Up to Up to 3TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 3TB 3DS ECC LRDIMM, DDR4-2933MHz, in 16 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only)	Up to 3TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 3TB 3DS ECC LRDIMM, DDR4-2933MHz, in 12 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only)
Expansion Slots	2 PCI-E 3.0 x16 Double-Wide FHFL GPGPU 1 PCI-E 3.0 x8 Low Profile, 1 PCI-E 3.0 x16 Low Profile, 1 PCI-E 3.0 x16 (AIOM)	1 PCI-E 3.0 x16 (HBA Add-On-Module), 3 PCI-E 3.0 x8 Low Profile, 1 PCI-E 3.0 x16 Low Profile, 1 PCI-E 3.0 x16 (AIOM)	1 PCI-E 3.0 x16 (HBA Add-On-Module), 1 PCI-E 3.0 x8 Low Profile, 1 PCI-E 3.0 x16 Low Profile, 1 PCI-E 3.0 x16 (AIOM)
Onboard Storage Controller	Intel® C621 controller for 12 SATA3 (6 Gbps) ports; RAID 0,1,5,10	Intel® C621 controller for 12 SATA3 (6 Gbps) ports; RAID 0,1,5,10	Intel® C621 controller for 12 SATA3 (6 Gbps) ports; RAID 0,1,5,10
Connectivity	N/A	N/A	N/A
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	12x 3.5" hot-swap SAS3/SATA3 drive bays with 4x NVMe/SAS3/SATA3 hybrid ports	12x 3.5" hot-swap SAS3/SATA3 drive bays with 4x NVMe/SAS3/SATA3 hybrid ports (OEM sku to support 12x 3.5" all hybrid part)	12x 3.5" hot-swap SAS3/SATA3 drive bays with 4x NVMe/SAS3/SATA3 hybrid ports
Peripheral Bays	N/A	N/A	N/A
Power Supply	1U 1600W Redundant Titanium AC Power Supply with PMbus 73.5x203x40mm	1U 1000W CRPS, +12V/+12Vsb output, Platinum Level AC-DC Power Supply Module (203x73.5x40mm)	1U 750W CRPS, +12V/+12Vsb output, Platinum Level AC-DC Power Supply Module (203x73.5x40mm)
Cooling System	3x 80x80x38mm high-performance PWM fans	3x 80x80x38mm high-performance PWM fans	3x 80x80x38mm high-performance PWM fans
Form Factor	2U 17.2" (437mm) x 3.5" (89mm) x 25.5" (647mm)	2U 17.2" (437mm) x 3.5" (89mm) x 25.5" (647mm)	2U 17.2" (437mm) x 3.5" (89mm) x 25.5" (647mm)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

\* 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

\*\* OEM SKU only

Storage

# STORAGE

1U 32 EDSFF E1.L (Long 9.5mm)  
Extremely High-Density All-Flash Servers,  
Supports E1.L form factor

1U 32 EDSFF E1.S (Short)  
Extremely High-Density All-Flash Servers,  
Supports E1.S form factor



MODEL	SSG-1029P-NEL32R	SSG-1029P-NES32R
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 165W, 3 UPI up to 10.4 GT/s. <i>Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).</i>	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket LGA-3647 (Socket P) supported, CPU TDP support Up to 205W TDP, 3 UPI up to 10.4 GT/s. <i>Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).</i>
Key Applications	<ul style="list-style-type: none"> <li>High Throughput Ingest</li> <li>High Density Hot Storage</li> <li>HPC / Data Analytics</li> <li>Media/Video Streaming</li> <li>Content Delivery Network (CDN)</li> <li>Big Data Top of Rack Storage</li> </ul>	<ul style="list-style-type: none"> <li>IOPS Intensive application</li> <li>Database</li> <li>HCI</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Front access to a total of 32 NVMe hot swap 9.5mm EDSFF Long SSDs</li> <li>2x PCI-E 3.0 x16 slots</li> <li>1600W Platinum Level high-efficiency power supply</li> <li>IPMI management with dedicated LAN</li> <li>Intel® C627 chipset support</li> <li>QAT</li> </ul>	<ul style="list-style-type: none"> <li>All flash NVMe drives</li> <li>Supports new E1.S form factor</li> <li>SKL (up to 205W), 3 UPI designed for up to 10.4 GT/s</li> <li>24 DIMM support</li> <li>Intel® Quick Assist Technology</li> <li>Redundant 1600W Titanium Level high-efficiency power supplies</li> </ul>
Serverboard	SUPER® X11DPS-RE	SUPER® X11DSF-E
Chipset	Intel® C627 chipset	Intel® C627 chipset
System Memory (Max.)*	24 DIMM slots; Up to 6TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, 3DS RDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)	24 DIMM slots; Up to 6TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)
Expansion Slots	2 PCI-E 3.0 x16 slots (Low Profile)	2 PCI-E 3.0 x16 (FHHL) slots, 1 PCI-E 3.0 x4 (Low Profile) slot
Onboard Storage Controller	N/A	PCIe fan out switching supporting 32x E1.S
Connectivity	Intel® X550 Dual Port 10GBase-T	Intel® X550 Dual Port 10GBase-T
VGA/Audio	Aspeed AST2500 BMC	Onboard VGA port
Management	Intel® Node Manager, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	32x Hot-swap EDSFF Long Drive slots	32 Hot-swap E1.S Drive slots
Peripheral Bays	N/A	N/A
Power Supply	Redundant(1+1) 1600W Platinum level high efficiency power supplies	Redundant(1+1) 1600W Platinum level high efficiency power supplies
Cooling System	8x 40x56mm PWM fan;	8x 40x56mm counter-rotation PWM fan;
Form Factor	1U Rackmount 17.26" (438mm) x 1.71" (43mm) x 35.95" (913mm); Enclosure: 438 x 43 x 913mm (17.26" x 1.7" x 35.95") Gross Weight: 90lbs (40.82kg) Net Weight: 55lbs (24.95kg)	1U 17.2" (437mm) x 1.7" (43mm) x 30" (762mm)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

<sup>†</sup> 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

<sup>††</sup> For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.



# STORAGE

1U SuperStorage  
1U 32 U.2 NVMe



1U SuperStorage  
1U 32 NF1 + 4 M.2 Drives



MODEL	SYS-1029P-N32R	SSG-1029P-NMR36L
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 140W, 3 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed <i>Cascade Lake Refresh</i> ).	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket LGA-3647 (Socket P) supported, CPU TDP support Up to 205W TDP, 3 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed <i>Cascade Lake Refresh</i> ).
Key Applications	<ul style="list-style-type: none"> <li>High Throughput Ingest</li> <li>High Density Hot Storage</li> <li>HPC / Data Analytics</li> <li>Media/Video Streaming</li> <li>Content Delivery Network (CDN)</li> <li>Big Data Top of Rack Storage</li> </ul>	<ul style="list-style-type: none"> <li>IOPS Intensive application</li> <li>Database</li> <li>HCI</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Dual Drawer/Tray with a total of 32 NVMe 2.5" SSDs</li> <li>2x PCI-E 3.0 x16 slots</li> <li>1600W Platinum Level high-efficiency power supply</li> <li>IPMI management with dedicated LAN</li> <li>Intel® C627 chipset support</li> <li>QAT</li> </ul>	<ul style="list-style-type: none"> <li>All flash NVMe drives</li> <li>Supports new NF1 form factor SKL (up to 205W), 3 UPI designed for up to 10.4 GT/s[nid:9987]</li> <li>24 DIMM support</li> <li>Intel® Quick Assist Technology</li> <li>Redundant 1600W Titanium Level high-efficiency power supplies</li> </ul>
Serverboard	SUPER● X11DPS-RE	SUPER● X11DSF-E
Chipset	Intel® C627 chipset	Intel® C627 chipset
System Memory (Max.)*	24 DIMM slots; Up to 6TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, 3DS RDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)	24 DIMM slots; Up to 6TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)
Expansion Slots	2 PCI-E 3.0 x16 slots (Low Profile)	2 PCI-E 3.0 x16(FHHL), 1 PCI-E 3.0 x4(LP) support
Onboard Storage Controller	N/A	PCIe fan out switching supporting 32x NF1
Connectivity	Intel® X550 Dual Port 10GBase-T	Dual LAN with 10GBase-T with Intel® X550;
VGA/Audio	Aspeed AST2500 BMC	
Management	Intel® Node Manager, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	32x 2.5" Drive slots	32x NF1 Drive slots + 4x SATA M.2 drive slots
Peripheral Bays	N/A	N/A
Power Supply	Redundant(1+1) 1600W Platinum level high efficiency power supplies	Redundant Power Supplies: PWS-1K62A-1R
Cooling System	8x 40x56mm PWM fan;	8x 40x56mm counter-rotation PWM fan;
Form Factor	1U Rackmount 1U 17.26" (438mm) x 1.7" (43mm) x 35.95" (913mm); Enclosure: 438 x 43 x 913mm (17.26" x 1.71" x 35.95") Gross Weight: 93lbs (42.18kg) Net Weight: 58lbs (26.31kg)	1U Rack mount 437 x 43 x 763 mm (17.2" x 1.7" x 30.0")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

<sup>†</sup> 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

<sup>††</sup> For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.

Storage

# STORAGE

*X11 SuperStorage*  
Expandable Storage, 32x NVMe JBOF



*1U SuperStorage*  
Storage Expandable, 32x EDSFF E1.L (Long) Drives



MODEL	SSG-136R-N32JBF	SYS-136R-NEL32JBF
Processor Support	N/A	N/A
Key Applications	<ul style="list-style-type: none"> <li>High Throughput Ingest</li> <li>High Density Hot Storage</li> <li>HPC / Data Analytics</li> <li>Media/Video Streaming</li> <li>Content Delivery Network (CDN)</li> <li>Big Data Top of Rack Storage</li> </ul>	<ul style="list-style-type: none"> <li>High Throughput Ingest</li> <li>High Density Hot Storage</li> <li>HPC / Data Analytics</li> <li>Media/Video Streaming</li> <li>Content Delivery Network (CDN)</li> <li>Big Data Top of Rack Storage</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Dual Drawer/Tray with a total of 32 NVMe 2.5" SSDs</li> <li>4x PCI-E 3.0 x16 IO ports, 2x X16 PCI-E 3.0 x16 slots</li> <li>1000W Titanium Level high-efficiency power supply</li> <li>IPMI management with dedicated LAN</li> </ul>	<ul style="list-style-type: none"> <li>Front access to a total of 32 NVMe hot swap 9.5mm EDSFF Long SSDs</li> <li>4x PCI-E 3.0 x16 IO ports, 2x PCI-E 3.0 x16 slots</li> <li>1000W Titanium Level high-efficiency power supply</li> <li>IPMI management with dedicated LAN</li> </ul>
Serverboard	N/A	N/A
Chipset	N/A	N/A
System Memory (Max.)*	N/A	N/A
Expansion Slots	2x X16 PCIe Slots	2x X16 PCIe Slots
Onboard Storage Controller	N/A	N/A
Connectivity	4x X16 PCIe IO ports	4x X16 PCIe IO ports
VGA/Audio	N/A	N/A
Management	IPMI 2.0 with Dedicated LAN	IPMI 2.0 with Dedicated LAN
Drive Bays	32x 2.5" Drive slots	32x 9.5mm EDSFF Long Drive slots
Peripheral Bays	N/A	N/A
Power Supply	Redundant(1+1) 1000W Titanium level high efficiency power supplies	Redundant(1+1) 1000W Titanium level high efficiency power supplies
Cooling System	8x 40mm Fans, N/A	8x 40mm Fans, N/A
Form Factor	1U Rackmount 17.26" x 1.71" x 31.95"; Enclosure: 438 x 43 x 812mm (17.26" x 1.71" x 31.95") Gross Weight: 65lbs (29.48kg) Net Weight: 49lbs (22.23kg)	1U Rackmount 17.26" x 1.71" x 31.95"; Enclosure: 438 x 43 x 812mm (17.26" x 1.71" x 31.95") Gross Weight: 65lbs (29.48kg) Net Weight: 49lbs (22.23kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

Storage

# STORAGE

X11 2U SuperStorage

X11 2U SuperStorage



MODEL	SSG-2029P-ACR24H SSG-2029P-ACR24L	SSG-2029P-E1CR24H SSG-2029P-E1CR24L
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s. <i>Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).</i>	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s. <i>Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).</i>
Key Applications	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Database Processing &amp; Storage</li> <li>HPC</li> <li>Large Database</li> <li>Web Cache</li> </ul>	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Database Processing &amp; Storage</li> <li>Enterprise Server</li> <li>HPC</li> <li>Data Center</li> <li>iSCSI SAN</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>2 Optional Onboard NVMe M.2</li> <li>24x 2.5" Hot-swap SAS3/SATA3 drive bays</li> <li>Up to 205W CPU support</li> <li>16 DIMM support</li> <li>Dual 10G BaseT</li> <li>3 Broadcom® 3108 HW SAS controllers</li> <li>1200W Titanium Level high-efficiency power supply</li> </ul>	<ul style="list-style-type: none"> <li>Broadcom 3108 SAS3 HW RAID controller</li> <li>2 Optional Onboard NVMe M.2</li> <li>24x 2.5" Hot-swap SAS3/SATA3 drive bays</li> <li>Up to 205W CPU support</li> <li>16 DIMM support</li> <li>Dual 10G BaseT</li> <li>Dual JBOD Expansion Ports</li> <li>1200W Titanium Level high-efficiency power supply</li> </ul>
Serverboard	SUPER● X11DPH-T	SUPER● X11DPH-T
Chipset	Intel® C622 chipset	Intel® C622 chipset
System Memory (Max.)*	16 DIMM slots; Up to 4TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)	16 DIMM slots; Up to 4TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)
Expansion Slots	3 PCI-E 3.0 x16, 4 PCI-E 3.0 x8.	3 PCI-E 3.0 x16, 4 PCI-E 3.0 x8. Slot 2 & 3 occupied by controller and JBOD Expansion Port
Storage Controller	-ACR24H: 3 Broadcom 3108 SAS3 add-on controller cards -ACR24L: 3 Broadcom 3008 SAS3 add-on controller cards	-E1CR24H: Broadcom 3108 SAS3 add-on controller card -E1CR24L: Broadcom 3008 SAS3 add-on controller card
Connectivity	Dual LAN with 10GBase-T with Intel® X557	Dual LAN with 10GBase-T with Intel® X557
VGA/Audio		Aspeed AST2500 BMC
Management	Intel® Node Manager, IPMI2.0, NMI, SPM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, NMI, SPM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	24x 2.5" hot-swap SAS3/SATA3 drive bays	24x 2.5" hot-swap SAS3/SATA3 drive bays
Peripheral Bays	2x 2.5" rear hot-swap SATA3 drive bays; 2 Optional onboard NVMe M.2 (up to 110mm)	2x 2.5" rear hot-swap SATA3 drive bays; 2 Optional onboard NVMe M.2 (up to 110mm)
Power Supply	1200W Titanium Level high-efficiency power supply	1200W Titanium Level high-efficiency power supply
Cooling System	3x 8cm hot-swap redundant PWM cooling fans.	3x 8cm hot-swap redundant PWM cooling fans.
Form Factor	2U 17.2" (437mm) x 3.5" (89mm) x 24.8" (630mm)	2U 17.2" (437mm) x 3.5" (89mm) x 24.8" (630mm)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

<sup>†</sup> 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

<sup>††</sup> For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.

# STORAGE

X11 SuperStorage  
Super SBB

X11 SuperStorage  
Super SBB

X11 SuperStorage  
Super SBB



MODEL	SSG-2029P-DN2R24L	SSG-2029P-DN2RR32L	SSG-2029P-DN2R48L
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).
Key Applications	<ul style="list-style-type: none"> <li>High Availability Hardware Platform</li> <li>Enterprise File/Block Storage Server</li> <li>Failover Cluster</li> <li>Corporate Database</li> <li>HPC</li> <li>Virtualization</li> </ul>	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Lustre</li> <li>HPC</li> <li>Virtualization</li> <li>High Availability Storage Appliance Platform</li> <li>All Flash Storage</li> </ul>	<ul style="list-style-type: none"> <li>High Availability Hardware Platform</li> <li>Enterprise File/Block Storage Server</li> <li>Failover Cluster</li> <li>Corporate Database</li> <li>HPC</li> <li>Virtualization</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Redundant DP SBB supporting 24x U.2 Dual-Port NVMe</li> <li>IPMI management with dedicated LAN</li> <li>2000W High Efficiency (96%) Titanium Level Redundant Power Supplies</li> <li>NV-DIMM support</li> <li>Shared storage between redundant controllers</li> <li>Node to node heartbeat/ NTB connectivity</li> </ul>	<ul style="list-style-type: none"> <li>Dual Drawer/Tray with a total of 32 NVMe Ruler SSDs</li> <li>IPMI management with dedicated LAN</li> <li>2000W High-Efficiency (96%) Titanium Level Redundant Power Supplies [nid:58</li> <li>NV-DIMM support</li> <li>Shared storage between redundant controllers</li> <li>Node to node heartbeat/ NTB connectivity</li> </ul>	<ul style="list-style-type: none"> <li>Redundant DP SBB supporting 48x U.2 Dual-Port NVMe</li> <li>IPMI management with dedicated LAN</li> <li>2000W High Efficiency (96%) Titanium Level Redundant Power Supplies [nid:58</li> <li>NV-DIMM support</li> <li>Shared storage between redundant controllers</li> <li>Node to node heartbeat/ NTB connectivity</li> </ul>
Serverboard Chipset	SUPER® X11DSN-TS Intel® C624 chipset	SUPER® X11DSN-TSq Intel® C627 chipset	SUPER® X11DSN-TS Intel® C624 chipset
System Memory (Max.)*	12 DIMM slots; Up to 3TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)	Up to 3TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 3TB 3DS ECC LRDIMM, DDR4-2933MHz, in 12 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only)	12 DIMM slots; Up to 3TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)
Expansion Slots	2 PCI-E 3.0 x16(LP,HL); 1 PCI-E 3.0 x16 SIOM	2 PCI-E 3.0 x16 Low-profile slots, 1 PCI-E 3.0 x16 SIOM slot from CPU2, x8 signals shared with QAT enabled board per node	2 PCI-E 3.0 x16(LP,HL) per node; 1 PCI-E 3.0 x16 SIOM
Onboard Storage Controller	N/A	N/A	N/A
Connectivity	Dual LAN with 10GBase-T with Intel® X557-AT2; Dual 10G private Ethernet between controller nodes; Dedicated B2B connection using NTB by PLX PCI-E 3.0 x8	Dual LAN with 10GBase-T with Intel® X772 + PHY Intel® X557; Dual 10G private Ethernet between controller nodes; Node to node PCI-E x8 NTB link	Dual LAN with 10GBase-T with Intel® X557-AT2; Dual 10G private Ethernet between controller nodes; Dedicated B2B connection using NTB by PLX PCI-E 3.0 x8
VGA/Audio	1 VGA D-Sub Connector, 1 Asped AST2500 BMC	Intel® Node Manager; IPMI v2.0 with KVM support; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5; Watchdog	1 VGA D-Sub Connector, 1 Asped AST2500 BMC
Management	Intel® Node Manager; IPMI (Intelligent Platform Management Interface) v2.0 with KVM support; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5; Watchdog;	Intel® Node Manager; IPMI v2.0 with KVM support; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5; Watchdog	Intel® Node Manager; IPMI (Intelligent Platform Management Interface) v2.0 with KVM support; IPMI2.0; KVM with dedicated LAN; NMI; SPM; SSM; SUM; SuperDoctor® 5; Watchdog;
Drive Bays	24x U.2 hot-swap Dual-Port NVMe drive bays	32 hot-swappable Intel Ruler NVMe drive bays + 1x M.2 per node	48x U.2 hot-swap Dual-Port NVMe drive bays
Peripheral Bays	2 SATA DOM per node; 1 Optional onboard NVMe M.2 (up to 80m) per node	N/A	2 SATA DOM per node; 1 Optional onboard NVMe M.2 (up to 80mm)
Power Supply	2000W Redundant Titanium Level high-efficiency power supplies	2000W Redundant Titanium Level high-efficiency power supplies	2000W Redundant Titanium Level high-efficiency power supplies
Cooling System	5x 8cm high-performance PWM fans;	6x 6cm counter rotating fans	5x 8cm high-performance PWM fans;
Form Factor	2U Rackmount 17.2" (437mm) x 3.5" (89mm) x 25.6" (650mm)	2U Rackmount, 17.2" (437mm) x 3.5" (89mm) x 33.3" (846mm)	2U 17.2" (437mm) x 3.5" (89mm) x 33.3" (846mm)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

<sup>†</sup> 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

<sup>††</sup> For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.

# STORAGE

SuperStorage

X11 2U SuperStorage

X11 2U SuperStorage



MODEL	SSG-2029P-E1CR48H SSG-2029P-E1CR48L	SSG-6029P-E1CR12H SSG-6029P-E1CR12L	SSG-6029P-E1CR12T
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed <i>Cascade Lake Refresh</i> ).	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed <i>Cascade Lake Refresh</i> ).	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed <i>Cascade Lake Refresh</i> ).
Key Applications	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Data Center</li> <li>Database Processing &amp; Storage</li> <li>Enterprise Server</li> <li>HPC</li> <li>iSCSI SAN</li> </ul>	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Database Processing &amp; Storage</li> <li>Enterprise Server</li> <li>HPC</li> <li>Data Center</li> <li>iSCSI SAN</li> </ul>	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Database Processing &amp; Storage</li> <li>Enterprise Server</li> <li>HPC</li> <li>Data Center</li> <li>iSCSI SAN</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>48x 2.5" Drive in 2U Form Factor</li> <li>Supports Dual 205W Skylake CPU</li> <li>24 DIMM sockets</li> <li>Support SIOM Card for Multiple IO Option</li> <li>Redundant 1600W Titanium Level high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>Broadcom 3008 SAS3 IT Mode controller</li> <li>2 Optional Onboard NVMe M.2</li> <li>12x 3.5" hot-swap SAS3/SATA3 drive bays</li> <li>Up to 205W CPU support</li> <li>16 DIMM support</li> <li>Dual 10G BaseT</li> <li>Dual JBOD Expansion Ports</li> <li>1200W Titanium Level high-efficiency power supply</li> </ul>	<ul style="list-style-type: none"> <li>Broadcom 3108 SAS3 HW RAID controller</li> <li>2 Optional Onboard NVMe M.2</li> <li>12x 3.5" hot-swap SAS3/SATA3 drive bays</li> <li>Up to 205W CPU support</li> <li>16 DIMM support</li> <li>Dual 10G BaseT</li> <li>1200W Titanium Level high-efficiency power supply</li> </ul>
Serverboard	SUPER● X11DSC+	SUPER● X11DPH-T	SUPER● X11DPH-T
Chipset	Intel® C621 chipset	Intel® C622 chipset	Intel® C622 chipset
System Memory (Max.)*	24 DIMM slots; Up to 6TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)	Up to Up to 4TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 4TB 3DS ECC LRDIMM, DDR4-2933MHz, in 16 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only);	16 DIMM slots; Up to 4TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)
Expansion Slots	2 PCI-E 3.0 x16, 1 PCI-E 3.0 x8, 1 PCI-E 3.0 x16 for Add-On-Module (AOM)	3 PCI-E 3.0 x16, 4 PCI-E 3.0 x8. Slot 2 & 3 occupied by controller and JBOD Expansion Port	3 PCI-E 3.0 x16, 4 PCI-E 3.0 x8. Slot 3 occupied by controller
Storage Controller	-E1CR48H: Broadcom® 3108 SAS3 HW RAID controller -E1CR48L: Broadcom® 3008 IT Mode SAS Controller	-E1CR12H: Broadcom 3108 SAS3 add-on controller card -E1CR12L: Broadcom 3008 SAS3 add-on controller card	3108 SAS3 add-on HW RAID controller
Connectivity	N/A	Dual LAN with 10GBase-T with Intel® X557	Dual LAN with 10GBase-T with Intel® X557
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, KVM with dedicated LAN, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, NMI, SPM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, NMI, SPM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	48x 2.5" hot-swap drive bay 2x 2.5" hot-swap drive bay	12x 3.5" hot-swap SAS3/SATA3 drive bays	12x 3.5" hot-swap SAS3/SATA3 drive bays
Peripheral Bays	N/A	2x 2.5" rear hot-swap SATA3 drive bays; 2 Optional onboard NVMe M.2 (up to 110mm)	2x 2.5" rear hot-swap SATA3 drive bays; 2 Optional onboard NVMe M.2 (up to 110mm)
Power Supply	PWS-1K62P-1R	1200W Titanium Level high-efficiency power supply	1200W Titanium Level high-efficiency power supply
Cooling System	5x 8cm high-performance PWM fans;	3x 8cm hot-swap redundant PWM cooling fans.	3x 8cm hot-swap redundant PWM cooling fans.
Form Factor	2U 17.2" (437mm) x 3.5" (89mm)	2U 17.2" (437mm) x 3.5" (89mm) x 25.5" (647mm)	2U 17.2" (437mm) x 3.5" (89mm) x 25.5" (647mm)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

<sup>†</sup> 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

<sup>††</sup> For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.

Storage

# STORAGE

X11 2U SuperStorage



Simply Double Storage



MODEL	SSG-6029P-E1CR16T	SSG-6029P-E1CR24H SSG-6029P-E1CR24L
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s. <i>Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).</i>	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s. <i>Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).</i>
Key Applications	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Database Processing &amp; Storage</li> <li>Enterprise Server</li> <li>HPC</li> <li>Data Center</li> <li>iSCSI SAN</li> </ul>	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Data Center</li> <li>Database Processing &amp; Storage</li> <li>Enterprise Server</li> <li>HPC</li> <li>iSCSI SAN</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Broadcom 3108 SAS3 HW RAID controller</li> <li>2 Optional Onboard NVMe M.2</li> <li>16x 3.5" Hot-swap SAS3/SATA3 drive bays</li> <li>Up to 205W CPU support</li> <li>16 DIMM support</li> <li>Dual 10G BaseT</li> <li>Redundant 1600W Titanium Level high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>24x 3.5" Drives in 2U Form Factor</li> <li>Supports Dual 205W Skylake CPU</li> <li>24 DIMM sockets</li> <li>Support SIOM Card for Multiple IO Option</li> </ul>
Serverboard	SUPER● X11DPH-T	SUPER● X11DSC+
Chipset	Intel® C622 chipset	Intel® C621 chipset
System Memory (Max.)*	16 DIMM slots; Up to 4TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)	24 DIMM slots; Up to 6TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)
Expansion Slots	3 PCI-E 3.0 x16, 4 PCI-E 3.0 x8. Slot 1 occupied by controller	2 PCI-E 3.0 x16, 1 PCI-E 3.0 x8, 1 PCI-E 3.0 x16 for Add-On-Module (AOM)
Onboard Storage Controller	Broadcom 3108 SAS3 add-on controller card	-E1CR24H: Broadcom® 3108 SAS3 HW RAID controller -E1CR24L: Broadcom® 3008 IT Mode SAS Controller
Connectivity	Dual LAN with 10GBase-T with Intel® X557	N/A
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager, IPMI2.0, NMI, SPM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, KVM with dedicated LAN, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	16x 3.5" hot-swap SAS3/SATA3 drive bays	24x 3.5" hot-swap drive bay 2x 2.5" hot-swap drive bay
Peripheral Bays	2x 2.5" rear hot-swap SATA3 drive bays; 2 Optional onboard NVMe M.2 (up to 110mm)	N/A
Power Supply	1600W Titanium Level high-efficiency power supply	Redundant 1600W Titanium Level high-efficiency power supplies
Cooling System	3x 8cm hot-swap redundant PWM cooling fans.	5x 8cm high-performance PWM fans;
Form Factor	2U 17.2" (437mm) x 3.5" (89mm) x 27.75" (705mm) Gross Weight: 61lbs (27.67kg) Net Weight: 34lbs (15.42kg)	2U 17.2" (437mm) x 3.5" (89mm) x 34" (863.6mm) Gross Weight: 74.5lbs (33.79kg) Net Weight: 52lbs (23.59kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

<sup>†</sup> 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

<sup>††</sup> For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.

Storage

# STORAGE

X11 3U SuperStorage



X11 4U SuperStorage



MODEL	SSG-6039P-E1CR16H SSG-6039P-E1CR16L	SSG-6049P-E1CR24H SSG-6049P-E1CR24L
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s. <i>Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).</i>	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s. <i>Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).</i>
Key Applications	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Data Center</li> <li>Database Processing &amp; Storage</li> <li>Enterprise Server</li> <li>HPC</li> <li>iSCSI SAN</li> </ul>	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Data Center</li> <li>Database Processing &amp; Storage</li> <li>Enterprise Server</li> <li>HPC</li> <li>iSCSI SAN</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Optional Slim DVD support</li> <li>2 Optional Onboard NVMe M.2</li> <li>16x 3.5" Hot-swap SAS3/SATA3 drive bays</li> <li>Up to 205W CPU support</li> <li>16 DIMM support</li> <li>Dual 10G BaseT</li> <li>Dual JBOD Expansion Ports</li> <li>1200W Titanium Level high-efficiency power supply</li> </ul>	<ul style="list-style-type: none"> <li>Broadcom 3008 SAS3 IT Mode Controller</li> <li>2 Optional Onboard NVMe M.2</li> <li>24x 3.5" Hot-swap SAS3/SATA3 drive bays</li> <li>Up to 205W CPU support</li> <li>16 DIMM support</li> <li>Dual 10G BaseT</li> <li>Dual JBOD Expansion Ports</li> <li>1200W Titanium Level high-efficiency power supply</li> </ul>
Serverboard	SUPER● X11DPH-T	SUPER● X11DPH-T
Chipset	Intel® C622 chipset	Intel® C622 chipset
System Memory (Max.)*	16 DIMM slots; Up to 4TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)	16 DIMM slots; Up to 4TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)
Expansion Slots	3 PCI-E 3.0 x16, 4 PCI-E 3.0 x8. Slot 2 & 3 occupied by controller and JBOD Expansion Port	3 PCI-E 3.0 x16, 4 PCI-E 3.0 x8. Slot 2 & 3 occupied by controller and JBOD Expansion Port
Storage Controller	-E1CR116H: Broadcom 3108 SAS3 add-on controller card -E1CR116L: Broadcom 3008 SAS3 add-on controller card	-E1CR24H: Broadcom 3108 SAS3 add-on controller card -E1CR24L: Broadcom 3008 SAS3 add-on controller card
Connectivity	Dual LAN with 10GBase-T with Intel® X557	Dual LAN with 10GBase-T with Intel® X557
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager, IPMI2.0, NMI, SPM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, NMI, SPM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	16x 3.5" hot-swap SAS3/SATA3 drive bays	24x 3.5" hot-swap SAS3/SATA3 drive bays
Peripheral Bays	2x 2.5" rear hot-swap drive bays; 2 Optional onboard NVMe M.2 (up to 110mm)	2x 2.5" rear hot-swap SATA3 drive bays; 2 Optional onboard NVMe M.2 (up to 110mm)
Power Supply	1200W Titanium Level high-efficiency power supply	1200W Titanium Level high-efficiency power supply
Cooling System	3x 8cm hot-swap redundant PWM cooling fans. 2x 8cm rear hot-swap exhaust PWM fan	3x 8cm hot-swap redundant PWM cooling fans. 2x 8cm rear hot-swap exhaust PWM fan
Form Factor	3U 17.2" (437mm) x 5.2" (132mm) x 25.5" (647mm)	4U 17.2" (437mm) x 7" (178mm) x 26" (660mm)

Storage

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

<sup>†</sup> 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

<sup>††</sup> For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.

# STORAGE

X11 4U SuperStorage  
36x 3.5" HDDs

4U Top-Loading Storage  
45x 3.5" HDDs, 26" Short-Depth

4U Top-Loading Storage  
60x 3.5" HDDs



MODEL	SSG-6049P-E1CR36H SSG-6049P-E1CR36L	SSG-6049P-E1CR45H SSG-6049P-E1CR45L SSG-6049P-E1CR45L+	SSG-6049P-E1CR60H SSG-6049P-E1CR60L SSG-6049P-E1CR60L+
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s. <i>Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).</i>	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s. <i>Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).</i>	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s. <i>Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).</i>
Key Applications	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Data Center</li> <li>Database Processing &amp; Storage</li> <li>Enterprise Server</li> <li>HPC</li> <li>iSCSI SAN</li> </ul>	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Data Center</li> <li>Database Processing &amp; Storage</li> <li>Enterprise Server</li> <li>HPC</li> <li>iSCSI SAN</li> </ul>	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Data Center</li> <li>Database Processing &amp; Storage</li> <li>Enterprise Server</li> <li>HPC</li> <li>iSCSI SAN</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Broadcom 3108 SAS3 HW RAID controller</li> <li>2x Optional Onboard NVMe M.</li> <li>36x 3.5" Hot-swap SAS3/SATA3 drive bays</li> <li>Up to 205W CPU support</li> <li>16 DIMM support</li> <li>Dual 10G BaseT</li> <li>Dual JBOD Expansion Ports</li> <li>1200W Titanium Level high-efficiency power supply</li> </ul>	<ul style="list-style-type: none"> <li>45x 3.5" Drive in 4U Form Factor</li> <li>Supports Dual 205W Skylake CPU</li> <li>24 DIMM sockets</li> <li>Support SIOM Card for Multiple IO Options</li> </ul>	<ul style="list-style-type: none"> <li>60x 3.5" Drive in 4U Form Factor</li> <li>Supports Dual 205W Skylake CPU</li> <li>24 DIMM sockets</li> <li>Support SIOM Card for Multiple IO Options</li> </ul>
Serverboard Chipset	SUPER● X11DPH-T Intel® C622 chipset	SUPER● X11DSC+ Intel® C621 chipset	SUPER● X11DSC+ Intel® C621 chipset
System Memory (Max.)*	16 DIMM slots; Up to 4TB DDR4-2933 MHz† with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM†† (128/256/512GB)	24 DIMM slots; Up to 6TB DDR4-2933 MHz† with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM†† (128/256/512GB)	24 DIMM slots; Up to 6TB DDR4-2933 MHz† with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM†† (128/256/512GB)
Expansion Slots	3 PCI-E 3.0 x16, 4 PCI-E 3.0 x8. Slot 2 & 3 occupied by controller and JBOD Expansion Port	2 PCI-E 3.0 x16, 1 PCI-E 3.0 x8	2 PCI-E 3.0 x16, 1 PCI-E 3.0 x8
Storage Controller	-E1CR36H: Broadcom 3108 SAS3 add-on controller card -E1CR36L: Broadcom 3008 SAS3 add-on controller card	-E1CR45H: Broadcom® 3108 SAS3 HW RAID controller -E1CR45L: Broadcom® 3008 IT Mode SAS Controller -E1CR45L+: 3616 IT Mode x16 SAS Controller	-E1CR60H: Broadcom® 3108 SAS3 HW RAID controller -E1CR60L: Broadcom® 3008 IT Mode SAS controller -E1CR60L+: 3616 IT Mode SAS controller
Connectivity	Dual LAN with 10GBase-T with Intel® X557	SIOM Networking Card For Flexible Networking Options	SIOM Networking Card For Flexible Networking Options
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager, IPMI2.0, NMI, SPM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, KVM with dedicated LAN, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, KVM with dedicated LAN, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	36x 3.5" hot-swap SAS3/SATA3 drive bays	45x 3.5" hot-swap SAS/SATA drive bay with SES3	60x 3.5"/2.5" hot-swap SAS3/SATA3 drive bays
Peripheral Bays	2x 2.5" rear hot-swap SATA3 drive bays; 2 Optional onboard NVMe M.2 (up to 110m)	2x 2.5" hot-swap drive bay	2x 2.5" hot-swap SATA3 drive bays
Power Supply	1200W Titanium Level high-efficiency power supply	1600W Redundant Platinum Level High-Efficiency Power Supplies	1600W Redundant Platinum Level High-Efficiency Power Supplies
Cooling System	7x 8cm high-performance PWM fans, air shroud	5x 80mm rear hot-swap exhaust PWM fan;	5x 80mm rear hot-swap exhaust PWM fan;
Form Factor	4U 17.2" (437mm) x 7" (178mm) x 27.5" (699mm)	4U Rackmount 17.2" (437mm) x 7" (178mm) x 26" (660mm)	4U Rackmount 17.2" (437mm) x 7" (178mm) x 30.2" (767.08mm) Gross Weight: 170.5lbs (77.34kg) Net Weight: 118lbs (53.52kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

† 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

†† For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.



# STORAGE

(For Complete System Only)

1U Storage  
12x 3.5 Data Drives in 1U



12-bay SoC Storage  
CDN, Warm Storage, Web/Database Server



Cold Storage  
12x 3.5 Data Drives in 1U



MODEL	SYS-6019P-ACR12L+	SYS-5019D8-TR12P	SSG-5018A-AR12L
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Dual Socket P (LGA 3647) supported, CPU TDP support 205W, 2 UPI up to 10.4 GT/s. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed <i>Cascade Lake Refresh</i> ).	Intel® Xeon® D-2146NT SoC Processor 8-Core, 16 Threads 2.3 GHz, 80W	Intel® Atom® Processor C2750.  Socket FCBGA1283 supported, CPU TDP support 20W
Key Applications	<ul style="list-style-type: none"> <li>Object Storage</li> <li>Data Center Database Processing &amp; Storage</li> <li>Enterprise Server</li> <li>Big Data Analytics</li> <li>Hadoop &amp; Ceph storage solutions</li> </ul>	<ul style="list-style-type: none"> <li>Warm Storage</li> <li>Content Delivery Networks (CDNs)</li> <li>MEC (Multi-access Edge Computing)</li> <li>VM and SMB Servers</li> </ul>	<ul style="list-style-type: none"> <li>Storage Nodes</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Broadcom® 3216 SAS3 IT mode controller</li> <li>12x 3.5" hot-swap SAS3/SATA3 drive bays</li> <li>4x 2.5" 7mm hot-swap NVMe/SATA drive bays</li> <li>1x M.2 NVMe up to 110mm</li> <li>Front Panel HDD Locate LED</li> <li>Internal Cable Arm</li> </ul>	<ul style="list-style-type: none"> <li>2-Port 1Gig Base-T, 2-Port 10Gig Base-T and 2-port 10G SFP+ Network Port</li> <li>IPMI 2.0 (dedicated LAN) with Virtual Media/ KVM over LAN</li> <li>With cost-effective AOC support 12x 3.5" SAS3, 2x fixed 2.5 SAS3/SATA3</li> <li>Built in Intel QAT up to 40Gbps Crypto/ Compression</li> <li>Redundant or Single PWS Option</li> </ul>	<ul style="list-style-type: none"> <li>Hardware Drive Power Control</li> <li>1 PCI-E 2.0 x4 (in x8 slot)</li> <li>12x 3.5" data drives in 1U</li> <li>Cost optimized RAID: IT Mode only</li> </ul>
Serverboard	SUPER● X11DDW-NT	SUPER● X11SDV-8C-TP8F	SUPER● A1SA7-2750F
Chipset	Intel® C622 chipset	Intel® Xeon® D-2146NT SoC Processor	System on Chip chipset
System Memory (Max.)*	Up to Up to 3TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 3TB 3DS ECC LRDIMM, DDR4-2933MHz, in 12 DIMM slots; Up to 2TB Intel® Optane™ DC Persistent Memory in memory mode (Cascade Lake only).	Up to 256GB Registered ECC RDIMM, DDR4-2133MHz; Up to 512GB LRDIMM LRDIMM, in 4 DIMM slots	64GB Unbuffered ECC/non-ECC UDIMM, DDR3-1600MHz, in 4 DIMM slots; x8 data width
Expansion Slots	3 PCI-E 3.0 x16, 1 PCI-E 3.0 x16 for Add-On-Module (AOM)	1 PCI-E 3.0 x8	1 PCI-E 2.0 x4 (LP, HL, in x8 slot)
Onboard Storage Controller	Intel® C622 controller for 4 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel RSTe RAID	IT Mode
Connectivity	N/A	2x USB 3.0, VGA	N/A
VGA/Audio	Aspeed AST2500 BMC	Built-in VGA from BMC	Aspeed AST2400 BMC
Management	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	IPMI 2.0 w/ dedicated LAN port & KVM; 4 Pin PWM Fan Speed control; Thermal and voltage monitoring	IPMI2.0, NMI, SuperDoctor® 5, Watchdog
Drive Bays	12x 3.5" hot-swap SAS3/SATA3 drive bays 4x 2.5" 7mm hot-swap NVMe/SATA drive bays	12x Hot-Swap 3.5" SATA3 drive bays (default); With optional AOC-S3216L-L16iT: support 12x 3.5" SAS3 + 2x 2.5" fixed SAS3/SATA3	12x 3.5" hot-swap HDD bays for server chassis
Peripheral Bays	N/A	N/A	SATADOM for OS drive
Power Supply	800W 1U Platinum redundant power supply	400W Redundant Power (PWS-407P-1R), 80PLUS Platinum	PWS-406P-1R
Cooling System	6x 40x40x56mm 20.5K-17.6K RPM Counter-rotating Fan;	6x 4cm 4-pin PWM fans	6x 40x28mm PWM fan;
Form Factor	1U 17.6" (447mm) x 1.7" (43mm) x 37.5" (952.5mm)	437 x 43 x 813mm (17.2" x 1.7" x 32")	1U 17.2" (437mm) x 1.7" (43mm) x 32" (813mm)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

† 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

\*\* For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.

# STORAGE

2U Storage  
3x 3108 HW controller  
Low Latency

2U Storage  
3x 3008 IT Mode controller  
Low Latency

24-Bay 2U Storage  
High Availability Storage Platform



MODEL	SSG-2028R-ACR24H	SSG-2028R-ACR24L	SSG-2028R-DE2CR24L
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Redundant dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>High Performance NAS Servers</li> <li>Web Cache</li> <li>Corporate Database</li> <li>Database Processing &amp; Storage</li> <li>HPC</li> <li>Large Database</li> </ul>	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Database Processing &amp; Storage</li> <li>HPC</li> <li>Large Database</li> <li>Web Cache</li> </ul>	<ul style="list-style-type: none"> <li>High Availability Storage Appliance Platform</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>145W CPU support</li> <li>3 3108 HW RAID controller</li> <li>SAS 3.0 (12Gbps) support</li> <li>16 DIMM support DDR4-2133MHz</li> <li>2x 10GBase-T Ports</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> </ul>	<ul style="list-style-type: none"> <li>145W CPU support</li> <li>3 3008 HBA controller</li> <li>16 DIMM support DDR4-2133MHz</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>SAS 3.0 (12Gbps) support</li> <li>2x 10GBase-T Ports</li> </ul>	<ul style="list-style-type: none"> <li>Redundant DP SBB supporting shared 24x 2.5" SAS HDD</li> <li>Intel® X540 Dual port 10GBase-T</li> <li>Dual JBOD Expansion Ports per node</li> <li>NV-DIMM support</li> <li>Up to 3 add-on cards per node</li> <li>Redundant 1200W <b>Titanium Level</b> redundant power supplies</li> </ul>
Serverboard	SUPER● X10DRH-iT	SUPER● X10DRH-iT	Redundant SUPER● X10DRS-2U
Chipset	Intel® C612 Express chipset	Intel® C612 Express chipset	Redundant Intel® C612 chipset
System Memory (Max.)*	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Redundant up to 1TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 8 DIMM slots
Expansion Slots	1 PCI-E 3.0 x16 6 PCI-E 3.0 x8	1 PCI-E 3.0 x16 6 PCI-E 3.0 x8	Redundant 3 PCI-E 3.0 x8 Low profile expansion slots per controller
Onboard Storage Controller	3 3108 HW RAID controller	3 3008 HBA controllers	Redundant 3008 SAS controller
Connectivity	Dual LAN with 10GBase-T with Intel® X540 10GbE Controller	Dual LAN with 10GBase-T with Intel® X540 10GbE Controller	Redundant dual LAN with 10GBase-T with Intel® X540 10GbE Controller per node 100M private Ethernet between controller nodes
VGA/Audio	AST2400 VGA	AST2400 VGA	Redundant AST2400 VGA
Management	Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Redundant IPMI 2.0 + KVM with dedicated LAN
Drive Bays	24x 2.5" hot-swap SAS3/SATA3 drive bay w/ full SES-II support	24x 2.5" hot-swap SAS3/SATA3 drive bay w/ full SES-II support	Shared 24x 2.5" hot-swap SAS drive bay with SES2
Peripheral Bays	Optional 2x 2.5" Rear Hot-Swap Drive Bays	Optional 2x 2.5" Rear Hot-Swap Drive Bays	N/A
Power Supply	Redundant 920W <b>Platinum Level</b> Digital high-efficiency power supplies	Redundant 920W <b>Platinum Level</b> Digital high-efficiency power supplies	Redundant 1200W <b>Titanium Level</b> high-efficiency power supplies with I <sup>2</sup> C and PMBus
Cooling System	3x cooling fans	3x cooling fans	Redundant 4x 4cm PWM cooling fans per node
Form Factor	2U Rackmount	2U Rackmount	2U Rackmount 437 x 89 x 622mm (17.2" x 3.5" x 24.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# STORAGE

SBB Storage  
20x 2.5" NVMe drive bays



SBB Storage  
24x 2.5" dual port NVMe drive bays



SBB Storage  
40x 2.5" NVMe drive bays



MODEL	SSG-2028R-DN2R20L	SSG-2028R-DN2R24L	SSG-2028R-DN2R40L
Processor Support	Intel® Xeon® processor E5-2600 v3, Intel® Xeon® processor E5-2600 v4. Dual Socket R3 (LGA 2011) supported, CPU TDP support Up to 145W TDP	Intel® Xeon® processor E5-2600 V3/V4 with QPI up to 9.6GT/s	Intel® Xeon® processor E5-2600 V3 Intel® Xeon® processor E5-2600 V4 with UPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Lustre</li> <li>HPC</li> <li>Virtualization</li> </ul>	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Lustre</li> <li>HPC</li> <li>Virtualization</li> <li>High Availability Storage Appliance Platform</li> </ul>	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Lustre</li> <li>HPC</li> <li>Virtualization</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Dual port NVMe</li> <li>Support SIOM Card for Multiple IO Option</li> <li>2000W High-Efficiency (96%) Titanium Level Redundant Power Supplies</li> </ul>	<ul style="list-style-type: none"> <li>Dual port NVMe</li> <li>Support SIOM Card for Multiple IO Option</li> <li>2000W High-Efficiency (96%) Titanium Level Redundant Power Supplies</li> <li>Redundant DP SBB supporting 24x U.2 dual port NVMe</li> <li>Shared storage between redundant controllers</li> <li>Node to node heartbeat/10G connectivity</li> </ul>	<ul style="list-style-type: none"> <li>Dual port NVMe</li> <li>Support SIOM Card for Multiple IO Option</li> <li>2000W High-Efficiency (96%) Titanium Level Redundant Power Supplies</li> </ul>
Serverboard	SUPER● X10DSN-TS	SUPER● X10DSN-TS	SUPER● X10DSN-TS
Chipset	Intel® C612 chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	1TB Registered ECC, DDR4-2133MHz in 16 DIMM slots	1TB Registered ECC, DDR4-2400/2133 MHz in 16 DIMM slots (per node)	1TB Registered ECC, DDR4-2133MHz in 16 DIMM slots
Expansion Slots	1 PCI-E 3.0 x16 HHHH; 1 PCI-E 3.0 x8 HHHH; 1 SIOM	1 PCI-E 3.0 x16 HHHH, 1 PCI-E 3.0 x8 HHHH, SIOM (per node)	1 PCI-E 3.0 x16 HHHH; 1 PCI-E 3.0 x8 HHHH; 1 SIOM
Onboard Storage Controller	Intel® C612 controller for 2 SATA3 (6 Gbps) ports;	Intel® C612 controller for 2 SATA3 (6 Gbps) ports (per node)	Intel® C612 controller for 2 SATA3 (6 Gbps) ports;
Connectivity	Dual LAN with Intel® X540 10GBase-T Ethernet Controller;	Dual LAN with Intel® X540 10GBase-T Ethernet Controller (per node)	Dual LAN with Intel® X540 10GBase-T Ethernet Controller;
VGA/Audio	1 VGA by Aspeed AST2400 BMC;	1 VGA by Aspeed AST2400 BMC	1 VGA by Aspeed AST2400 BMC;
Management	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; NMI;	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; NMI;	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; NMI;
Drive Bays	20x 2.5" NVMe drive bay	24x 2.5" dual port NVMe drive bay	40x 2.5" NVMe drive bay
Peripheral Bays	N/A	N/A	N/A
Power Supply	Redundant 2000W Redundant Titanium AC Power supply	Redundant 2000W Redundant Titanium AC Power supply	Redundant 2000W Redundant Titanium AC Power supply
Cooling System	5x 8cm high-performance PWM fans;; N/A	5x 8cm high-performance PWM fans;	5x 8cm high-performance PWM fans;; N/A
Form Factor	2U Rackmount 17.2" (437mm) x 3.5" (89mm) x 25.6" (650mm)	2U Rackmount 17.2" (437mm) x 3.5" (89mm) x 25.6" (650mm)	2U Rackmount 17.2" (437mm) x 3.5" (89mm) x 33.3" (846mm)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

Storage

# STORAGE

Super SBB Storage

2U Storage  
SAS3 HW RAID controller  
Storage Expandable

2U Storage  
SAS3 IT mode controller  
Storage Expandable



MODEL	SSG-2028R-DN2R48L	SSG-2028R-E1CR24H	SSG-2028R-E1CR24L
Processor Support	Intel® Xeon® processor E5-2600 V3 Intel® Xeon® processor E5-2600 V4 with UPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Lustre</li> <li>HPC</li> <li>Virtualization</li> <li>High Availability Storage Appliance Platform</li> </ul>	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Data Center</li> <li>Database Processing &amp; Storage</li> <li>Enterprise Server</li> <li>HPC</li> <li>iSCSI SAN</li> </ul>	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Data Center</li> <li>Database Processing &amp; Storage</li> <li>Enterprise Server</li> <li>HPC</li> <li>iSCSI SAN</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Dual port <b>NVMe</b></li> <li>Support SIOM Card for Multiple IO Option</li> <li>2000W High-Efficiency (96%) <b>Titanium Level</b> Redundant Power Supplies</li> <li>Redundant DP SBB supporting 48x U.2 dual port <b>NVMe</b></li> <li>Shared storage between redundant controllers</li> <li>Node to node heartbeat/10G connectivity</li> </ul>	<ul style="list-style-type: none"> <li>3108 <b>SAS3</b> HW RAID controller</li> <li>24x 2.5" Hot-swap <b>SAS3</b> bays</li> <li>145W CPU support</li> <li>16 DIMM slots</li> <li>Dual 10GBase-T</li> <li>Dual JBOD Expansion Ports</li> <li>920W Redundant <b>Platinum Level</b> high-efficiency</li> </ul>	<ul style="list-style-type: none"> <li>3008 <b>SAS3</b> HBA controller</li> <li>24x 2.5" Hot-swap <b>SAS3</b> bays</li> <li>145W CPU support</li> <li>16 DIMM slots</li> <li>Dual 10GBase-T Ports</li> <li>Dual JBOD Expansion Ports</li> <li>920W Redundant <b>Platinum Level</b> high-efficiency</li> </ul>
Serverboard	SUPER● X10DSN-TS	SUPER● X10DRH-iT	SUPER● X10DRH-iT
Chipset	Intel® C612 chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	1TB Registered ECC, DDR4-2400/2133 MHz in 16 DIMM slots (per node)	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	1 PCI-E 3.0 x16 HHHL, 1 PCI-E 3.0 x8 HHHL, 1 SIOM (per node)	1 PCI-E 3.0 x16 6 PCI-E 3.0 x8 Slot 1 & 2 occupied by controller and JBOD expansion port	1 PCI-E 3.0 x16 6 PCI-E 3.0 x8 Slot 1 & 2 occupied by controller and JBOD expansion port
Onboard Storage Controller	Intel® C612 controller for 2 SATA3 (6 Gbps) ports (per node)	3108 <b>SAS3</b> HW RAID controller	3008 <b>SAS3</b> HBA controller
Connectivity	Dual LAN with Intel® X540 10GBase-T Ethernet Controller (per node)	Dual LAN with Intel® X540 10GBase-T Ethernet Controller	Dual LAN with Intel® X540 10GBase-T Ethernet Controller
VGA/Audio	1 VGA by Aspeed AST2400 BMC (per node)	AST2400 VGA	AST2400 VGA
Management	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; NMI;	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	48x 2.5" dual port <b>NVMe</b> drive bay	24x 2.5" hot-swap <b>SAS3</b> /SATA3 drive bay; 2x 2.5" optional rear hot-swap drive bay	24x 2.5" hot-swap <b>SAS3</b> /SATA3 drive bay; 2x 2.5" optional rear hot-swap drive bay
Peripheral Bays	N/A	N/A	N/A
Power Supply	Redundant PWS-2K05A-1R	Redundant 1000W Titanium / 920W <b>Platinum Level</b> high-efficiency power supplies with I <sup>2</sup> C and PMBus	Redundant 1000W Titanium / 920W <b>Platinum Level</b> high-efficiency power supplies with I <sup>2</sup> C and PMBus
Cooling System	5x 8cm high-performance PWM fans;	3x 8cm hot-swap redundant PWM cooling fans	3x 8cm hot-swap redundant PWM cooling fans
Form Factor	2U Rackmount 17.2" (437mm) x 3.5" (89mm) x 33.3" (846mm)	2U Rackmount 437 x 89 x 630mm (17.2" x 3.5" x 24.8")	2U Rackmount 437 x 89 x 630mm (17.2" x 3.5" x 24.8")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# STORAGE

2U Storage  
SAS3 HW RAID controller  
Storage Expandable

2U Simply Double Storage  
48 Bay SAS3  
Storage Expandable

2U Simply Double Storage  
48 Bay SAS3  
Storage Expandable



MODEL	SSG-2028R-E1CR24N	SSG-2028R-E1CR48N	SSG-2028R-E1CR48L
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Data Center</li> <li>Database Processing &amp; Storage</li> <li>Enterprise Server</li> <li>HPC</li> <li>iSCSI SAN</li> </ul>	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Data Center</li> <li>Database Processing &amp; Storage</li> <li>Enterprise Server</li> <li>HPC</li> <li>iSCSI SAN</li> </ul>	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Data Center</li> <li>Database Processing &amp; Storage</li> <li>Enterprise Server</li> <li>HPC</li> <li>iSCSI SAN</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>3108 SAS3 HW RAID controller</li> <li>24x 2.5" Hot-swap SAS3 bays</li> <li>145W CPU support</li> <li>24 DIMM slots</li> <li>Quad 10GBase-T Ports</li> <li>Dual JBOD Expansion Ports</li> <li>920W Redundant Platinum Level high-efficiency</li> </ul>	<ul style="list-style-type: none"> <li>48x 2.5" Drive in 2U Form Factor</li> <li>3108 SAS3 HW RAID controller;</li> <li>24 DIMM sockets</li> <li>Support SIOM Card for Multiple IO Option</li> <li>Redundant 1600W Titanium Level high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>48x 2.5" Drive in 2U Form Factor</li> <li>3008 SAS3 HBA controller</li> <li>Supports dual 145W CPU</li> <li>24 DIMM sockets</li> <li>Support SIOM Card for Multiple IO Option</li> <li>Redundant 1600W Titanium Level high-efficiency power supplies</li> </ul>
Serverboard	SUPER● X10DRI-T4+	SUPER● X10DSC+	SUPER● X10DSC+
Chipset	Intel® C612 chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 24 DIMM slots	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 24 DIMM slots	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 24 DIMM slots
Expansion Slots	2 PCI-E 3.0 x16 3 PCI-E 3.0 x8 1 PCI-E 3.0 x4 (in x8) Slot 3 & 4 occupied by controller and JBOD expansion port	2 PCI-E 3.0 x16 1 PCI-E 3.0 x8	2 PCI-E 3.0 x16 1 PCI-E 3.0 x8
Onboard Storage Controller	3108 SAS3 HW RAID controller	3108 SAS3 HW RAID controller	3008 SAS3 HBA controller
Connectivity	Quad LAN with Intel® X540 10GBase-T Ethernet Controller	SIOM card for multiple IO option.	SIOM card for multiple IO option.
VGA/Audio	AST2400 VGA	AST2400 VGA	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	24x 2.5" hot-swap SAS3/SATA3 drive bay; optional 2x 2.5" internal fixed drive bay	48x 2.5" hot-swap SAS3/SATA3 drive bays; Optional 4x NVMe hybrid drive bay support (44x 2.5" +4x NVMe)	48x 2.5" hot-swap SAS3/SATA3 drive bays; Optional 4x NVMe hybrid drive bay support (44x 2.5" +4x NVMe)
Peripheral Bays	N/A	Optional 2x 2.5" rear drive tray to support 4x rear 2.5" drives	Optional 2x 2.5" rear drive tray to support 4x rear 2.5" drives
Power Supply	Redundant 1000W Titanium / 920W Platinum Level high-efficiency power supplies with I <sup>2</sup> C and PMBus	1600W Redundant Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	1600W Redundant Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMBus
Cooling System	3x 8cm hot-swap redundant PWM cooling fans	5x 8cm hot-swap redundant PWM cooling fans	5x 8cm hot-swap redundant PWM cooling fans
Form Factor	2U Rackmount 437 x 89 x 630mm (17.2" x 3.5" x 24.8")	2U Rackmount 437 x 89 x 767mm (17.2" x 3.5" x 30.2"); With Cable Management Arm installed: 35.2" (895mm)	2U Rackmount 437 x 89 x 767mm (17.2" x 3.5" x 30.2"); With Cable Management Arm installed: 35.2" (895mm)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

Storage

# STORAGE

(For Complete System Only)

2U Simply Double Storage  
48 Bay NVMe Drive



2U Storage  
SAS3 HW RAID controller  
Storage Expandable



MODEL	SSG-2028R-NR48N	SSG-6028R-E1CR12T
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Data Center</li> <li>Database Processing &amp; Storage</li> <li>Enterprise Server</li> <li>HPC</li> <li>iSCSI SAN</li> </ul>	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Data Center</li> <li>Database Processing &amp; Storage</li> <li>Enterprise Server</li> <li>HPC</li> <li>iSCSI SAN</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>48x 2.5" NVMe Drive in 2U Form Factor</li> <li>Supports dual 145W CPU</li> <li>24 DIMM sockets</li> <li>Support SIOM Card for Multiple IO Option</li> <li>Redundant 1600W Titanium Level high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>Onboard 3108 SAS3 HW RAID controller</li> <li>12x 3.5" hot-swap SAS3/SATA3 drive bays</li> <li>Supports dual 145W CPU</li> <li>Supports 16 DIMM DDR4 up to 2133MHz</li> <li>Dual 10G BaseT</li> <li>Redundant 920W Platinum Level (94%+) Power Supplies</li> </ul>
Serverboard	SUPER● X10DSC+	SUPER● X10DRH-CT
Chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 24 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	2 PCI-E 3.0 x16 1 PCI-E 3.0 x8 Slot 3 occupied by NVMe AOC	1 PCI-E 3.0 x16 6 PCI-E 3.0 x8
Onboard Storage Controller	Onboard NVMe controller	3108 SAS3 onboard controller card
Connectivity	SIOM card for multiple IO option.	Dual 10GBase-T with Intel® X540 10GbE Controller
VGA/Audio	AST2400 VGA	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	48x 2.5" hot-swap NVMe drive bays	12x 3.5" hot-swap SAS3/SATA3 drive bay; Optional 4x NVMe hybrid drive bay support (8x 3.5" + 4x NVMe)
Peripheral Bays	2x 2.5" rear hot-swap drive bays	2x 2.5" optional rear hot-swap drive bay
Power Supply	1600W Redundant Titanium Level high-efficiency power supplies with iPC & PMBus	920W Redundant Platinum Level high-efficiency power supplies with iPC & PMBus
Cooling System	5x 8cm hot-swap redundant PWM cooling fans	3x 8cm hot-swap redundant PWM cooling fans
Form Factor	2U 17.2" (437mm) x 3.5" (89mm) x 30" (684mm)	2U Rackmount 437 x 89 x 647mm (17.2" x 3.5" x 25.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# STORAGE

2U Storage  
Storage Expandable

2U Storage  
Storage Expandable

2U Storage  
SAS3 HW RAID controller Storage Expandable



MODEL	SSG-6028R-E1CR12H	SSG-6028R-E1CR12L	SSG-6028R-E1CR12N
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Data Center</li> <li>Database Processing &amp; Storage</li> <li>Enterprise Server</li> <li>HPC</li> <li>iSCSI SAN</li> </ul>	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Data Center</li> <li>Database Processing &amp; Storage</li> <li>Enterprise Server</li> <li>HPC</li> <li>iSCSI SAN</li> </ul>	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Data Center</li> <li>Database Processing &amp; Storage</li> <li>Enterprise Server</li> <li>HPC</li> <li>iSCSI SAN</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>3108 SAS3 HW RAID controller</li> <li>12x 3.5" SAS3/SATA3 drive bays</li> <li>145W CPU support</li> <li>16 DIMM slots</li> <li>Dual 10G BaseT</li> <li>Dual JBOD Expansion Ports</li> <li>Redundant 920W Platinum Level High-Efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>3008 SAS3 HBA controller</li> <li>12x 3.5" SAS3/SATA3 drive bays</li> <li>145W CPU support</li> <li>16 DIMM slots</li> <li>Dual 10G BaseT</li> <li>Dual JBOD Expansion Ports</li> <li>Redundant 920W Platinum Level High-Efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>3108 SAS3 HW RAID controller</li> <li>12x 3.5" SAS3/SATA3 drive bays</li> <li>145W CPU support</li> <li>24 DIMM slots</li> <li>4x 10G BaseT</li> <li>Dual JBOD Expansion Ports</li> <li>Redundant 920W Platinum Level High-Efficiency power supplies</li> </ul>
Serverboard	SUPER● X10DRH-iT	SUPER● X10DRH-iT	SUPER● X10DRi-T4+
Chipset	Intel® C612 chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 24 DIMM slots
Expansion Slots	1 PCI-E 3.0 x16 6 PCI-E 3.0 x8 Slot 1 & 2 occupied by controller and JBOD expansion port	1 PCI-E 3.0 x16 6 PCI-E 3.0 x8 Slot 1 & 2 occupied by controller and JBOD expansion port	2 PCI-E 3.0 x16 3 PCI-E 3.0 x8 1 PCI-E 3.0 x4 (in x8) Slot 3 & 4 occupied by controller and JBOD expansion port
Onboard Storage Controller	3108 SAS3 HW RAID controller	-3008 SAS3 HBA controller	3108 SAS3 HW RAID controller card
Connectivity	Dual LAN with Intel® X540 10GBase-T Ethernet Controller	Dual LAN with Intel® X540 10GBase-T Ethernet Controller	Quad LAN with Intel® X540 10GBase-T Ethernet Controller
VGA/Audio	AST2400 VGA	AST2400 VGA	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	12x 3.5" hot-swap SAS3/SATA3 drive bay; Optional 4x NVMe hybrid drive bay support (8x 3.5" + 4x NVMe); 2x 2.5" optional rear hot-swap drive bay	12x 3.5" hot-swap SAS3/SATA3 drive bay; Optional 4x NVMe hybrid drive bay support (8x 3.5" + 4x NVMe); 2x 2.5" optional rear hot-swap drive bay	12x 3.5" hot-swap SAS3/SATA3 drive bay; optional 2x 2.5" internal fixed drive bay
Peripheral Bays	N/A	N/A	N/A
Power Supply	920W Redundant Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	920W Redundant Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	920W Redundant Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus
Cooling System	3x 8cm hot-swap redundant PWM cooling fans	3x 8cm hot-swap redundant PWM cooling fans	3x 8cm hot-swap redundant PWM cooling fans
Form Factor	2U Rackmount 437 x 89 x 647mm (17.2" x 3.5" x 25.5")	2U Rackmount 437 x 89 x 647mm (17.2" x 3.5" x 25.5")	2U Rackmount 437 x 89 x 647mm (17.2" x 3.5" x 25.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

Storage

# STORAGE

2U Simply Double Storage  
24 Bay SAS3 w/IT Mode  
Storage Expandable

3U Storage  
SAS3 HW/IT mode controller  
Storage Expandable

3U Storage  
HW SAS3 controller  
Storage Expandable



MODEL	SSG-6028R-E1CR24L	SSG-6038R-E1CR16H SSG-6038R-E1CR16L	SSG-6038R-E1CR16N
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Data Center</li> <li>Database Processing &amp; Storage</li> <li>Enterprise Server</li> <li>HPC</li> <li>iSCSI SAN</li> </ul>	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Data Center</li> <li>Database Processing &amp; Storage</li> <li>Enterprise Server</li> <li>HPC</li> <li>iSCSI SAN</li> </ul>	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Data Center</li> <li>Database Processing &amp; Storage</li> <li>Enterprise Server</li> <li>HPC</li> <li>iSCSI SAN</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>24x 3.5" Drive in 2U Form Factor</li> <li>3008 SAS3 HBA controller</li> <li>Supports dual 145W CPU</li> <li>24 DIMM sockets</li> <li>Support SIOM Card for Multiple IO Option</li> <li>Redundant 1600W Titanium Level high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>16x 3.5" Hot-swap SAS3 drive bays</li> <li>130W CPU support</li> <li>16 DIMM slots</li> <li>Dual 10G BaseT</li> <li>Dual JBOD Expansion Ports</li> <li>920W Platinum Level High-Efficiency power supply</li> </ul>	<ul style="list-style-type: none"> <li>3108 SAS3 HW RAID controller</li> <li>16x 3.5" SAS3/SATA3 drive bays</li> <li>130W CPU support</li> <li>24 DIMM slots</li> <li>4 x 10G BaseT</li> <li>Dual JBOD Expansion Ports</li> <li>920W Platinum Level High-Efficiency power supply</li> </ul>
Serverboard	SUPER® X10DSC+	SUPER® X10DRH-iT	SUPER® X10DRi-T4+
Chipset	Intel® C612 chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 24 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 24 DIMM slots
Expansion Slots	2 PCI-E 3.0 x16 1 PCI-E 3.0 x8	1 PCI-E 3.0 x16, 6 PCI-E 3.0 x8, Slot 1 & 2 occupied by controller and JBOD Expansion Port	2 PCI-E 3.0 x16, 3 PCI-E 3.0 x8, 1 PCI-E 3.0 x4 (in x8) Slot 3 & 4 occupied by controller and JBOD Expansion Port
Onboard Storage Controller	3008 SAS3 HBA controller	-E1CR16H: 3108 SAS3 HW RAID controller; -E1CR16L: 3008 SAS3 HBA controller	3108 SAS3 HW RAID controller
Connectivity	SIOM card for multiple IO option	Dual LAN with 10GBase-T with Intel® X540 10GbE Controller	Quad LAN with Intel® X540 10GBase-T Ethernet Controller
VGA/Audio	1 VGA, 1 Aspeed AST2400 BMC	AST2400 VGA	AST2400 VGA
Management	Intel® Node Manager, IPMI2.0, NMI, SPM, SUM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	24x 3.5" hot-swap drive bay; Optional 4x NVMe hybrid drive bay support (20x 3.5" +4x NVMe)	16x 3.5" hot-swap SAS3/SATA3 drive bay; 2x 2.5" optional rear hot-swap drive bay	16x 3.5" hot-swap SAS3/SATA3 drive bay; 2x 2.5" optional rear hot-swap drive bay
Peripheral Bays	Optional 2x 2.5" rear drive bay to support 4x rear 2.5" drives	1 optional Slim DVD-ROM bay	1 optional Slim DVD-ROM bay
Power Supply	1600W Redundant Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	920W Redundant Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	920W Redundant Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus
Cooling System	5x 8cm hot-swap redundant PWM cooling fans	3x 8cm hot-swap redundant PWM cooling fans. 2x 80mm rear hot-swap exhaust PWM fan	3x 8cm hot-swap redundant PWM cooling fans. 2x 80mm rear hot-swap exhaust PWM fan
Form Factor	2U Rackmount 437 x 89 x 863.6mm (17.2" x 3.5" x 34"); With Cable Management Arm installed: 41" (1041.4mm)	3U Rackmount 437 x 132 x 647mm (17.2" x 5.2" x 25.5")	3U Rackmount 437 x 132 x 647mm (17.2" x 5.2" x 25.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



# STORAGE

(For Complete System Only)

4U Storage  
SAS3HW/IT mode controller,  
Storage Expandable

4U Storage  
SAS3HW/IT mode controller,  
Storage Expandable

4U Storage  
HW SAS3 controller,  
Storage Expandable



MODEL	SSG-6048R-E1CR24H	SSG-6048R-E1CR24L	SSG-6048R-E1CR24N
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Data Center</li> <li>Database Processing &amp; Storage</li> <li>Enterprise Server</li> <li>HPC</li> <li>iSCSI SAN</li> </ul>	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Data Center</li> <li>Database Processing &amp; Storage</li> <li>Enterprise Server</li> <li>HPC</li> <li>iSCSI SAN</li> </ul>	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Data Center</li> <li>Database Processing &amp; Storage</li> <li>Enterprise Server</li> <li>HPC</li> <li>iSCSI SAN</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>24x 3.5" Hot-swap SAS3 bays</li> <li>145W CPU support</li> <li>16 DIMM slots</li> <li>Dual 10G BaseT</li> <li>Dual JBOD Expansion Ports</li> <li>920W Platinum Level redundant high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>24x 3.5" Hot-swap SAS3 bays</li> <li>145W CPU support</li> <li>16 DIMM slots</li> <li>Dual 10G BaseT</li> <li>Dual JBOD Expansion Ports</li> <li>920W Platinum Level redundant high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>3108 SAS3 HW RAID controller</li> <li>24x 3.5" Hot-swap SAS3 bays</li> <li>145W CPU support</li> <li>24 DIMM slots</li> <li>4x 10G BaseT</li> <li>Dual JBOD Expansion Ports</li> <li>920W Platinum Level redundant high-efficiency power supplies</li> </ul>
Serverboard	SUPER● X10DRH-iT	SUPER● X10DRH-iT	SUPER● X10DRi-T4+
Chipset	Intel® C612 chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 24 DIMM slots
Expansion Slots	1 PCI-E 3.0 x16, 6 PCI-E 3.0 x8; Slot 1 & 2 occupied by controller and JBOD Expansion Port	1 PCI-E 3.0 x16, 6 PCI-E 3.0 x8; Slot 1 & 2 occupied by controller and JBOD Expansion Port	2 PCI-E 3.0 x16, 3 PCI-E 3.0 x8, 1 PCI-E 3.0 x4 (in x8); Slot 3 & 4 occupied by controller and JBOD Expansion Port
Onboard Storage Controller	3108 SAS3 HW RAID controller;	3008 SAS3 HBA controller	3108 SAS3 HW RAID controller
Connectivity	Dual LAN with 10GBase-T with Intel® X540 10GbE Controller	Dual LAN with 10GBase-T with Intel® X540 10GbE Controller	Quad LAN with Intel® X540 10GBase-T Ethernet Controller
VGA/Audio	AST2400 VGA	AST2400 VGA	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	24x 3.5" hot-swap SAS3/SATA3 drive bay; 2x 2.5" optional rear hot-swap drive bay	24x 3.5" hot-swap SAS3/SATA3 drive bay; 2x 2.5" optional rear hot-swap drive bay	24x 3.5" hot-swap SAS3/SATA3 drive bay, 2x 2.5" optional rear hot-swap drive bay
Peripheral Bays	N/A	N/A	N/A
Power Supply	920W Redundant Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	920W Redundant Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	920W Redundant Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus
Cooling System	3x 8cm hot-swap redundant PWM cooling fans. 2x 80mm rear hot-swap exhaust PWM fan	3x 8cm hot-swap redundant PWM cooling fans. 2x 80mm rear hot-swap exhaust PWM fan	3x 8cm hot-swap redundant PWM cooling fans. 2x 80mm rear hot-swap exhaust PWM fan
Form Factor	4U Rackmount 437 x 178 x 673mm (17.2"x7"x26.5")	4U Rackmount 437 x 178 x 673mm (17.2"x7"x26.5")	4U Rackmount 437 x 178 x 673mm (17.2"x7"x26.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

Storage

# STORAGE

(For Complete System Only)

4U Storage  
High Availability Storage Platform



4U Storage  
HW SAS3 controller,  
Storage Expandable



4U Storage  
HW SAS3 controller,  
Storage Expandable



MODEL	SSG-6048R-DE2CR24L	SSG-6048R-E1CR36H SSG-6048R-E1CR36L	SSG-6048R-E1CR36N
Processor Support	Redundant dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>High Availability Storage Appliance Platform</li> </ul>	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Data Center</li> <li>Database Processing &amp; Storage</li> <li>Enterprise Server</li> <li>HPC</li> <li>iSCSI SAN</li> </ul>	<ul style="list-style-type: none"> <li>Corporate Database</li> <li>Data Center</li> <li>Database Processing &amp; Storage</li> <li>Enterprise Server</li> <li>HPC</li> <li>iSCSI SAN</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Redundant DP SBB supporting shared 24x 3.5" HDD</li> <li>Intel® X540 Dual port 10GBase-T</li> <li>Dual JBOD expansion ports per node</li> <li>NV-DIMM support</li> <li>Up to 3 add-on cards per node</li> <li>Titanium Level power supplies</li> </ul>	<ul style="list-style-type: none"> <li>3108 SAS3 HW RAID controller</li> <li>1280W Platinum Level redundant high-efficiency power supplies</li> <li>145W CPU support</li> <li>36x 3.5" Hot-swap SAS3 bays</li> <li>Dual JBOD Expansion Ports</li> <li>Dual 10G BaseT</li> <li>16 DIMM slots</li> </ul>	<ul style="list-style-type: none"> <li>3108 SAS3 HW RAID controller</li> <li>145W CPU support</li> <li>24 DIMM slots</li> <li>36x 3.5" Hot-swap SAS3 bays</li> <li>Dual JBOD Expansion Ports</li> <li>4x 10GBase-T Ports</li> <li>1280W Platinum Level redundant high-efficiency power supplies</li> </ul>
Serverboard	Redundant SUPER● X10DRS-4U	SUPER● X10DRH-iT	SUPER● X10DRI-T4+
Chipset	Redundant Intel® C612 chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Redundant up to 1TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 8 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 24 DIMM slots
Expansion Slots	Redundant 3 PCI-E 3.0 x8 (1x HHHL, 2x LPHL) expansion slots per controller	1 PCI-E 3.0 x16 6 PCI-E 3.0 x8 Slot 1 & 2 occupied by controller and JBOD Expansion Port	2 PCI-E 3.0 x16, 3 PCI-E 3.0 x8, 1 PCI-E 3.0 x4 (in x8) Slot 3 & 4 occupied by controller and JBOD Expansion Port
Onboard Storage Controller	Redundant 3008 SAS controller	-E1CR36H: 3108 SAS3 HW RAID controller -E1CR36L: 3008 SAS3 HBA controller	3108 SAS3 HW RAID controller
Connectivity	Redundant dual LAN with 10GBase-T with Intel® X540 10GbE Controller per node; 100M private Ethernet between controller nodes	Dual LAN with 10GBase-T with Intel® X540 10GbE Controller	Quad LAN with Intel® X540 10GBase-T Ethernet Controller
VGA/Audio	Redundant AST2400 VGA	AST2400 VGA	AST2400 VGA
Management	Redundant IPMI 2.0 + KVM with dedicated LAN	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor™ 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor™ 5, Watchdog
Drive Bays	Shared 24x 3.5" hot-swap SAS drive bay with SES2	36x 3.5" hot-swap SAS3/SATA3 drive bays; 2x 2.5" optional rear hot-swap drive bays; 4x 2.5" internal fixed drive bays; Optional 4x NVMe hybrid drive bay support (32x 3.5" + 4x NVMe)	36x 3.5" hot-swap SAS3/SATA3 drive bay; 4x 2.5" internal fixed drive bay
Peripheral Bays	N/A	N/A	N/A
Power Supply	Redundant 1600W Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	1280W Redundant Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	1280W Redundant Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus
Cooling System	Redundant 2x 4cm PWM cooling fans and 4x 8cm system PWM cooling fans	7x 8cm high-performance PWM fans, air shroud	7x 8cm high-performance PWM fans, air shroud
Form Factor	4U Rackmount 437 x 178 x 648mm (17.2"x7"x25.5")	4U Rackmount 437 x 178 x 699mm (17.2" x 7" x 27.5")	4U Rackmount 437 x 178 x 699mm (17.2"x7"x27.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

Storage

# STORAGE

(For Complete System Only)

4U Storage  
Capacity Maximized  
Top-Loading 45 Bay



4U Storage  
60x 3.5" SAS3 Drive Bays,  
w/IT mode controller, Storage Expandable



4U Storage  
60x 3.5" SAS3 Drive Bays,  
w/IT mode controller, Storage Expandable



MODEL	SSG-6048R-E1CR45L	SSG-6048R-E1CR60L	SSG-6048R-E1CR60N
Processor Support	Intel® Xeon® processor E5-2600 V3 Intel® Xeon® processor E5-2600 V4 with QPI up to Dual 8.0GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s; Supports up to 160W	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s; Supports up to 160W
Key Applications	<ul style="list-style-type: none"> <li>• Corporate Database</li> <li>• Data Center</li> <li>• Database Processing &amp; Storage</li> <li>• Enterprise Server</li> <li>• HPC</li> <li>• iSCSI SAN</li> </ul>	<ul style="list-style-type: none"> <li>• Corporate Database</li> <li>• Data Center</li> <li>• Database Processing &amp; Storage</li> <li>• Enterprise Server</li> <li>• HPC</li> <li>• iSCSI SAN</li> </ul>	<ul style="list-style-type: none"> <li>• Corporate Database</li> <li>• Data Center</li> <li>• Database Processing &amp; Storage</li> <li>• Enterprise Server</li> <li>• HPC</li> <li>• iSCSI SAN</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 45x 3.5" Drive in 4U Form Factor</li> <li>• Supports up to Dual 160W Broadwell CPU</li> <li>• 24 DIMM sockets</li> <li>• Optional 6x NVMe drive bay</li> <li>• Support SIOM Card for Multiple IO Option</li> <li>• 3008 SAS3 controller; RAID 0, 1, 10</li> </ul>	<ul style="list-style-type: none"> <li>• 60x 3.5" Drive in 4U Form Factor</li> <li>• 3008 SAS3 HBA controller</li> <li>• Supports dual 145W CPU</li> <li>• 24 DIMM sockets</li> <li>• Support SIOM Card for Multiple IO Option</li> <li>• Redundant 2000W Titanium Level high-efficiency power supplies</li> <li>• LCD screen</li> </ul>	<ul style="list-style-type: none"> <li>• 60x 3.5" Drive in 4U Form Factor</li> <li>• 3108 SAS3 HW RAID controller Supports dual 145W CPU</li> <li>• 24 DIMM sockets</li> <li>• Support SIOM Card for Multiple IO Option</li> <li>• Redundant 2000W Titanium Level high-efficiency power supplies</li> <li>• LCD screen</li> </ul>
Serverboard	SUPER● X10DSC+	SUPER● X10DSC+	SUPER● X10DSC+
Chipset	Intel® C624 chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 1TB 3DS ECC, DDR4-2666MHz in 16 DIMM slots	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 24 DIMM slots	Up to 3TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 24 DIMM slots
Expansion Slots	3 PCI-E 3.0 x16; 4 PCI-E 3.0 x8;	2 PCI-E 3.0 x16 1 PCI-E 3.0 x8	2 PCI-E 3.0 x16 1 PCI-E 3.0 x8
Onboard Storage Controller	Intel® C624 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	3008 SAS3 HBA controller	3108 SAS3 HW RAID controller
Connectivity	Dual LAN with 10GBase-T with Intel® X557;	SIOM card for multiple IO option	SIOM card for multiple IO option
VGA/Audio	1 VGA	AST2400 VGA	AST2400 VGA
Management	Intel® Node Manager; IPMI2.0; KVM with dedicated LAN; SPM; SSM; SUM; SuperDoctor® 5; Watchdog;	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	45x 3.5" hot-swap SAS/SATA drive bay with SES3	60x 3.5" hot-swap SAS3/SATA3 drive bays; 6x optional NVMe drive bays	60x 3.5" hot-swap SAS3/SATA3 drive bays; 6x optional NVMe drive bays
Peripheral Bays	2x 2.5" hot-swap drive bay	2x 2.5" rear hot-swap drive bays	2x 2.5" rear hot-swap drive bays
Power Supply	Yes Redundant 2 Qty. PWS-1K66P-1R	2000W Redundant Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	2000W Redundant Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMBus
Cooling System	5x 80mm rear hot-swap exhaust PWM fan;	5x 8cm hot-swap redundant PWM cooling fans	5x 8cm hot-swap redundant PWM cooling fans
Form Factor	4U Rackmount 437 x 178 x 660mm (17.2" x 7" x 26")	4U Rackmount 447 x 178 x 906mm (17.6"x7"x35.66")	4U Rackmount 447 x 178 x 906mm (17.6"x7"x35.66")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

Storage

# STORAGE

(For Complete System Only)

4U Double-Sided Storage



4U Top-Loading Storage  
90x 3.5" Drive Bays



MODEL	SSG-6048R-E1CR72L	SSG-6048R-E1CR90L
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>• CDN</li> <li>• Media/Streaming</li> <li>• NAS and IP-SAN</li> <li>• Unstructured Data Storage</li> <li>• Virtual Tape</li> </ul>	<ul style="list-style-type: none"> <li>• Corporate Database</li> <li>• Data Center</li> <li>• Database Processing &amp; Storage</li> <li>• Enterprise Server</li> <li>• HPC</li> <li>• iSCSI SAN</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• High Density 4U Server supports 72x 3.5" SAS3 drives</li> <li>• Supports dual 145W CPU</li> <li>• Supports 16 DIMM DDR4 up to 2133MHz</li> <li>• Support 72x 3.5" SAS3 HDD</li> <li>• 3 3008 SAS3 HBA controllers</li> <li>• Dual 10G BaseT</li> </ul>	<ul style="list-style-type: none"> <li>• 90x 3.5" Drive in 4U Form Factor</li> <li>• 2 3008 SAS3 HBA controllers</li> <li>• Support Dual Intel® Boardwell CPU</li> <li>• 8 DIMM sockets</li> <li>• Support SIOM Card for Multiple IO Option</li> <li>• 4x 1000W Titanium Level high-efficiency power supplies</li> <li>• Quad LAN 10G SFP+ LAN ports</li> </ul>
Serverboard	SUPER● X10DRH-iT	SUPER● X10DSC-TP4S
Chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots	Up to 1TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 8 DIMM slots
Expansion Slots	3x slots occupied by IT Mode disk controllers 3008; 4x Low profile slots available	N/A
Onboard Storage Controller	3 3008 SAS3 HBA controllers	2 3008 SAS3 HBA controllers
Connectivity	Dual LAN with 10GBase-T with Intel® X540 10GbE Controller	SIOM card for multiple IO option; On board Quad LAN 10G SFP+ with Intel® X710
VGA/Audio	AST2400 VGA	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	72x 3.5" hot-swap SAS3/SATA3 drive bays with SES2	90x 3.5" hot-swap SAS3/SATA3 drive bays
Peripheral Bays	2x 2.5" rear hot-swap drive bays	2x 2.5" rear hot-swap drive bays
Power Supply	2000W Redundant Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	4x 1000W Redundant Titanium Level high-efficiency power supplies with I <sup>2</sup> C & PMBus
Cooling System	7x 92mm hot-swap redundant PWM cooling fans	5x 8cm hot-swap redundant PWM cooling fans
Form Factor	4U Rackmount 437 x 178 x 889mm (17.2"x7"x35")	4U Rackmount 447 x 178 x 906mm (17.6"x7"x35.66")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# STORAGE

(For Complete System Only)

2U SBB Storage  
SBB JBOD



3U SBB Storage  
SBB JBOD



4U SBB Storage  
SBB JBOD

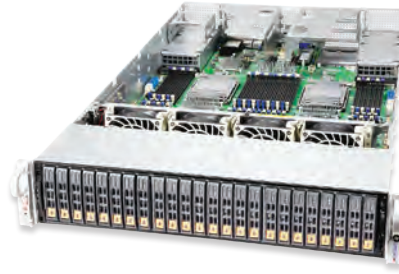


MODEL	SSG-927R-E2CJB	SSG-937R-E2CJB	SSG-947-E2CJB
Processor Support	N/A (please refer to Server Model)	N/A (please refer to Server Model)	N/A (please refer to Server Model)
Key Applications	<ul style="list-style-type: none"> <li>High Availability Storage Appliance Platform</li> </ul>	<ul style="list-style-type: none"> <li>High Availability Storage Appliance Platform</li> </ul>	<ul style="list-style-type: none"> <li>High Availability Storage Appliance Platform</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Redundant Hot-Swappable Expander Trays</li> <li>4x SAS3.0 IO ports</li> <li>1200W Titanium Level high-efficiency power supply</li> <li>IPMI management with dedicated LAN</li> </ul>	<ul style="list-style-type: none"> <li>Redundant hot-swappable expander trays</li> <li>4x SAS 3.0 IO ports</li> <li>1200W Titanium Level high-efficiency power supply</li> <li>IPMI management with dedicated LAN</li> </ul>	<ul style="list-style-type: none"> <li>Redundant hot-swappable expander trays</li> <li>4x SAS 3.0 IO ports</li> <li>1200W Titanium Level high-efficiency power supply</li> <li>IPMI management with dedicated LAN</li> </ul>
Serverboard	N/A (please refer to Server Model)	N/A (please refer to Server Model)	N/A (please refer to Server Model)
Chipset	N/A (please refer to Server Model)	N/A (please refer to Server Model)	N/A (please refer to Server Model)
System Memory (Max.)*	N/A (please refer to Server Model)	N/A (please refer to Server Model)	N/A (please refer to Server Model)
Expansion Slots	N/A (please refer to Server Model)	N/A (please refer to Server Model)	N/A (please refer to Server Model)
Onboard Storage Controller	N/A (please refer to Server Model)	N/A (please refer to Server Model)	N/A (please refer to Server Model)
Connectivity	4x SAS 3.0 IO ports	4x SAS 3.0 IO ports	4x SAS 3.0 IO ports
VGA/Audio	N/A (please refer to Server Model)	N/A (please refer to Server Model)	N/A (please refer to Server Model)
Management	IPMI 2.0 with dedicated LAN	IPMI 2.0 with dedicated LAN	IPMI 2.0 with dedicated LAN
Drive Bays	24x 2.5" Drive bays	16x 3.5" hot-swap SAS drive bays	24x 3.5" hot-swap SAS drive bays
Peripheral Bays	N/A (please refer to Server Model)	N/A (please refer to Server Model)	N/A (please refer to Server Model)
Power Supply	Redundant 1200W Titanium Level high-efficiency power supplies with I <sup>2</sup> C and PMBus	Redundant 1200W Platinum Level high-efficiency power supplies with I <sup>2</sup> C & PMBus	Redundant 1200W Platinum Level high-efficiency power supplies
Cooling System	8x 4cm PWM FANS	12x 4cm PWM cooling fans	4x 40mm Fans, 4x 80mm Fans
Form Factor	2U Rackmount 437 x 89 x 622.3mm (17.2" x 3.5" x 24.5")	3U Rackmount 437 x 132 x 647mm (17.2" x 5.2" x 25.5")	4U Rackmount 437 x 178 x 647mm (17.2" x 7" x 25.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# X12 MP

(For Complete System Only)



MODEL	SYS-240P-TNRT
Processor Support	3rd Gen Intel® Xeon® Scalable processors Quad Socket LGA-4189 (Socket P+) supported TDP up to 250W; 6 UPI up to 10.4GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Artificial Intelligence (AI)</li> <li>• Business Intelligence</li> <li>• ERP, CRM</li> <li>• Scientific Virtualization</li> <li>• In-Memory Database</li> <li>• HCI</li> <li>• SAP HANA</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• Flexible networking options with AIOM/OCP NIC 3.0 support</li> <li>• 24x 2.5" hybrid hot-swappable NVMe/SAS/SATA drive bays</li> <li>• Flexible onboard networking options up to dual 10G Ethernet &amp; dual SFP+</li> <li>• Large memory footprint for up to 18TB</li> </ul>
Serverboard	SUPERMICRO® X12QCH+
Chipset	Intel® C621
System Memory (Max.)	48 DIMM slots Up to 12TB ECC LRDIMM, DDR4-3200MHz Up to 12TB ECC RDIMM, DDR4-3200MHz Up to 18TB Intel® DCPMM, DDR4-2666MHz
Expansion Slots	2 PCI-E 3.0 x16 FHFL slot(s) 2 PCI-E 3.0 x16 FHHL slot(s) 2 PCI-E 3.0 x8 FHFL slot(s) 4 PCI-E 3.0 x8 LP slot(s)
Onboard Storage Controller	Intel® SATA
Connectivity	100Gb QSFP 28 with AIOM (optional) 2x 10GbE RJ45 and 2x 10GbE SFP+ port(s) with Intel® Ethernet Controller X710-TM4 via AIOM
VGA/Audio	1 VGA port
Management	SuperDoctor® 5; Watch Dog; NMI; SUM; IPMI 2.0
Drive Bays	24x 2.5" hot-swap NVMe/SAS3/SATA3 drive bays; 24x 2.5" NVMe hybrid; Optional RAID support via RAID controller AOC
Peripheral Bays	None
Power Supply	Redundant 2000W Titanium level (80%)
Cooling System	4x 8cm heavy duty fan(s)
Form Factor	2U rackmount Enclosure: 439.5 x 89 x 803mm (17.3" x 3.5" x 31.6") Package: 672 x 250 x 1100mm (26.5" x 9.75" x 43.5")

MP/MicroCloud

# MP

(For Complete System Only)

7U 8-Way  
Up to 224 cores per system, 23 PCI-E 3.0 slots,  
41 NVMe/24 SAS3 option



4U 4-Way  
Up to 112 cores, 16 PCI-E 3.0 slots,  
8 NVMe/24 3.5" SAS3 option



MODEL	SYS-7089P-TR4T	SYS-8049U-E1CR4T
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Octal Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s.	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Quad Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s.
Key Applications	<ul style="list-style-type: none"> <li>Virtualization</li> <li>ERP, CRM</li> <li>In-Memory Database Application</li> <li>Research lab/National Lab</li> <li>Scale-up HPC</li> </ul>	<ul style="list-style-type: none"> <li>In-Memory Database Application</li> <li>ERP, CRM</li> <li>Business Intelligence</li> <li>Scientific Computing</li> <li>Scale-up HPC</li> <li>Cloud and Virtualization needs</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>8 Sockets, up to 224 cores per system</li> <li>96 DDR4 Memory DIMM slots, up to 6TB</li> <li>Up to 23 PCIe3.0 Slots</li> <li>Up to 8 GPU</li> <li>Optional up to 32 U.2 NVMe</li> <li>Default 4-port 10GBASE-T Ethernet SIOM with options</li> </ul>	<ul style="list-style-type: none"> <li>8 NVMe SSD ports Ready</li> <li>Up to 16 PCI-E 3.0 slots</li> <li>4 x 10GBASE-T + 1 Dedicated IPMI</li> <li>Support up to 6 double width passive GPUs</li> <li>24 3.5" SAS3/SATA3 HDD with 8 Hybrid Ports support NVMe</li> </ul>
Serverboard	SUPER● X110Pi-CPU	SUPER● X11QPH+
Chipset	Intel® C621 chipset	Intel® C621 chipset
System Memory (Max.)*	8 CPU modules, 96 DIMM slots; Up to 24TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)	48 DIMM slots; Up to 12TB DDR4-2933 MHz <sup>†</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)
Expansion Slots	23 or 39 (OEM) PCI-E 3.0 slots include 8 FH x16 PCI-E cards or 8 GPUs or 16 U.2 NVMe + 8 FHFL x16 PCI-E cards or 16 U.2 NVMe + 2 LP x8 (in x16 slot) PCI-E internal cards (storage module) + 5 FHFL x16 PCI-E cards (rear)	6 PCI-E 3.0 x16 and 10 PCI-E 3.0 x8 PCI-E slots
Onboard Storage Controller	Intel C621 including 2 SATA3 (SATA DOM) , 2 M.2 (SATA3/NVMe), 8HDD (SATA3), 1TPM Header, and 1 VROC key header	Intel® C621 including 2 SATA3 (SATA DOM), 1 TPM header, and 1 VROC key header
Connectivity	4-port 10GBASE-T Ethernet SIOM (Intel® X550 10GbE controller)	4 x 10GBASE-T ports via AOC-4UR66-I4XTF-P
VGA/Audio	1 VGA by Aspeed AST2500 BMC	1 x VGA, 1 Aspeed AST2500 BMC
Management	Aspeed 2500 1 Port IPMI on AOM	Intel® Node Manager; IPMI2.0; NMI; SMCBU and SMM; SuperDoctor® 5; Watchdog;
Drive Bays	16 hot swap 2.5" SAS3 HDDs (w/ RAID cards) 8 2.5" or 6 3.5" internal HDDs (w/ RAID cards)	24 hot-swap 3.5" SAS3/SATA3 drives supported via optional Add-on RAID controller card; 8 Hybrid ports with NVMe supported via optional Add-on card
Peripheral Bays	N/A	No Peripheral Drive
Power Supply	5 x 1600W (N+2 Redundant), Titanium Level power supply w/ PMBus	3+1 1600W Redundancy Platinum Level Power Supply
Cooling System	8 92x92x76 mm, 10.5K-10.8K RPM, Counter-rotating Exhaust Hot-Swappable Rear Fans	8x 9CM Heavy Duty Fans with Speed Control
Form Factor	7U Rackmount; Enclosure: 448 x 310 x 733mm (17.63" x 12.2" x 28.87") Package: 759 x 978 x 1199mm (29.9" x 38.5" x 47.2")	4U Rackmount 437 x 177 x 876mm(17.2"x 6.9" x 34.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

<sup>†</sup> 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

<sup>††</sup> For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.

# MP

(For Complete System Only)

2U 4-Way  
High Core Count, VM Optimized, Cost Optimize  
8x 2.5" U.2 NVMe and 2x 2.5" SATA drives

2U 4-Way  
Up to 112 cores, 11 PCI-E 3.0 slots,  
4x NVMe/24x 2.5" SAS3 option



MODEL	SYS-2049P-TN8R	SYS-2049U-TR4
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Quad Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s.	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Quad Socket P (LGA 3647) supported, CPU TDP support 205W, 3 UPI up to 10.4 GT/s.
Key Applications	Cloud and Virtualization needs Data Center Scale-Out Density, VOD Delivery	<ul style="list-style-type: none"> <li>ERP, CRM</li> <li>High End Enterprise Server</li> <li>Business Intelligence</li> <li>Scientific Virtualization</li> <li>High Performance Computer Cluster (HPCC)</li> </ul>
Outstanding Features	7 PCI-E Add-on cards Front I/O Front USB 3.0 ports 2 M.2 M key (22110/2280) Support 8 NVMe SSD	<ul style="list-style-type: none"> <li>4 Sockets, up to 112 cores per system</li> <li>48 x DDR4 Memory DIMM slots, up to 6TB</li> <li>4 NVMe SSD ports Ready</li> <li>Up to 11 x PCIe.3.0 Slots</li> <li>4 x GLAN + 1 Dedicated IPMI</li> <li>2U Rack Mount Chassis</li> </ul>
Serverboard	SUPER● X11QPL	SUPER● X11QPH+
Chipset	Intel® C621 chipset	Intel® C621 chipset
System Memory (Max.)*	48 DIMM slots; Up to 12TB DDR4-2933 MHz <sup>1</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)	48 DIMM slots; Up to 12TB DDR4-2933 MHz <sup>1</sup> with 256GB memory modules; Supports RDIMM, LRDIMM, 3DS RDIMM, and 3DS LRDIMM; Supports Intel® Optane™ DCPMM <sup>††</sup> (128/256/512GB)
Expansion Slots	5 PCI-E 3.0 x8, 2 PCI-E 3.0 x16	2 LPHL PCI-E 3.0 x16 (Left-internal) + 2 LPHL PCI-E 3.0 x16 (Right-internal), 2 Double Width FH PCI-E 3.0 x16 (Rear) + 1 LPHL PCI-E 3.0 x8 (Rear) + 2 FHFL PCI-E 3.0 x8 (Rear) + 2 FHHL PCI-E 3.0 x8 (Rear)
Onboard Storage Controller	Intel® C621 including 2 SATA3, 2 M.2 M Key (22110/2280), 1 TPM header, and 1 VROC key header	Intel® C621 including 2 SATA3 (SATA DOM), 12 SATA3 (HDD/SSD), 1 TPM header, and 1 VROC key header
Connectivity	1 GbE(i210) RJ45	4 x Gigabit Ethernet ports via AOC-2UR66-i4G
VGA/Audio	Onboard VGA	1 x VGA, 1 Aspeed AST2500 BMC;
Management	IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, NMI, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager; IPMI2.0; NMI; SMCBU and SMM; SuperDoctor® 5; Watchdog;
Drive Bays	Front 2 2.5" SATA and 8 U.2 NVMe 2.5" drive bays	24 hot-swap 2.5" SAS3/SATA3 drives supported via optional Add-on RAID controller card; 4 Hybrid ports with NVMe supported via optional Add-on card
Peripheral Bays	N/A	N/A
Power Supply	Redundant 2200W Titanium Level (96%+) Digital High-efficiency Power Supplies with I2C & PMBus	1600W Redundant Titanium Level Power Supply;
Cooling System	4 Heavy duty fans w/ optimal fan speed control	4 X 8cm Heavy Duty Fan
Form Factor	17.2" (437mm) x 3.5" (89mm) x 30.2" (767.08mm); Enclosure: 437 x 89 x 767mm (17.2" x 3.5" x 30.2") Package: 564 x 274 x 1151mm (22.2" x 10.8" x 45.3") Gross Weight: 73.5lbs (33.34kg) Net Weight: 47.5lbs (21.55kg)	2U; Enclosure: 437 x 89 x 780mm (17.2" x 3.5" x 30.7")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



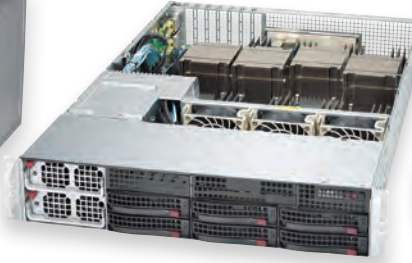
# MP

(For Complete System Only)

7U 8-Way  
Up to 24TB memory, 15 PCI-E 3.0 slots  
16 NVMe/12SAS3 option

EX 4-Way  
E7-8800/4800 v4/v3,  
32 DDR4 DIMMs in 2U

EX 4-Way  
E7-8800/4800 v4/v3,  
32 DDR4 DIMMs in 2U



MODEL	SYS-7088B-TR4FT	SYS-8028B-TR4F	SYS-8028B-COR4FT
Processor Support	Octal Intel® Xeon® Processor E7-8800 v4/v3 product families supported, QPI up to 9.6GT/s	Quad Intel® Xeon® Processor E7-8800/4800 v4/v3 product families supported, QPI up to 9.6GT/s	Quad Intel® Xeon® Processor E7-8800/4800 v4/v3 product families supported, QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>High End Enterprise Server</li> <li>ERP, CRM</li> <li>Database Applications</li> <li>Research lab/National Lab</li> <li>Virtualization</li> <li>High-performance computing</li> </ul>	<ul style="list-style-type: none"> <li>Compute Intensive Application</li> <li>Mission-critical applications</li> <li>Enterprise Server</li> </ul>	<ul style="list-style-type: none"> <li>Finance, Banking, e-Commerce</li> <li>Compute Intensive Application</li> <li>Mission-critical applications</li> <li>Enterprise Server</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>X10 EX 8-Way 192 cores</li> <li>Up to 192 DDR4 Memory DIMMs</li> <li>Up to 24TB (Broadwell), or 12 TB (Haswell)</li> <li>Up to 15 PCI-E FH slots</li> <li>Up to 16 optional U.2 NVMe support</li> <li>Optional up to 8 GPUs</li> <li>4x 10G LAN + 1 dedicated IPMI</li> </ul>	<ul style="list-style-type: none"> <li>Up to 96 cores per system</li> <li>Up to 4TB DDR4 memory capacity in 32 DIMM slots</li> <li>2U 4-way system</li> <li>4 PCI-E 3.0 support</li> <li>1400W Redundant <b>Platinum Level</b> Digital (94%+) high-efficiency power supplies with I<sup>2</sup>C &amp; PMBus</li> </ul>	<ul style="list-style-type: none"> <li>Up to 96 cores per system</li> <li>Up to 4TB DDR4 memory capacity in 32 DIMM slots</li> <li>2U 4-way system</li> <li>4 PCI-E 3.0 support</li> <li>3008 on board</li> <li>1400W Redundant <b>Platinum Level</b> Digital (94%+) high-efficiency power supplies with I<sup>2</sup>C &amp; PMBus</li> </ul>
Serverboard	SUPER● X10OBI-CPU	SUPER● X10QBL-4	SUPER● X10QBL-4CT
Chipset	Intel® C602J chipset	Intel® C602J chipset	Intel® C602J chipset
System Memory (Max.)*	Up to 24TB DDR4 (128GB LRDIMM); 192 DIMM slots	Up to 4TB ECC DDR4 (128GB LRDIMM), speed up to 1866MHz; 32 DIMM slots	Up to 4TB ECC DDR4 (128GB LRDIMM), speed up to 1866MHz; 32 DIMM slots
Expansion Slots	15 PCI-E 3.0 FH slots (8 PCI-E 3.0 x16 + 7 PCI-E 3.0 x8) (16 2.5" NVMe optional support + 7 PCI-E slots)	2 PCI-E 3.0 x16 LP slot; 2 PCI-E 3.0 x8 LP slot	2 PCI-E 3.0 x16 LP slot; 2 PCI-E 3.0 x8 LP slot
Onboard Storage Controller	Intel® C602J including 2 SATA3 (SATA DOM); 4 SATA2 (2 M.2, 2 HDD)	Intel® C602J for 2 SATA3 (6 Gbps) ports; 4 SATA2 (3 Gbps); RAID 0,1,5,10	Intel® C602J for 2 SATA3 (6 Gbps) ports; 4 SATA2 (3 Gbps); RAID 0,1,5,10; 3008 SW controller on board
Connectivity	4-port 10GBase-T Ethernet S10M (Intel® X550 10GbE controller); 1 Port IPMI	Dual LAN with Intel® i350 Gigabit Ethernet Controller	Dual LAN with Intel® X540 10GBase-T Ethernet Controller
VGA/Audio	AST2400 VGA	AST2400 VGA	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	12x hot swap 2.5" SAS3 HDDs (w/ RAID cards); 20x 2.5" or 6x 3.5" internal HDDs (w/ RAID cards)	6x 3.5" hot-swap SATA drive bays	6x 3.5" hot-swap SAS2 drive bays (through SAS2 Backplane)
Peripheral Bays	7U Rackmountable Rackmount Kit	N/A	N/A
Power Supply	5x 1600W (N+1 Redundant) <b>Titanium Level</b> power supplies with PMBus	1400W Redundant <b>Platinum Level</b> Digital (94%+) high-efficiency power supplies	1400W Redundant <b>Platinum Level</b> Digital (94%+) high-efficiency power supplies
Cooling System	8x 9cm Hot-Swappable Counter-Rotating Rear Fans	3x 8cm heavy duty fans with speed control	3x 8cm heavy duty fans with speed control
Form Factor	7U Rackmount 448 x 310 x 733mm (17.63" x 12.2" x 28.87") Gross Weight: 208lbs (94.35kg)	2U Rackmount 437 x 89 x 709mm (17.2" x 3.5" x 27.9")	2U Rackmount 437 x 89 x 709mm (17.2" x 3.5" x 27.9")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# MP

(For Complete System Only)

EX 4-Way  
E7-8800/4800 v4/v3, 96 DDR4 DIMMs,  
Up to 12TB memory capacity, 11 PCI-E 3.0 slots;  
SAS2 (6 Gbps)



EX 4-Way  
E7-8800/4800 v4/v3, 96 DDR4 DIMMs,  
Up to 12TB memory capacity, 11 PCI-E 3.0 slots;  
SAS3 (12 Gbps)



2U 4-Way  
48 DDR4 DIMMs  
11 PCI-E 3.0 slot, SAS, NVMe available



MODEL	SYS-8048B-TR4FT	SYS-4048B-TR4FT	SYS-2048U-RTR4
Processor Support	Quad Intel® Xeon® Processor E7-8800/4800 v4/v3 product families supported, QPI up to 9.6GT/s	Quad Intel® Xeon® Processor E7-8800/4800 v4/v3 product families supported, QPI up to 9.6GT/s	Quad Intel® Xeon® processor E5-4600 v4/v3 product families supported, QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Business Intelligence</li> <li>ERP, CRM</li> <li>Database Applications</li> <li>Research lab/National Lab</li> <li>Virtualization</li> </ul>	<ul style="list-style-type: none"> <li>Business Intelligence</li> <li>ERP, CRM</li> <li>Database Applications</li> <li>Research lab/National Lab</li> <li>Virtualization</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>High End Enterprise Server</li> <li>Cloud Computing</li> <li>DataCenter Applications</li> <li>HPC</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Up to 96 CPU cores per system</li> <li>Up to 12TB in 96 memory DIMMs</li> <li>Up to 11 PCI-E 3.0 slots</li> <li>Up to 24 3.5" HDDs, SAS 2.0 (6Gbps)</li> <li>Up to 4x 1620W Redundant <b>Platinum Level</b> (94%) power supplies</li> </ul>	<ul style="list-style-type: none"> <li>Up to 96 CPU cores per system</li> <li>Up to 12TB in 96 memory DIMMs</li> <li>Up to 11 PCI-E 3.0 slots</li> <li>Up to 48 SAS 3.0 (12Gbps) 2.5" drive bays</li> <li>Up to 4x 1620W Redundant <b>Platinum Level</b> (94%) power supplies</li> </ul>	<ul style="list-style-type: none"> <li>Up to 88 cores per system</li> <li>48 DDR4 up to 6TB Memory</li> <li>4 <b>NVMe</b> SSD ports Ready</li> <li>Up to 11 PCI-E 3.0 Slots</li> <li>4 GLAN + 1 Dedicated IPMI</li> <li>2U Rack Mount Chassis</li> </ul>
Serverboard	SUPER● X10QBi	SUPER● X10QBi	SUPER● X10QRH+
Chipset	Intel® C602J chipset	Intel® C602J chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 12TB ECC DDR4 with 128GB 3DS LRDIMM (8x memory module board: X10QBi-MEM2), speed up to 1866MHz; 96 DIMM slots	Up to 12TB ECC DDR4 with 128GB 3DS LRDIMM (8x memory module board: X10QBi-MEM2), speed up to 1866MHz; 96 DIMM slots	Up to 6TB DDR4 (128GB LRDIMM); up to 2400MHz; 48 DIMM slots
Expansion Slots	11 PCI-E 3.0 slots (4x PCI-E 3.0 x16 + 7x PCI-E 3.0 x8) with 4 memory module boards; 8 PCI-E 3.0 slots (4x PCI-E 3.0 x16 + 4x PCI-E 3.0 x8) with 8 memory module boards	11 PCI-E 3.0 slots (4x PCI-E 3.0 x16 + 7x PCI-E 3.0 x8) with 4 memory module boards; 8 PCI-E 3.0 slots (4x PCI-E 3.0 x16 + 4x PCI-E 3.0 x8) with 8 memory module boards	9 PCI-E 3.0 x8; 2 PCI-E 3.0 x16
Onboard Storage Controller	Intel® C602J for 2 SATA3 (6 Gbps) ports and 4 SATA2 (3 Gbps)	Intel® C602J for 2 SATA3 (6 Gbps) ports and 4 SATA2 (3 Gbps)	Intel® C612 for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10, including 8 HDD and 2 SATADOM
Connectivity	Dual 10GBase-T ports with Intel® X540 controller on AOM card	Dual 10GBase-T ports with Intel® X540 controller on AOM card	<b>Quad LAN</b> with Intel® i350 Gigabit Ethernet Controller
VGA/Audio	AST2400 VGA	AST2400 VGA	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	24 hot-swap 3.5" SAS2 drive support via extra Add-on RAID controller card	24 hot-swap 2.5" <b>SAS3</b> drive support via extra Add-on RAID controller card; optional: up to 48 hot-swap 2.5" <b>SAS3</b> drives support via extra backplane + add-on RAID controller card	24 hot-swap 2.5" <b>SAS3</b> drive support via extra Add-on RAID controller card; 4 Hybrid ports with <b>NVMe</b> support via extra Add-on card
Peripheral Bays	N/A	N/A	N/A
Power Supply	(N+1) Redundant 1620W up to 4 <b>Platinum Level</b> (94%) power supplies	(N+1) Redundant 1620W up to 4 <b>Platinum Level</b> (94%) power supplies	1000W Redundant <b>Titanium Level</b> power supplies; 2000W power supply options available
Cooling System	4x 9cm mid fans + 3x 8cm rear fans with speed control; optional 2 additional 8cm rear fans	4x 9cm mid fans + 3x 8cm rear fans with speed control; optional 2 additional 8cm rear fans	4x 8cm heavy duty fans with speed control
Form Factor	4U Rackmount 437 x 178 x 846mm (17.2" x 7" x 33.3")	4U Rackmount 437 x 178 x 795mm (17.2" x 7" x 31.3")	2U Rackmount 437 x 89 x 780mm (17.2" x 3.5" x 30.7")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# MICROCLOUD

(For Complete System Only)

MicroCloud  
3U 8 nodes Intel® Xeon® Scalable Processor

MicroCloud  
3U 8 nodes Intel® Xeon® E 2100

MicroCloud  
3U 12 nodes Intel® Xeon® E 2100



MODEL	SYS-5039MP-H8TNR	SYS-5039MC-H8TRF	SYS-5039MC-H12TRF
Processor Support	Octal set of Intel® Xeon® Scalable Processor, Cascade Lake CPU TDP support 165W	Octal set of Intel® Coffee Lake Xeon® processor E-2100/2200, Intel® 8th Gen Core™ i3,6/8 cores, support up to 95W (BIOS 1.0b or above is required to support E-2200)	12 set of Intel® Coffee Lake Xeon® processor E-2100/2200, Intel® 8th Gen Core™ i3,6/8 cores, support up to 95W (BIOS 1.0b or above is required to support E-2200)
Key Applications	<ul style="list-style-type: none"> <li>Big Data Analytics</li> <li>Cloud and Virtualization needs</li> <li>Web Hosting, VM</li> <li>Social Networking</li> <li>CDN, Business Hosting</li> </ul>	<ul style="list-style-type: none"> <li>Cloud Computing</li> <li>Web Cache</li> <li>Web Hosting, VM</li> <li>Social Networking</li> <li>Corporate-WINS, DNS, Print, Login</li> </ul>	<ul style="list-style-type: none"> <li>Cloud Computing</li> <li>Web Cache</li> <li>Web Hosting, VM</li> <li>Social Networking</li> <li>Corporate- WINS, DNS, Print, Login</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Single Socket P (LGA 3647) supports Intel® Xeon® Scalable Processors(Cascade Lake)</li> <li>2x 3.5" SATA3 or 2x 2.5" Hybrid SATA3/NVMe w/ optional kits</li> <li>Up to 1TB ECC 3DS RDIMM/LRDIMM, up to DDR4-2933MHz; 4 DIMM slots</li> <li>1x PCIe3.0 x16, 1x Micro-LP, and 2x M.2</li> <li>2x 1GbE port, 1x 1GbE centralized IPMI management port</li> <li>High-density, Enterprise Performance, Cost-effective</li> </ul>	<ul style="list-style-type: none"> <li>Up to 8x hot-pluggable node in 3U chassis</li> <li>1 PCI-E 3.0 (x8) Low-profile</li> <li>High density, enterprise performance, cost effective</li> <li>Redundant 2000W Titanium Level high-efficiency power supplies</li> <li>Hot-swappable SAS/SATA3 HDDs</li> <li>2 M.2 SATA3 or NVMe support</li> </ul>	<ul style="list-style-type: none"> <li>12 UP hot-pluggable nodes in 3U</li> <li>Flexible HDD selection, 2x 3.5" SATA3 or 4x 2.5" SATA3 or 2x 2.5" NVMe plus 2x 2.5" SATA 3</li> <li>1 M.2 SATA3 or NVMe support</li> <li>2000W High Efficiency (96%) Titanium Level Redundant Power Supplies</li> <li>UID LED</li> <li>Centralized dedicated management switch port</li> </ul>
Serverboard	SUPER● X11SPD-F	SUPER● X11SCD-F	SUPER● X11SCE-F
Chipset	Intel® C621 PCH	Intel® C246 chipset	Intel® C246 chipset
System Memory (Max.)*	Octal set of Up to 1TB ECC 3DS RDIMM/LRDIMM, up to DDR4-2933MHz; 4 DIMM slots	8 set of up to 128GB Unbuffered ECC Low Profile DDR4 2666MHz in 4 DIMM sockets	12 set of up to 128GB Unbuffered ECC Very Low Profile DDR4 2666MHz in 4 DIMM sockets
Expansion Slots	8 set of PCI-E 3.0 x16 low profile and Micro-LP slots (MicroLP upgradable)	8 set of PCI-E 3.0 x8 LP slot and 8 set of Micro-LP slots (MicroLP upgradable)	12 set of Micro-LP slots (MicroLP upgradable)
Onboard Storage Controller	8 set of VROC NVMe RAID port	8 set of Intel® C246 controller for 2 SATA3 (6Gbps) ports; RAID 0, 1,5,10: Selected low-profile RAID or HBA RAID card to support SAS HDD	12 set of Intel® C246 controller for 2 SATA3 (6Gbps) ports; RAID 0, 1, 5,10
Connectivity	8 set of Dual LAN Intel® i350 GbE LAN controller (via MLP)	8 set of Dual LAN Intel® i350 GbE LAN controller (via MLP)	12 set of Dual LAN Intel® i350 GbE LAN controller (via MLP)
VGA/Audio	on board VGA by KVM connector	8 set of Aspeed AST2500 graphics	12 set of Aspeed AST2500 graphics
Management	8 set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	8 set of IPMI 2.0 + KVM with dedicated LAN, Intel Node Manager, SUM, SPM, SSM, SuperDoctor 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel Node Manager, SUM, SPM, SSM, SuperDoctor 5, Watchdog
Drive Bays	8 set of 2 x 3.5" SATA3 HDD; or 2x 2.5" Hybrid SATA3/NVMe w/ 3.5"-to-2.5" converter	8 set of 2x 3.5" SATA3 HDD or 2x 2.5" SATA3 w/ option kits	12 set of 2x 3.5" SATA3 HDD; or 4x 2.5" SATA3; or 2x 2.5" NVMe plus 2x 2.5" SATA3; or 2x 2.5" NVMe plus 1x 3.5" SATA3
Peripheral Bays	N/A	N/A	N/A
Power Supply	2200W Redundant Titanium Level high-efficiency power supplies	2000W Redundant Titanium Level high-efficiency power supplies	2000W Redundant Titanium Level high-efficiency power supplies
Cooling System	4x 8cm hot-swap cooling fans with fan speed control	4x 8cm hot-swap cooling fans with fan speed control	4 x 9cm Heavy duty fans with optimal cooling zone
Form Factor	438 x 132 x 589mm (17.26" x 5.21" x 23.2")	3U Rackmount 438.4mm x 132.5mm x 589mm (17.26" x 5.21" x 23.2") (17.26" x 5.21" x 23.2") (26.26" x 11.65" x 34") Gross Weight: 88lbs Net Weight: 62.2lbs	3U Rackmount 444.5mm x 132.5mm x 749.3mm (17.5" x 5.21" x 29.5") (17.5" x 5.21" x 29.5")(28.35" x 16.1" x 42.36") Gross Weight: 125lbs Net Weight: 132lbs

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

MP/MicroCloud

# MICROCLOUD

(For Complete System Only)

MicroCloud  
3U 12 nodes



MicroCloud  
3U 12 nodes



MODEL	SYS-5039MA8-H12RFT	SYS-5039MA16-H12RFT
Processor Support	12 set of Intel® Atom® Processor C3750., Single Socket FCBGA1310 supported, CPU TDP support 21W	12 set of Intel® Atom® Processor C3955., Single Socket FCBGA1310 supported, CPU TDP support 32W
Key Applications	<ul style="list-style-type: none"> <li>Cloud Computing</li> <li>Web Cache</li> <li>Web Hosting, VM</li> <li>Social Networking</li> <li>Corporate- WINS, DNS, Print, Login</li> </ul>	<ul style="list-style-type: none"> <li>Cloud Computing</li> <li>Web Cache</li> <li>Web Hosting, VM</li> <li>Social Networking</li> <li>Corporate- WINS, DNS, Print, Login</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>12 UP hot-pluggable nodes in 3U</li> <li>Flexible HDD selection, 2x 3.5" SATA3 or 4x 2.5" SATA3 or 2x 2.5" NVME plus 2x 2.5" SATA3 or 2x 2.5" NVME plus 1x 3.5" SATA 3</li> <li>2 M.2 SATA3 or NVMe support</li> <li>2000W High Efficiency (96%) Titanium Level Redundant Power Supplies</li> <li>UID LED</li> <li>Centralized dedicated management switch port</li> </ul>	<ul style="list-style-type: none"> <li>12 UP hot-pluggable nodes in 3U</li> <li>Flexible HDD selection, 2x 3.5" SATA3 or 4x 2.5" SATA3 or 2x 2.5" NVME plus 2x 2.5" SATA3 or 2x 2.5" NVME plus 1x 3.5" SATA 3</li> <li>2 M.2 SATA3 or NVMe support</li> <li>2000W High Efficiency (96%) Titanium Level Redundant Power Supplies</li> <li>UID LED</li> <li>Centralized dedicated management switch port</li> </ul>
Serverboard	SUPER● A2SD1-3750F	SUPER● A2SD1-3955F
Chipset	Intel® Denverton SoC	Intel® Denverton SoC
System Memory (Max.)*	12 set of up to 128GB ECC VLP RDIMM Or 64GB ECC VLP UDIMM, DDR4-2400MHz, in 4 DIMM slots	12 set of up to 128GB ECC VLP RDIMM or 64GB ECC VLP UDIMM, DDR4-2400MHz, in 4 DIMM slots
Expansion Slots	no PCIe support	no PCIe support
Onboard Storage Controller	no RAID support	no RAID support
Connectivity	Dual LAN Intel® 10GBase-T on board controller	Dual LAN Intel® 10GBase-T on board controller
VGA/Audio	12 set of Aspeed AST2400 graphics	12 set of Aspeed AST2400 graphics
Management	IPMI 2.0 + KVM with dedicated LAN, Intel Node Manager, SUM, SPM, SSM, SuperDoctor 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel Node Manager, SUM, SPM, SSM, SuperDoctor 5, Watchdog
Drive Bays	12 set of 2x 3.5" SATA3; or 4x 2.5" SATA3 or 2x 2.5" NVME plus 2x 2.5" SATA3 (cannot support M.2); or 2x 2.5" NVME plus 1x 3.5" SATA3 (support only 1 M.2)	12 set of 2x 3.5" SATA3; or 4x 2.5" SATA3 or 2x 2.5" NVME plus 2x 2.5" SATA3; or 2x 2.5" NVME plus 1x 3.5" SATA3
Peripheral Bays	N/A	N/A
Power Supply	2000W Redundant Titanium Level high-efficiency power supplies	2000W Redundant Titanium Level high-efficiency power supplies
Cooling System	4 x 9cm power efficient fans with optimal cooling zone	4 x 9cm power efficient fans with optimal cooling zone
Form Factor	3U Rackmount 444.5mm x 132.5mm x 749.3mm (17.5" x 5.21" x 29.5") (17.5" x 5.21" x 29.5")(28.35" x 16.1" x 42.36") Gross Weight: 125lbs Net Weight: 132lbs	(17.5" x 5.21" x 29.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

MP/MicroCloud

MicroCloud  
3U 8 nodes Intel® Xeon® D 2100



MicroCloud  
3U 8 nodes Intel® Xeon® D 2100



MODEL	SYS-5039MD8-H8TNR	SYS-5039MD18-H8TNR
Processor Support	Octal set of Intel® Xeon® Processor D-2141I, 8-Cores, 16 Threads, CPU TDP support 65W	Octal set of Intel® Xeon® Processor D-2191, 18-Cores, 36 Threads, CPU TDP support 86W
Key Applications	<ul style="list-style-type: none"> <li>Cloud Computing</li> <li>Web Cache</li> <li>Web Hosting, VM</li> <li>Social Networking</li> <li>CDN</li> </ul>	<ul style="list-style-type: none"> <li>Cloud Computing</li> <li>Web Cache</li> <li>Web Hosting, VM</li> <li>Social Networking</li> <li>CDN</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>2x M.2 support (2x 2280/22110)</li> <li>High-density, Enterprise Performance, Cost-effective Intel® Xeon® Processor D-2141I, 8-Cores, 16 Threads, CPU TDP support 65W</li> <li>2x 3.5" SATA3 or 2x 2.5" Hybrid SATA3/NVMe w/ optional kits</li> <li>Up to 512GB ECC LRDIMM, up to 256GB ECC RDIMM DDR4-2133Mz; in 4 DIMM slots</li> <li>1x PCIe3.0 x16, 1x Micro-LP, and 2x M.2</li> <li>2x 1GbE port, 1x 1Gbe centralized IPMI management port</li> <li>Redundant 1600W Titanium Level high-efficiency power supplies</li> </ul>	<ul style="list-style-type: none"> <li>Intel® Xeon® D-2191, 18-Cores, 36 Threads, CPU TDP support 86W</li> <li>2x 3.5" SATA3 or 2x 2.5" Hybrid SATA3/NVMe w/ optional kits</li> <li>Up to 512GB ECC LRDIMM, up to 256GB ECC RDIMM DDR4-2400Mz; in 4 DIMM slots</li> <li>1x PCI-E 3.0 x16, 1x Micro-LP, and 2x M.2</li> <li>2x 1GbE port, 1x 1Gbe centralized IPMI management port</li> <li>Redundant 1600W Titanium Level high-efficiency power supplies</li> </ul>
Serverboard	SUPER● X11SDD-8C-F	SUPER● X11SDD-18C-F
Chipset	Intel® Xeon® Processor D SoC	Intel® Xeon® Processor D SoC
System Memory (Max.)*	Up to 512GB ECC LRDIMM, up to 256GB ECC RDIMM DDR4-2133Mz; in 4 DIMM slots	Up to 512GB ECC LRDIMM, up to 256GB ECC RDIMM DDR4-2400Mz; in 4 DIMM slots
Expansion Slots	8 set of PCI-E 3.0 x16 low profile and Micro-LP slots (MicroLP upgradable)	8 set of PCI-E 3.0 x16 low profile and Micro-LP slots (MicroLP upgradable)
Onboard Storage Controller	8 set of VROC NVMe RAID port (not support Micro-LP PXE boot)	8 set of VROC NVMe RAID port (not support Micro-LP PXE boot)
Connectivity	8 set of Dual LAN Intel® i350 GbE LAN controller (via MLP)	8 set of Dual LAN Intel® i350 GbE LAN controller (via MLP)
VGA/Audio	on board VGA by KVM connector	on board VGA by KVM connector
Management	8 set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	8 set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	Octal set of 2x 3.5" SATA3 HDD; or 2x 2.5" Hybrid SATA3/NVMe w/ optional kits	Octal set of 2x 3.5" SATA3 HDD; or 2x 2.5" Hybrid SATA3/NVMe w/ optional kits
Peripheral Bays	N/A	N/A
Power Supply	1600W Redundant Titanium Level high-efficiency power supplies	1600W Redundant Titanium Level high-efficiency power supplies
Cooling System	4x 8cm hot-swap cooling fans with fan speed control	4x 8cm hot-swap cooling fans with fan speed control
Form Factor	3U Rackmount 387 x 132 x 585mm (15.25" x 5.2" x 23"); Enclosure: 438 x 132 x 589mm (17.26" x 5.21" x 23.2") Package: 667 x 296 x 864mm (26.26" x 11.65" x 34") Gross Weight: 88lbs (39.92kg) Net Weight: 62.2lbs (28.21kg)	438 x 132 x 589mm (17.26" x 5.21" x 23.2")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# MICROCLOUD

(For Complete System Only)

MicroCloud  
3U 12 nodes Intel® Xeon® E3-1200 v6



MicroCloud  
3U 12 nodes Intel® Xeon® E3-1200 v6



MODEL	SYS-5039MS-H12TRF	SYS-5039MS-H12NR
Processor Support	12 set of Intel® Xeon® processor E3-1200 v6, Intel® 7th Gen Core™ i3, Intel® Pentium®, Intel® Celeron® processors product family	12 set of Intel® Xeon® processor E3-1200 v6, Intel® 7th Gen Core™ i3, Intel® Pentium®, Intel® Celeron® processors product family up to 72W TDP
Key Applications	<ul style="list-style-type: none"> <li>Cloud Computing</li> <li>Web Cache</li> <li>Web Hosting, VM</li> <li>Social Networking</li> <li>Corporate- WINS, DNS, Print, Login</li> </ul>	<ul style="list-style-type: none"> <li>Cloud Computing</li> <li>Web Cache</li> <li>Web Hosting, VM</li> <li>Social Networking</li> <li>All Flash Storage</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>12 UP hot-pluggable nodes in 3U</li> <li>Flexible HDD selection, 2x 3.5" SATA3 or 4x 2.5" SATA3 or 2x 2.5" NVMe plus 2x 2.5" SATA3 or 2x 2.5" NVMe plus 1x 3.5" SATA 3</li> <li>2000W High Efficiency (96%) Titanium Level Redundant Power Supplies</li> <li>UID LED</li> <li>Centralized dedicated management switch port</li> </ul>	<ul style="list-style-type: none"> <li>12 UP hot-pluggable nodes in 3U</li> <li>4 NVMe SSD ports Ready</li> <li>M.2 Support</li> <li>2000W High Efficiency (96%) Titanium Level Redundant Power Supplies</li> <li>UID LED</li> <li>Centralized dedicated management switch port</li> </ul>
Serverboard	SUPER® X11SSE-F	SUPER® X11SSE-F
Chipset	Intel® C236 chipset	Intel® C236 chipset
System Memory (Max.)*	12 set of up to 64GB Unbuffered ECC Very Low Profile DDR4 2400MHz in 4 DIMM sockets	12 set of up to 64GB Unbuffered ECC Very Low Profile DDR4 2400MHz in 4 DIMM sockets
Expansion Slots	12 set of Micro-LP slots (MicroLP upgradable)	12 set of Micro-LP slots (MicroLP upgradable)
Onboard Storage Controller	12 set of Intel® C236 controller for 2 SATA3 (6Gbps) ports; RAID 0, 1, 5,10	12 set of Intel® C236 controller for 2 SATA3 (6Gbps) ports; RAID 0, 1, 5,10
Connectivity	12 set of Dual LAN Intel® i350 Gbe LAN controller	12 set of Single 25G SFP28 LAN Mellanox® ConnectX-4 Lx EN controller
VGA/Audio	12 set of Aspeed AST2400 graphics	12 set of Aspeed AST2400 graphics
Management	IPMI 2.0 + KVM with dedicated LAN, Intel Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	12 set of 2x 3.5" SATA3 HDD or 4x 2.5" SATA3 or 2x 2.5" NVMe + 2x 2.5" SATA3	12 set of 4x 2.5" NVMe SSD, and 1x M.2 (2280 SATA3)
Peripheral Bays	N/A	N/A
Power Supply	2000W Redundant Titanium Level high-efficiency power supplies	2000W Redundant Titanium Level high-efficiency power supplies
Cooling System	4 x 9cm Heavy duty fans with optimal cooling zone	4 x 9cm Heavy duty N+1 hot-swap fans with optimal cooling zone
Form Factor	(17.5" x 5.21" x 29.5")	3U Rackmount 444.5mm x 132.5mm x 749.3mm (17.5" x 5.21" x 29.5") x 787mm (17.5" x 5.21" x 31")(28.35" x 16.1" x 42.36") Gross Weight: 125lbs Net Weight: 132lbs

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

MP/MicroCloud

# MICROCLOUD

(For Complete System Only)

MicroCloud  
8 UP Nodes

MicroCloud  
8 UP Nodes

MicroCloud  
8 UP Nodes



MODEL	SYS-5039MS-H8TRF	SYS-5038MD-H8TRF	SYS-5038MR-H8TRF
Processor Support	Octal set of Intel® Xeon® processor E3-1200 v5/ v6, Intel® 7th Gen Core™ i3, Intel® Pentium®, Intel® Celeron® processors product family. BIOS version 2.0 or above is required to support 7th Generation Intel® Core™ Processors and Intel® Xeon® Processor E3-1200 v6 series	Octal set of Intel® Xeon® D-1541, 8-Core, 45W	Octal set of Intel® Xeon® Processor E5-2600 v4/ v3 product families, and Intel® Xeon® Processor E5-1600 v4/v3 product families
Key Applications	<ul style="list-style-type: none"> <li>Cloud Computing</li> <li>Web Cache</li> <li>Web Hosting, VM</li> <li>Social Networking</li> </ul>	<ul style="list-style-type: none"> <li>Cloud Computing</li> <li>Web Cache</li> <li>Web Hosting, VM</li> <li>Social Networking</li> <li>CDN</li> </ul>	<ul style="list-style-type: none"> <li>CDN</li> <li>Cloud Computing</li> <li>Social Networking</li> <li>Video Streaming</li> <li>Web Cache</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Up to 8x hot-pluggable node in 3U chassis</li> <li>1 PCI-E 3.0 (x8) Low-profile</li> <li>High density, enterprise performance, cost effective</li> <li>Redundant 1600W Titanium Level high-efficiency power supplies</li> <li>Hot-swappable SAS/SATA3 HDDs</li> <li>UID LED</li> </ul>	<ul style="list-style-type: none"> <li>4x M.2 support (3x 22110, 1x 2240)</li> <li>Up to 8x hot-pluggable node in 3U chassis</li> <li>1 PCI-E 3.0 (x8) low-profile</li> <li>Redundant 1600W <b>Titanium Level</b> high-efficiency power supplies</li> <li>Hot-swappable SAS/SATA3 HDDs</li> <li>UID LED</li> </ul>	<ul style="list-style-type: none"> <li>8 x Hot-plug UP nodes in 3U</li> <li>1 x PCI-E x8 slot</li> <li>1620W Redundant <b>Platinum Level</b> high-efficiency power supplies</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>Hot-swappable SAS/SATA3 (6Gbps) HDDs</li> <li>UID LED</li> </ul>
Serverboard	SUPER● X11SSD-F	SUPER● X10SDD-F	SUPER● X10SRD-F
Chipset	Intel® C236 chipset	Intel® Xeon® D SoC	Intel® C612 Chipset
System Memory (Max.)*	8 set of up to 64GB Unbuffered ECC Low Profile DDR4 2400MHz in 4 DIMM sockets	Octal set of up to 128GB DDR4 ECC RDIMM, 64GB DDR4 ECC/non-ECC UDIMM, in 4 DIMM slots	4 DIMMs per node, support up to 512GB ECC 3DS LRDIMM / 256GB ECC LRDIMM / 128GB ECC RDIMMs 2400/2133/1866/1600 MHz Memory Octal set of 1 PCI-E 3.0 x8 (low profile) and Octal set of Micro-LP slots (Micro-LP upgradable)
Expansion Slots	8 set of PCI-E 3.0 x8 low profile slot and 8 set of Micro-LP slots (MicroLP upgradable)	Octal set of PCI-E 3.0 x8 low profile slot and Octal set of Micro-LP slots (MicroLP upgradable)	Octal set of Micro-LP slots (Micro-LP upgradable)
Onboard Storage Controller	8 set of Intel® C236 controller for 2 SATA3 (6Gbps) ports; RAID 0, 1,5,10: Selected low-profile RAID or HBA RAID card to support SAS HDD	Octal set of System on Chip	Octal set of Intel® C612 for 2 SATA3 (6Gbps) ports; RAID 0, 1; Selected low-profile RAID or HBA RAID card to support SAS HDD
Connectivity	8 set of Dual LAN Intel® i350 Gbe LAN controller	Octal set of Dual LAN Intel® i350 GbE LAN controller	Octal set of Dual LAN with 2x Intel® I350 Gigabit Ethernet controllers
VGA/Audio	8 set of Aspeed AST2400 graphics	Octal set of AST2400 VGA	Octal set of AST2400 VGA
Management	8 set of IPMI 2.0 + KVM with dedicated LAN, Intel Node Manager, SUM, SPM, SSM, SuperDoctor 5, Watchdog	Octal set of IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	Octal set of Dedicated Management LAN port
Drive Bays	Octal set of 2x 3.5" SATA3 HDD or 2x 2.5" SATA3 w/ option kits	Octal set of 2x 3.5" SATA3 HDD; or 2x 2.5" SATA3 w/ option kits	Octal set of 2 x 3.5" hot-swap SATA3/SAS (6Gbps) drive bays
Peripheral Bays	N/A	N/A	N/A
Power Supply	1600W Redundant Titanium Level high-efficiency power supplies	1600W Redundant <b>Titanium Level</b> high-efficiency power supplies	1620W Redundant <b>Platinum Level</b> high-efficiency power supplies
Cooling System	4 x 8cm Heavy duty fans with optimal cooling zone	4x 8cm hot-swap cooling fans with fan speed control	4x 8cm hot-swap cooling fans with fan speed control
Form Factor	3U Rackmount 438.4mm x 132.5mm x 589mm (17.26" x 5.21" x 23.2") (17.26" x 5.21" x 23.2") (26.26" x 11.65" x 34") Gross Weight: 88lbs Net Weight: 62.2lbs	3U Rackmount 438.4 x 132.5 x 589mm (17.26" x 5.21" x 23.2")	3U Rackmount 387 x 132 x 585mm (15.25" x 5.2" x 23")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

MP/MicroCloud

# X12 UP MAINSTREAM

**NEW!**

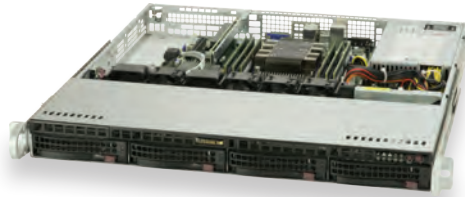
3rd Gen Intel® Xeon® Scalable processors Supported



MODEL	SYS-510P-M	SYS-510P-MR
Processor Support	3rd Gen Intel® Xeon® Scalable processors Single Socket LGA-4189 (Socket P+) supported TDP up to 220W;	3rd Gen Intel® Xeon® Scalable processors Single Socket LGA-4189 (Socket P+) supported TDP up to 220W;
Key Applications	<ul style="list-style-type: none"> <li>• Small Business</li> <li>• Web/Hosting Application</li> <li>• Email/Firewall/Print Server</li> </ul>	<ul style="list-style-type: none"> <li>• Small Business</li> <li>• Web/Hosting Application</li> <li>• Email/Firewall/Print Server</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• Short Depth</li> <li>• Cost Effective</li> <li>• 2x NVMe/SATA M.2 supported</li> </ul>	<ul style="list-style-type: none"> <li>• Short Depth.</li> <li>• Cost Effective.</li> <li>• 2x NVMe/SATA M.2 supported.</li> </ul>
Serverboard	SUPER● X12SPO-F	SUPER● X12SPO-F
Chipset	Intel® C621A	Intel® C621A
System Memory (Max.)	8 DIMM slots ECC RDIMM, DDR4-3200MHz ECC LRDIMM, DDR4-3200MHz Intel® DCPMM, DDR4-3200MHz	8 DIMM slots ECC RDIMM, DDR4-3200MHz ECC LRDIMM, DDR4-3200MHz Intel® DCPMM, DDR4-3200MHz
Expansion Slots	PCI-E 4.0 x16 FHHL slot(s)	PCI-E 4.0 x16 FHHL slot(s)
Onboard Storage Controller	Intel® SATA	Intel® SATA
Connectivity	2x 1GbE RJ45 port(s) with Intel® Ethernet Controller i350	2x 1GbE RJ45 port(s) with Intel® Ethernet Controller i350
VGA/Audio	1 onboard VGA port	1 onboard VGA port
Management	NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; Redfish API; IPMI2.0	NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; Redfish API; IPMI2.0
Drive Bays	4x 3.5" NVMe/SATA drive bays; 4x 3.5" NVMe hybrid;	4x 3.5" NVMe/SATA drive bays; 4x 3.5" NVMe hybrid;
Peripheral Bays	2x 2.5"	2x 2.5"
Power Supply	500W Platinum level (94%)	Redundant 400W Platinum level (94%)
Cooling System	4x (4cm x 4cm x 2.8cm) heavy duty fan(s)	4x (4cm x 4cm x 2.8cm) heavy duty fan(s)
Form Factor	1U rackmount Enclosure: 437 x 43 x 507mm (17.2" x 1.7" x 19.98") Package: 609.6 x 215.9 x 749.3mm (24" x 8.5" x 29.5")	1U rackmount Enclosure: 437 x 43 x 507mm (17.2" x 1.7" x 19.98") Package: 609.6 x 215.9 x 749.3mm (24" x 8.5" x 29.5")



# X11 UP MAINSTREAM



MODEL	SYS-5019P-M SYS-5019P-MR	SYS-5019P-MT SYS-5019P-MTR
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Single Socket P (LGA 3647) supported, CPU TDP support 165W. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed <i>Cascade Lake Refresh</i> ).	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Single Socket P (LGA 3647) supported, CPU TDP support 205W. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed <i>Cascade Lake Refresh</i> ).
Key Applications	<ul style="list-style-type: none"> <li>Web Hosting, VM</li> <li>Compact Network Appliance</li> </ul>	<ul style="list-style-type: none"> <li>Web Hosting, VM</li> <li>Application and data serving</li> <li>Database Applications</li> <li>Mission-critical applications</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Integrated IPMI 2.0 and KVM with Dedicated LAN</li> <li>High-efficiency Power Supply <b>Platinum Level</b> Certified</li> <li>Quick Release Rails</li> <li>2x 1GbE LAN</li> </ul>	<ul style="list-style-type: none"> <li>1 TB LRDIMM 3DS</li> <li>M.2 2280, 22110 SUPPORT</li> <li>Quick Release Rails</li> </ul>
Serverboard	SUPER● X11SPM-F	SUPER● X11SPI-TF
Chipset	Intel® C621 chipset	Intel® C622 chipset
System Memory (Max.)*	Up to Up to 1.5TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 1.5TB 3DS ECC LRDIMM, DDR4-2933MHz, in 6 DIMM slots	Up to Up to 2TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 2TB 3DS ECC LRDIMM, DDR4-2933MHz, in 8 DIMM slots
Expansion Slots	1x PCI-E 3.0 x16(FH.HL)	1 PCI-E 3.0 x16 slot
Onboard Storage Controller	Intel® C621 controller for 12 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C622 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	Dual LAN with 1GbE	4x USB 3.0 (front/rear), USB 2.0, VGA, Serial PORT
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	4x 3.5" hot-swap SAS/SATA	4x 3.5" Hot-swap SATA3 bays w/ RAID
Peripheral Bays	-M: 1x Slim DVD-ROM Drive(option) -MR: Option for 1x Slim DVD-ROM Drive 1x USB + COM port tray	Optional slim optical device bay, optional FDD/USB bay
Power Supply	-M: PWS-350-1H -MR: 400W Redundant <b>Platinum Level</b> power supplies w/ BBP® option	-MT: PWS-350-1H -MTR: 400W Redundant <b>Platinum Level</b> power supplies w/ BBP® option
Cooling System	4x 40x28mm PWM fan; 2x 40x28mm PWM fan(option)	4x 40x28mm PWM fan; 2x fans for AOC cooling(option)
Form Factor	1U 17.2" (437mm) x 1.7" (43mm) x 19.85" (503mm); Enclosure: 437 x 43 x 503mm (17.2" x 1.7" x 19.8") Package: 610 x 216 x 749mm (24" x 8.5" x 29.5") Gross Weight: 30lbs (13.61kg) Net Weight: 18lbs (8.16kg)	1U rackmount, 1.7" H x 17.2" W x 19.8" D (43mm H x 437mm W x 503mm D); Enclosure: 437 x 43 x 503mm (17.2" x 1.7" x 19.8") Package: 610 x 216 x 749mm (24" x 8.5" x 29.5") Gross Weight: 30.4lbs (13.79kg) Net Weight: 17.6lbs (7.98kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# X11 UP MAINSTREAM

Quad LAN



MODEL	SYS-5019C-M	SYS-5019C-MR	SYS-5019C-M4L
Processor Support	Intel® Xeon® Processor E-2100/E-2200 series, 8th/9th Generation Intel® Core™i3/Pentium®/Celeron® Processor, Single Socket LGA-1151 (Socket H4) supported, CPU TDP support Up to 95W TDP * 95W CPU support up to 30 degree ambient	Intel® Xeon® Processor E-2100/E-2200 series, 8th/9th Generation Intel® Core™i3/Pentium®/Celeron® Processor, Single Socket LGA-1151 (Socket H4) supported, CPU TDP support Up to 95W TDP * 95W CPU support up to 30 degree ambient	8th/9th Generation Intel® Core™i3/Pentium®/Celeron® Processor, Intel® Xeon® E-2100 Processor, Intel® Xeon® E-2200 Processor. Single Socket LGA-1151 (Socket H4) supported, CPU TDP support Up to 95W TDP BIOS version 1.0b or above is required to support Intel® Xeon® E-2200 and 9th Generation Intel® Core™ i3/Pentium®/Celeron® Processors *95W 6C support up to 30 degree ambient temperature
Key Applications	<ul style="list-style-type: none"> <li>General purpose, SMB, Web Hosting Application and data serving Archiving, Mail/Finance, Security</li> </ul>	<ul style="list-style-type: none"> <li>General purpose, SMB, Web Hosting Application and data serving Archiving, Mail/Finance, Security Mission-Critical</li> </ul>	<ul style="list-style-type: none"> <li>Entry level, Cost effective General purpose, SMB, Web Hosting Quad LAN</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Short-Depth(19.8"D) Quick Release Rails</li> </ul>	<ul style="list-style-type: none"> <li>Redundant 400W high-efficiency power supplies w/BBP module support</li> <li>Short-Depth (19.8"D)</li> </ul>	<ul style="list-style-type: none"> <li>Compact, less than 15 inches depth Up to 2x internal 3.5", 3x 2.5" drives (option)</li> </ul>
Serverboard	SUPER● X11SCM-F	SUPER● X11SCM-F	SUPER● X11SCL-LN4F
Chipset	Intel® C246 chipset	Intel® C246 chipset	Intel® C242 chipset
System Memory (Max.)*	Up to Up to 128GB Unbuffered ECC UDIMM, DDR4-2666MHz, in 4 DIMM slots	Up to Up to 128GB Unbuffered ECC UDIMM, DDR4-2666MHz, in 4 DIMM slots	Up to Up to 128GB Unbuffered ECC UDIMM, DDR4-2666MHz, in 4 DIMM slots
Expansion Slots	1 PCI-E 3.0 x16	1 PCI-E 3.0 x16	1 PCI-E 3.0 x16 (FHHL)
Onboard Storage Controller	Intel® C246 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C246 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C242 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	Dual LAN with Intel® Ethernet Controller I210-AT	Dual LAN with Intel® Ethernet Controller I210-AT	Quad LAN with Intel® Ethernet Controller I210-AT
VGA/Audio	Aspeed AST2500 BMC	Integrated video from Aspeed BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager, IPMI2.0, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	IPMI2.0, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	4x 3.5" hot-swap SAS/SATA	4x 3.5" hot-swap SAS/SATA	Up to 2x internal 3.5", 3x 2.5" drives (option)
Peripheral Bays	1x Slim DVD-ROM Drive(option)	1x Slim DVD-ROM Drive 1x USB + COM port tray(option)	1x slim DVD-ROM drive(option)
Power Supply	PWS-350-1H	PWS-407P-1R	PWS-350-1H
Cooling System	4x 40x28mm PWM fan	4x 40x28mm PWM fan; ; 2x fans for AOC cooling(option)	2x 4cm counter-rotating PWM fan
Form Factor	1U 17.2" (437mm) x 1.7" (43mm) x 19.85" (503mm); Enclosure: 25 x 25 x 483mm (17.2" x 1.7" x 19.8") Package: 584 x 216 x 762mm (23.5" x 8.5" x 30") Gross Weight: 32lbs (14.51kg) Net Weight: 18lbs (8.16kg)	1U 17.2" (437mm) x 1.7" (43mm) x 19.85" (503mm); Enclosure: 437 x 43 x 503mm (17.2" x 1.7" x 19.8") Package: 594 x 216 x 754mm (23.4" x 8.5" x 29.7") Gross Weight: 33lbs (14.97kg) Net Weight: 20lbs (9.07kg)	437 x 43 x 366mm (17.2" x 1.7" x 14.4")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# X11 UP MAINSTREAM



MODEL	SYS-5019C-L	SYS-5019C-FL
Processor Support	8th/9th Generation Intel® Core™i3/Pentium®/Celeron® Processor, Intel® Xeon® E-2100 Processor, Intel® Xeon® E-2200 Processor. Single Socket LGA-1151 (Socket H4) supported, CPU TDP support Up to 95W TDP BIOS version 1.0b or above is required to support Intel® Xeon® E-2200 and 9th Generation Intel® Core™ i3/Pentium®/Celeron® Processors*95W 6C support up to 30 degree ambient temperature	8th/9th Generation Intel® Core™i3/Pentium®/Celeron® Processor, Intel® Xeon® E-2100 Processor, Intel® Xeon® E-2200 Processor. Single Socket LGA-1151 (Socket H4) supported, CPU TDP support Up to 95W TDP BIOS version 1.0b or above is required to support Intel® Xeon® E-2200 and 9th Generation Intel® Core™ i3/Pentium®/Celeron® Processors *95W 6C support up to 30 degree ambient temperature
Key Applications	<ul style="list-style-type: none"> <li>Appliance Server</li> <li>Network Security Appliance</li> <li>Office Server</li> </ul>	<ul style="list-style-type: none"> <li>Appliance Server</li> <li>Network Security</li> <li>Office Server</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>8th Generation Intel® Core™ i3 Processors, Intel® Xeon® E-2100/2200 processor</li> <li>2x 3.5" SATA3 or 4x 2.5" SATA3 w/ optional kits</li> <li>Short-depth, space saving design</li> </ul>	<ul style="list-style-type: none"> <li>8th Generation Intel® Core™ i3 Processors, Intel® Xeon® Processor E-2100/E-2200 series</li> <li>Short-depth, space saving design</li> <li>Front I/O</li> </ul>
Serverboard	SUPER● X11SCL-IF	SUPER● X11SCL-IF
Chipset	Intel® C242 chipset	Intel® C242 chipset
System Memory (Max.)*	Up to Up to 64GB Unbuffered ECC UDIMM, DDR4-2666MHz, in 2 DIMM slots	Up to Up to 64GB Unbuffered ECC UDIMM, DDR4-2666MHz, in 2 DIMM slots
Expansion Slots	1 PCI-E 3.0 x16(in x16 slot)	1 PCI-E 3.0 x16(in x16 slot)
Onboard Storage Controller	Intel® C242 controller for 4 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C242 controller for 4 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	Dual LAN with 1GbE with Intel® I210	Dual LAN with 1GbE with Intel® I210
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	IPMI2.0, KVM with dedicated LAN, SSM, SUM, SuperDoctor® 5, Watchdog	IPMI2.0, KVM with dedicated LAN, SSM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	1x 3.5" Internal Drive Bay with 1 Full-height, Half-length PCI 2x 3.5" Internal Drive Bay 2x 2.5" Internal Drive Bay with 1 Full-height, Half-length PCI 4x 2.5" Internal Drive	1x 3.5" Internal Drive Bay with 1 Full-height, Half-length PCI 2x 3.5" Internal Drive Bay 2x 2.5" Internal Drive Bay with 1 Full-height, Half-length PCI 4x 2.5" Internal Drive
Peripheral Bays	N/A	N/A
Power Supply	PWS-203-1H	PWS-203-1H
Cooling System	2x 40x40x28mm PWM fans	2x 40x40x28mm PWM fans
Form Factor	Mini-1U 17.2" (437mm) x 1.7" (43mm) x 9.8" (249mm); Enclosure: 432 x 43 x 229mm (17.2" x 1.7" x 9.8") Package: 655 x 155 x 465mm (25.8" x 6.1" x 18.3") Gross Weight: 12lbs (5.44kg) Net Weight: 8lbs (3.63kg)	Mini-1U 17.2" (437mm) x 1.7" (43mm) x 9.8" (249mm); Enclosure: 25 x 25 x 249mm (17.2" x 1.7" x 9.8") Package: 655 x 155 x 465mm (25.8" x 6.1" x 18.3") Gross Weight: 12lbs (5.44kg) Net Weight: 8lbs (3.63kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

† 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

\*\* For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.

# X11 UP MAINSTREAM

Quad LAN



MODEL	SYS-5019S-M	SYS-5019S-MR	SYS-5019S-MN4
Processor Support	Intel® Xeon® processor E3-1200 v6/v5, 6th Gen. Intel® Core™ i3 processor, Intel® Celeron® processor, Intel® Pentium® processor product families, Socket H4 (LGA 1151) supported	Intel® Xeon® processor E3-1200 v6/v5, 6th Gen. Intel® Core™ i3 processor, Intel® Celeron® processor, Intel® Pentium® processor product families, Socket H4 (LGA 1151) supported	Intel® Xeon® processor E3-1200 v6/v5, 6th Gen. Intel® Core™ i3 processor, Intel® Celeron® processor, Intel® Pentium® processor product families, Socket H4 (LGA 1151) supported
Key Applications	<ul style="list-style-type: none"> <li>High Flexibility, VM, Communication</li> <li>File/Print, Web Hosting</li> </ul>	<ul style="list-style-type: none"> <li>HA, File/Print Server</li> <li>Web Hosting, VM</li> </ul>	<ul style="list-style-type: none"> <li>General purpose, SMB, Web Hosting</li> <li>Domain Controller, File/Print</li> <li>Front USB 3.0 ports</li> <li>Quick Release Rails</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>M.2 mini-PCI-E support 2280 form factor</li> <li>Up to 4 hot-swap 3.5" drives</li> <li>Front USB 3.0 ports</li> <li>Quick Release Rails</li> <li>1x PCI-E 3.0 x8 (x16) expansion slot</li> <li>SuperDOM support (SATA DOM support)</li> <li>2x GbE port, 1x dedicated IPMI port</li> </ul>	<ul style="list-style-type: none"> <li>M.2 PCI-E support 2280 form factor</li> <li>Supermicro Battery Back Up (BBP) option</li> <li>Support Intel® VHD (with selected CPU) and NM</li> <li>Redundant 400W high-efficiency power</li> <li>Up to 4 hot-swap 3.5" drives</li> <li>Internal fixed drive options</li> <li>2x GbE port, 1x dedicated IPMI port</li> <li>Front USB 3.0 ports</li> <li>Quick Release Rails</li> </ul>	<ul style="list-style-type: none"> <li>M.2 mini-PCI-E support 2280</li> <li>Support Intel® VHD (with selected CPU) and NM</li> <li>SATA DOM support</li> <li>4x GbE LAN ports</li> </ul>
Serverboard	SUPER● X11SSH-F	SUPER● X11SSH-F	SUPER● X11SSH-LN4F
Chipset	Intel® C236 Express chipset	Intel® C236 Express chipset	Intel® C236 Express chipset
System Memory (Max.)*	Up to 4x ECC UDIMM slots, up to 64GB DDR4-2133MHz	Up to 4x ECC UDIMM slots, up to 64GB DDR4-2133MHz	Up to 4x ECC UDIMM slots, up to 64GB DDR4-2133MHz
Expansion Slots	1x PCI-E 3.0 x8 (in x16)	1x PCI-E 3.0 x8 (in x16)	1x PCI-E 3.0 x8 (in x16)
Onboard Storage Controller	Intel® C236 Express chipset	Intel® C236 Express chipset	Intel® C236 Express chipset
Connectivity	2x USB 3.0 (front/rear), USB 2.0, VGA, Serial	2x USB 3.0 (front/rear), USB 2.0, VGA, Serial	Quad LAN with Intel® Ethernet Controller i210-AT; 2x USB 3.0 (front/rear), USB 2.0, VGA, Serial
VGA/Audio	Integrated VGA from Aspeed BMC	Integrated video from Aspeed BMC	Integrated video from Aspeed BMC
Management	IPMI 2.0 + KVM with dedicated LAN, SuperDoctor® 5, Watchdog	Built-in Aspeed BMC with IPMI 2.0, KVM, and more	Built-in Aspeed BMC with IPMI 2.0, KVM, and more
Drive Bays	4x 3.5" Hot-swap SATA3 bays w/ RAID	4x 3.5" Hot-swap SATA3 bays w/ RAID	4x 3.5" Hot-swap SATA3 bays w/ RAID
Peripheral Bays	1x slim DVD-ROM drive bay	1x slim DVD-ROM drive bay	1x slim DVD-ROM drive bay
Power Supply	350W high-efficiency power supply	Redundant 400W high-efficiency power Supermicro Battery Back Up (BBP) option	350W high-efficiency power supply
Cooling System	4x 4cm chassis internal fan	4x 4cm chassis internal fan	4x 4cm chassis internal fan
Form Factor	1U Rackmount 437 x 43 x 503mm (17.2" x 1.7" x 19.8")	1U Rackmount 437 x 43 x 503mm (17.2" x 1.7" x 19.8")	1U Rackmount 437 x 43 x 503mm (17.2" x 1.7" x 19.8")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# X11 UP MAINSTREAM

Low-Power, 12" Short-Depth



MODEL	SYS-5019S-MT	SYS-5019S-ML	SYS-5019S-L
Processor Support	Intel® Xeon® processor E3-1200 v6/v5, 6th Gen. Intel® Core™ i3 processor, Intel® Celeron® processor, Intel® Pentium® processor product families, Socket H4 (LGA 1151) supported	Intel® Xeon® processor E3-1200 v6/v5, 6th Gen. Intel® Core™ i3 processor, Intel® Celeron® processor, Intel® Pentium® processor product families, Socket H4 (LGA 1151) supported	Intel® Xeon® processor E3-1200 v6/v5, 6th Gen. Intel® Core™ i3 processor, Intel® Celeron® processor, Intel® Pentium® processor product families, Socket H4 (LGA 1151) supported
Key Applications	<ul style="list-style-type: none"> <li>Storage HN, VM, Hosting Server</li> <li>Compact File Server</li> </ul>	<ul style="list-style-type: none"> <li>Entry level, Cost effective</li> </ul>	<ul style="list-style-type: none"> <li>Low-Power, Low Cost Applications</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>2x 10G Base-T LAN ports</li> <li>Intel® Node Management</li> <li>Up to 4x hot-swap 3.5" SATA3 drives</li> <li>Optional slim optical drive or fixed internal</li> <li>1x PCI-E add-on card slot</li> <li>Front USB 3.0 ports</li> <li>Quick Release Rails</li> <li>M.2 PCI-E x4 support 2260</li> </ul>	<ul style="list-style-type: none"> <li>Support Intel® VHD (with selected CPU) and NM</li> <li>M.2 mini-PCI-E connector: Support 2280</li> <li>Compact, less than 15 inches depth</li> <li>Up to 2x internal 3.5", 3x 2.5" drives (option)</li> </ul>	<ul style="list-style-type: none"> <li>Supports Low-Power CPU</li> <li>Compact Form Factor</li> <li>Less than 12 inches depth</li> <li>1x PCI-E 3.0 x8 expansion slot</li> <li>Up to 1x internal 3.5", 2x 2.5" drives (option)</li> </ul>
Serverboard	SUPER● X11SSH-TF	SUPER● X11SSH-F	SUPER● X11SSL-F
Chipset	Intel® C236 Express Chipset	Intel® C236 Express chipset	Intel® C232 Express chipset
System Memory (Max.)*	Up to 4x ECC UDIMM slots, up to 64GB DDR4-2133MHz	Up to 4x ECC UDIMM slots, up to 64GB DDR4-2133MHz	Up to 64GB Unbuffered ECC UDIMM, DDR4-2400MHz, in 4 DIMM slots
Expansion Slots	1x PCI-E 3.0 x8 (in x16) add-on card slot	1x PCI-E 3.0 x8 add-on card slot	1x PCI-E 3.0 x8 expansion slot
Onboard Storage Controller	Intel® C236 Express Chipset	Intel® C236 Express chipset	Intel® C232 Express chipset
Connectivity	2x USB 2.0, USB 3.0(front/rear), VGA, Serial	USB 3.0, 2x USB 2.0, VGA, Serial	2x USB 2.0, USB 3.0, VGA, Serial
VGA/Audio	Integrated video from Aspeed BMC	Integrated VGA from Aspeed BMC	Integrated video from Aspeed BMC
Management	Built-in Aspeed BMC with IPMI 2.0, KVM, and more	IPMI 2.0 + KVM with dedicated LAN, SuperDoctor® 5, Watchdog	Built-in Aspeed BMC with IPMI 2.0, KVM, and more
Drive Bays	Up to 4x hot-swap 3.5" SATA3 drives	Up to 2x internal 3.5"; 3x 2.5" drives (option)	Up to 1x internal 3.5", 2x 2.5" drives (option)
Peripheral Bays	N/A	1x slim DVD-ROM drive bay	N/A
Power Supply	350W high-efficiency power supply	350W high-efficiency power supply	200W high-efficiency power supply
Cooling System	4x 4cm chassis internal fan	2x 4cm chassis internal fan	2x 4cm chassis internal fan
Form Factor	1U Rackmount 437 x 43 x 503mm (17.2" x 1.7" x 19.8")	1U Rackmount 437 x 43 x 366mm (17.2" x 1.7" x 14.4")	1U rackmount 437 x 43 x 287mm (17.2" x 1.7" x 11.3")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# X11 UP MAINSTREAM

Performance Workstation  
Rich I/O and versatile storage options



MODEL	SYS-5039C-T	SYS-5039C-I
Processor Support	Single Intel Xeon E-2100/ E-2200 series/ 8th Intel Core i3/Pentium/ Celeron, H4 (LGA1511), up to 95W TDP	Single Intel Xeon E-2100/ E-2200 series (CFL-S, up to 6cores)/ 8th Intel Core i3/Pentium/ Celeron, H4 (LGA1511), up to 95W TDP
Key Applications	2D/3D and CAD Applications Digital Content Creation 3D Animations	Entry Level server for SOHO and SMB Remote access for mobile users Data sharing/storage and centralized backup
Outstanding Features	Cost effective UP platform Versatile Storage with M.2, U.2 and SATA support Fast I/O with 2 GbE and USB 3.1 Gen 2	Cost optimized tower server Remote management with IPMI 2.0 Flexible and expandable
Serverboard	SUPER <sup>®</sup> X11SCA	SUPER <sup>®</sup> X11SCL-F
Chipset		Intel <sup>®</sup> C242 Chipset
System Memory (Max.)*	Up to	4 DDR4 ECC UDIMM, Up to 2666MHz, max. capacity 64GB
Expansion Slots	2 PCI-E 3.0 x16 running at NA/16 or 8/8 1 PCI-E 3.0 x4 slot 1 PCI-E 3.0 x1 slot 1 PCI 32bit 5V slot	1 PCIe3.0 x8 (in x16), 2 PCIe3.0 x4 (in x8)
Onboard Storage Controller		6 SATA 3.0 6Gb/s connector, support RAID 0, 1, 5, 10; 1x M.2 M-key (22110/2280, PCIe3.0 x4)
Connectivity	Single LAN with Intel <sup>®</sup> Ethernet Controller I210-AT Single LAN with Intel <sup>®</sup> PHY I219LM LAN controller	Dual GbE LAN, 1 LAN port for dedicated IPMI, 2 (front)USB3.0 ports, 4 (rear)USB ports, 1 COM port
VGA/Audio	1 HDMI 2.0a port, 1 DVI-D port, 1 DP 1.2 (DisplayPort) port	1
Management		IPMI2.0, SSM, SUM, SuperDoctor 5, SPM, Watchdog
Drive Bays	4 Fixed 3.5" drive bays Optional 4 internal 2.5" drive bays	4 internal 3.5" drive bays
Peripheral Bays	2 external 5.25" drive bays 1 3.5" external device bay	2x 5.25" external peripheral bays
Power Supply		400W 80PLUS Gold Certified
Cooling System	1 12cm rear exhaust fan Optional 12cm front cooling fan	1x 9cm (rear) PWM fan w/ tool-less design, Optional 1x 8cm (front) cooling fan
Form Factor		184 x 362 x 425mm (7.25" x 14.25" x 16.75")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# X11/X10 UP MAINSTREAM

Security and Surveillance  
Appliance Server, UP

Cost-Effective  
Redundant / Non-Redundant Options



We Power the Cloud



MODEL	SYS-1019S-MC0T	SYS-5019S-M2	SYS-5018R-M SYS-5018R-MR (shown)
Processor Support	Intel® 7th/6th Generation Core i3 series, Intel® Celeron®, Intel® Pentium®, Intel® Xeon® processor E3-1200 v6/v5.  Socket H4 (LGA 1151) supported, CPU TDP support 80W	Intel® 6th Generation Core™ i3 series, Intel® 6th Generation Core™ i5 series, Intel® 6th Generation Core™ i7 series, Intel® 7th Generation Core™ i3 series, Intel® 7th Generation Core™ i5 series, Intel® 7th Generation Core™ i7 series, Intel® Celeron®, Intel® Pentium®, Intel® Xeon® processor E3-1200 v5 series, Intel® Xeon® processor E3-1200 v6.  Socket H4 (LGA 1151) supported, CPU TDP support Up to 91W	Single Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Storage HN, VM, Hosting Server</li> <li>Compact File Server</li> </ul>	<ul style="list-style-type: none"> <li>Security and Surveillance</li> <li>Appliance Server</li> <li>Secure Storage</li> <li>Rack Workstation</li> </ul>	<ul style="list-style-type: none"> <li>DataCenter Applications</li> <li>Server Appliance</li> <li>Mainstream Server Usage</li> <li>Mission-Critical</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>2x 10G GbE port</li> <li>Quick Release Rails</li> <li>Intel Node Management</li> </ul>	<ul style="list-style-type: none"> <li>Intel Xeon E3-1200 v5; 6th Gen Core i7, i5, i3 in 1U</li> <li>2x DP, DVI-I, total 3x independent display</li> <li>4x 3.5" SATA3 hot-swap drive bays</li> <li>Intel vPro™ and AMT</li> <li>2x Gigabit LAN with AMT</li> <li>7 year life cycle</li> </ul>	<ul style="list-style-type: none"> <li>-MR: Redundant 400W high-efficiency power supplies w/ BBP™ module support</li> <li>Short-depth (19.8"D)</li> </ul>
Serverboard	SUPER● X11SSH-CTF	SUPER● X11SSZ-F	SUPER● X10SRI-F
Chipset	Intel® C236 Express chipset	Intel® C236 chipset	Intel® C612 chipset
System Memory (Max.)*	Up to 64GB Unbuffered ECC UDIMM, DDR4-2400MHz, in 4 DIMM slots	Up to Up to 64GB Unbuffered ECC/non-ECC UDIMM, DDR4-2400MHz, in 4 DIMM slots	Up to 1TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 8 DIMM slots
Expansion Slots	1x PCI-E 3.0 x8 (in x16) add-on card slot	1x PCI Express 3.0 x16 FH, HL slot	1 x16 PCI-E 3.0 slot
Onboard Storage Controller	Intel® C236 Express chipset Avago/Broadcom 3008 SAS3 built-in	Intel® C236 chipset	Intel® C612 controller for 4 SATA3 (6Gbps) ports; RAID 0,1,10
Connectivity	2x USB 2.0, USB 3.0, VGA, Serial, Dual LAN with Intel® X550 10GBase-T Ethernet	4x USB 3.0 (2x rear), 9x USB 2.0 (2x rear) 1x USB 2.0 Type A 2x Serial header 1x SuperDOM (shared) Audio header Audio header	4x USB 2.0 (front/rear), USB 3.0, VGA, Serial
VGA/Audio	Aspeed AST2400 BMC	Intel® HD Graphics, Aspeed AST2400 BMC	AST2400 VGA
Management	Intel® Node Manager, IPMI2.0, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	AMT, IPMI2.0, KVM with dedicated LAN, NMI, SuperDoctor® 5, vPro, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	Up to 8x hot-swap 2.5" HDD	4x 3.5" hot-swap SAS/SATA	4x 3.5" hot-swap SATA3 bays
Peripheral Bays	1x slim DVD-ROM drive bay(option)	1x Slim DVD-ROM Drive(option)	Optional slim optical device bay, optional FDD/USB bay
Power Supply	PWS-341P-1H	PWS-350-1H	-M: 350W high-efficiency power supply -MR: Redundant 400W high-efficiency power supplies with optional BBP™ module support
Cooling System	4x 40x28mm PWM fan; ; 2x fans for AOC cooling(option)	4x 40x28mm PWM fan; 2x 40x28mm PWM fan(option)	4x 40mm mid-fan
Form Factor	1U rackmount 1.7" x 17.2" x 19.98"; Enclosure: 437 x 43 x 507mm (17.2" x 1.7" x 19.98") Package: 610 x 203 x 749mm (24" x 8" x 29.5") Gross Weight: 31lbs (14.06kg) Net Weight: 18.5lbs (8.39kg)	1U rackmount 1.7" x 17.2" x 23.4" (43 x 437 x 503 mm); Enclosure: 437 x 43 x 594mm (17.2" x 1.7" x 23.4") Package: 610 x 216 x 762mm (24" x 8.5" x 30") Gross Weight: 30.4lbs (13.79kg) Net Weight: 17.6lbs (7.98kg)	Short-depth 1U Rackmount 437 x 43 x 503mm (17.2" x 1.7" x 19.8")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# X12 UPWIO

**NEW!**

3rd Gen Intel® Xeon® Scalable processors Supported



MODEL	SYS-110P-WTR	SYS-510P-WT	SYS-510P-WTR	SYS-520P-WTR
Processor Support	3rd Gen Intel® Xeon® Scalable processors Single Socket LGA-4189 (Socket P+) supported TDP up to 270W;	3rd Gen Intel® Xeon® Scalable processors Single Socket LGA-4189 (Socket P+) supported TDP up to 270W;	3rd Gen Intel® Xeon® Scalable processors Single Socket LGA-4189 (Socket P+) supported TDP up to 270W;	3rd Gen Intel® Xeon® Scalable processors Single Socket LGA-4189 (Socket P+) supported TDP up to 270W;
Key Applications	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>Enterprise Server</li> <li>Data Center Optimized</li> <li>Database Processing and Storage</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>Enterprise Server</li> <li>Data Center Optimized</li> </ul>	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>Enterprise Server</li> <li>Data Center Optimized</li> </ul>	<ul style="list-style-type: none"> <li>Data Center Optimized</li> <li>Database Processing and Storage</li> <li>Network Appliance</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Maximum I/O. Support 3 x16 expansion slots in 1U form factor.</li> <li>4x Gen4 NVMe drives supported in 1U Form Factor.</li> </ul>	<ul style="list-style-type: none"> <li>Cost Effective</li> <li>Maximum I/O. Support 3 x16 expansion slots in 1U form factor.</li> <li>4x NVMe drives supported in 1U Form Factor.</li> </ul>	<ul style="list-style-type: none"> <li>Maximum I/O. Support 3 x16 expansion slots in 1U form factor.</li> <li>4x NVMe drives supported in 1U Form Factor.</li> </ul>	<ul style="list-style-type: none"> <li>Flexible I/O expansion.</li> <li>Up to 6 expansion slots with optional riser card.</li> </ul>
Serverboard	SUPER● X12SPW-TF	SUPER● X12SPW-TF	SUPER● X12SPW-TF	SUPER● X12SPW-TF
Chipset	Intel® C621A	Intel® C621A	Intel® C621A	Intel® C621A
System Memory (Max.)	8 DIMM slots ECC RDIMM, DDR4-3200MHz ECC LRDIMM, DDR4-3200MHz Intel® DCPMM, DDR4-3200MHz	8 DIMM slots ECC RDIMM, DDR4-3200MHz ECC LRDIMM, DDR4-3200MHz Intel® DCPMM, DDR4-3200MHz	8 DIMM slots ECC RDIMM, DDR4-3200MHz ECC LRDIMM, DDR4-3200MHz Intel® DCPMM, DDR4-3200MHz	8 DIMM slots ECC RDIMM, DDR4-3200MHz ECC LRDIMM, DDR4-3200MHz Intel® DCPMM, DDR4-3200MHz
Expansion Slots	2 PCI-E 4.0 x16 FHFL slot(s) PCI-E 4.0 x16 LP slot(s)	2 PCI-E 4.0 x16 FHFL slot(s) PCI-E 4.0 x16 LP slot(s)	2 PCI-E 4.0 x16 FHFL slot(s) PCI-E 4.0 x16 LP slot(s)	2 PCI-E 4.0 x16 FHFL slot(s) 2 PCI-E 4.0 x8 LP slot(s)
Onboard Storage Controller	Intel® SATA	Intel® SATA	Intel® SATA	Intel® SATA
Connectivity		2x 10GbE RJ45 port(s) with Intel® Ethernet Controller X550	2x 10GbE RJ45 port(s) with Intel® Ethernet Controller X550	2x 10GbE RJ45 port(s) with Intel® Ethernet Controller X550
VGA/Audio	1 onboard VGA port	1 onboard VGA port	1 onboard VGA port	1 onboard VGA port
Management	NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; Redfish API; IPMI2.0	NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; Redfish API; IPMI2.0	NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; Redfish API; IPMI2.0	NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; Redfish API; IPMI2.0
Drive Bays	10x 2.5" SATA drive bays; 4x 2.5" NVMe hybrid;	4x 3.5" NVMe/SATA drive bays; 4x 3.5" NVMe hybrid;	4x 3.5" NVMe/SATA drive bays; 4x 3.5" NVMe hybrid;	8x 3.5" SATA drive bays; 2x 2.5" NVMe dedicated;
Peripheral Bays	None	2x 2.5"	2x 2.5"	2x 2.5"
Power Supply	Redundant 750W Platinum level (94%)	600W Platinum level (94%)	Redundant 500W Platinum level (94%)	Redundant 650W Platinum level (94%)
Cooling System	5x (4cm x 4cm x 5.6cm) heavy duty fan(s)	5x (4cm x 4cm x 5.6cm) heavy duty fan(s)	5x (4cm x 4cm x 5.6cm) heavy duty fan(s)	3x (8cm x 8cm x 3.8cm) heavy duty fan(s)
Form Factor	1U rackmount Enclosure: 437 x 43 x 597mm (17.2" x 1.7" x 23.5") Package: 609.6 x 203.2 x 812.8mm (24" x 8" x 32")	1U rackmount Enclosure: 437 x 43 x 650mm (17.2" x 1.7" x 25.6") Package: 596.9 x 215.9 x 855.98mm (23.5" x 8.5" x 33.7")	1U rackmount Enclosure: 437 x 43 x 650mm (17.2" x 1.7" x 25.6") Package: 596.9 x 215.9 x 855.98mm (23.5" x 8.5" x 33.7")	2U rackmount Enclosure: 437 x 89 x 647mm (17.2" x 3.5" x 25.5") Package: 673.1 x 279.4 x 863.6mm (26.5" x 11" x 34")

UP Servers

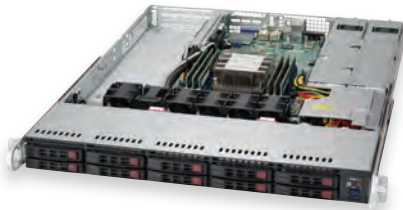


# X11 UPWIO

1U Flexible I/O, Storage Array

1U Flexible I/O, Flexible Array

2U 4 Full-Height PCI-E Slots



MODEL	SYS-1019P-WTR	SYS-5019P-WT SYS-5019P-WTR (shown)	SYS-5029P-WTR
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Single Socket P (LGA 3647) supported, CPU TDP support 205W. <i>Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).</i>	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Single Socket P (LGA 3647) supported, CPU TDP support 205W. <i>Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).</i>	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Single Socket P (LGA 3647) supported, CPU TDP support 205W. <i>Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).</i>
Key Applications	<ul style="list-style-type: none"> <li>Database Processing &amp; Storage</li> <li>DataCenter Applications</li> <li>Data Center</li> </ul>	<ul style="list-style-type: none"> <li>Database Processing &amp; Storage</li> <li>DataCenter Applications</li> <li>FireWall Applications</li> </ul>	<ul style="list-style-type: none"> <li>Database Processing &amp; Storage</li> <li>Connectivity/Storage Computer Nodes</li> <li>Data Warehouse</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>1 PCI-E x8 3.0 slots</li> <li>2 PCI-E x16 3.0 slots</li> <li>2x 10 Gigabit Ethernet Ports</li> <li>2x NVMe w/AOC (option)</li> </ul>	<ul style="list-style-type: none"> <li>1 PCI-E x8 3.0 slots</li> <li>2 PCI-E x16 3.0 slots</li> <li>2x 10 Gigabit Ethernet Ports</li> <li>-WTR: Redundant Power</li> </ul>	<ul style="list-style-type: none"> <li>8x 3.5" Hot-swap SATA3 bays w/ RAID</li> <li>2x 10 Gigabit Ethernet Ports</li> </ul>
Serverboard	SUPER● X11SPW-TF	SUPER● X11SPW-TF	SUPER● X11SPW-TF
Chipset	Intel® C622 chipset	Intel® C622 chipset	Intel® C622 chipset
System Memory (Max.)*	Up to Up to 384GB Registered ECC RDIMM, DDR4-2933MHz; Up to 1.5TB 3DS ECC LRDIMM, DDR4-2933MHz, in 6 DIMM slots	Up to Up to 384GB Registered ECC RDIMM, DDR4-2933MHz; Up to 1.5TB 3DS ECC LRDIMM, DDR4-2933MHz, in 6 DIMM slots	Up to Up to 384GB Registered ECC RDIMM, DDR4-2933MHz; Up to 1.5TB 3DS ECC LRDIMM, DDR4-2933MHz, in 6 DIMM slots
Expansion Slots	2 PCI-E 3.0 x16(FHFL), 1 PCI-E 3.0 x8(LP)slot	2 PCI-E 3.0 x16(FHFL), 1 PCI-E 3.0 x8(LP)slot	4x PCI-E 3.0 x8(FHFL), 1x PCI-E3.0 x8(LP)slot
Onboard Storage Controller	Intel® C622 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C622 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C622 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	Dual LAN with 10GBase-T with Intel® X722 + X557	Dual LAN with 10GBase-T with Intel® X722 + X557	Dual LAN with 10GBase-T with Intel® X557
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	10x 2.5" hot-swap SAS/SATA drive bay	-WT: 4x 3.5" Hot-swap SATA3 bays -WTR: 4x 3.5" hot-swap SAS/SATA	8x 3.5" hot-swap SAS/SATA drive bay with SGPIO 2x 3.5" fixed drive bay
Peripheral Bays	N/A	1x slim DVD-ROM drive bay(option)	1x slim DVD-ROM drive bay(option) 1x COM port tray 2x USB 3.0 ports
Power Supply	PWS-504P-1R	-WT: PWS-605P-1H -WTR: PWS-504P-1R	PWS-609P-1R2
Cooling System	5x 40x56mm counter-rotation PWM fan	Total 5x 40x56mm counter-rotation PWM fan; , Chassis default 4x counter-rotation PWM fan + additional 1x counter-rotation PWM fan	3x 8cm (7000 RPM) hot-swap PWM cooling fan;
Form Factor	1U 17.2" (437mm) x 1.7" (43mm) x 23.5" (597mm); Enclosure: 25 x 43 x 597mm (17.2" x 1.7" x 23.5") Package: 610 x 203 x 813mm (24" x 8" x 32") Gross Weight: 40lbs (18.14kg) Net Weight: 25lbs (11.34kg)	1U 17.2" (437mm) x 1.7" (43mm) x 25.6" (650mm); Enclosure: 437 x 43 x 650mm (17.2" x 1.7" x 25.6") Package: 597 x 216 x 856mm (23.5" x 8.5" x 33.7") Gross Weight: 46lbs (20.87kg) Net Weight: 22lbs (9.98kg)	432 x 89 x 635mm (17.2" x 3.5" x 25.6")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

† 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

\*\* For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.

# X11 UPWIO

Flexible I/O, Short-Depth

Quad LAN



MODEL	SYS-5019C-WR	SYS-1019S-WR	SYS-5019S-WR	SYS-5019S-W4TR
Processor Support	Intel® Xeon® E-2100 Processor, Intel® Xeon® Processor E-2100/E-2200 series, 8th/9th Generation Intel® Core™i3/Pentium®/Celeron® Processor. Single Socket LGA-1151 (Socket H4) supported, CPU TDP support Up to 95W TDP * 95W CPU support up to 30 degree ambient.	Intel® 7th/6th Generation Core i3 series, Intel® Celeron®, Intel® Pentium®, Intel® Xeon® processor E3-1200 v6/v5.  Socket H4 (LGA 1151) supported, CPU TDP support 80W	Intel® 7th/6th Generation Core i3 series, Intel® Celeron®, Intel® Pentium®, Intel® Xeon® processor E3-1200 v6/v5.  Socket H4 (LGA 1151) supported, CPU TDP support 80W	Intel® 6th/7th Generation Core™ i3 series, Intel® Celeron®, Intel® Pentium®, Intel® Xeon® processor E3-1200 v6/v5.  Socket H4 (LGA 1151) supported, CPU TDP support 80W
Key Applications	<ul style="list-style-type: none"> <li>Data Center Application and data serving Appliance Server Hosting &amp; Application delivery</li> </ul>	<ul style="list-style-type: none"> <li>Appliance Server Embedded Applications</li> </ul>	<ul style="list-style-type: none"> <li>HA, High flexibility, VM, Communication</li> </ul>	<ul style="list-style-type: none"> <li>Application and data serving Appliance Server</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>2x PCI-E 3.0 x8 or 1x PCI-E 3.0 x16(FHFL), 1x PCI-E 3.0 x4 (x8) (LP) add-on card slot</li> <li>2x PCI-E 3.0 x8(FHFL) or 1x PCI-E 3.0 x16(FHFL), 1x PCI-E 3.0 x4 (x8) (LP) add-on card slot</li> <li>1+1 Redundant 500W high-efficiency power</li> <li>Up to 4 hot-swap 3.5" drives</li> </ul>	<ul style="list-style-type: none"> <li>1 x4, and 2 x8 or 1 x16 optional expansion slots</li> <li>Support 1 double wide GPU cards</li> </ul>	<ul style="list-style-type: none"> <li>2x PCI-E 3.0 x8, 1x PCI-E 3.0 x4 (x8) add-on card slot</li> <li>M.2 mini-PCI-e connector (PCI-e 3.0 x2)</li> <li>2x PCI-E 3.0 x8 (or 1x16) and 1 x8 (x4 signal) add-on card slots</li> <li>1+1 Redundant 500W high-efficiency power</li> <li>Up to 4 hot-swap 3.5" drives</li> </ul>	<ul style="list-style-type: none"> <li>1 x16 or 2 X 8 PCI-E slots</li> <li>4x 10GBase-T ports</li> </ul>
Serverboard	SUPER● X11SCW-F	SUPER● X11SSW-F	SUPER● X11SSW-F	SUPER● X11SSW-4TF
Chipset	Intel® C246 chipset	Intel® C236 chipset	Intel® C236 chipset	Intel® C236 chipset
System Memory (Max.)*	Up to Up to 128GB Unbuffered ECC UDIMM, DDR4-2666MHz, in 4 DIMM slots	64GB Unbuffered ECC, DDR4-2400MHz in 4 DIMM slots	Up to 64GB Unbuffered ECC UDIMM, DDR4-2400MHz, in 4 DIMM slots	Up to 64GB Unbuffered ECC UDIMM, DDR4-2400MHz, in 4 DIMM slots
Expansion Slots	2x PCI-E 3.0 x8(FHFL) or 1x PCI-E 3.0 x16(FHFL), 1x PCI-E 3.0 x4(x8) (LP)	1 PCI-E 3.0 x16 or 2 x8 Left Riser Slot; 1 PCI-E 3.0 x4 (in x8 slot);	2x PCI-E 3.0 x8 or 1x PCI-E 3.0 x16( by jumper), 1x PCI-E 3.0 x4 (x8) add-on card slot	1 PCI-E 3.0 x16 Left Riser Slot
Onboard Storage Controller	Intel® C246 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C236 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C236 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C236 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	Dual LAN with Intel® Ethernet Controller I210-AT	Dual LAN with Intel® Ethernet Controller I210-AT	USB 2.0, USB 3.0, VGA, Serial	Quad LAN with Intel® X540 10GBase-T Ethernet Controller
VGA/Audio	Aspeed AST2500 BMC	1 VGA, 1 Aspeed AST2400 BMC;	Integrated video from Aspeed BMC	Aspeed AST2400 BMC
Management	Intel® Node Manager, IPMI2.0, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager; IPMI2.0; NMI; SPM; SSM; SUM; SuperDoctor® 5; Watchdog;	Intel® Node Manager, IPMI2.0, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	4x 3.5" hot-swap drive bay	Internal 2x 2.5" SATA	4x 3.5" hot-swap drive bay	4x 3.5" hot-swap SAS/SATA
Peripheral Bays	1x Slim DVD-ROM Drive(option)	N/A	1x Slim DVD-ROM Drive(option)	1x slim DVD-ROM drive bay(option)
Power Supply	PWS-504P-1R	400W Platinum Level 1U Redundant Power Supplies with PMbus	PWS-504P-1R	PWS-504P-1R
Cooling System	Total 5x 4cm heavy duty counter-rotating with optimal fan speed control; fans for AOC cooling	4x 40x56mm PWM fan; ; 2x fans for AOC cooling(option)	4x 4cm chassis internal fan	Total 4x 40x56mm counter-rotation PWM fan
Form Factor	1U 17.2" (437mm) x 1.7" (43mm) x 25.6" (650mm); Enclosure: 437 x 43 x 650mm (17.2" x 1.7" x 25.6") Package: 584 x 216 x 856mm (23.5" x 8.5" x 33.7") Gross Weight: 35lbs (15.88kg) Net Weight: 24lbs (10.89kg)	17.2" x 1.7" x 16.9"; Enclosure: 437 x 43 x 429mm (17.2" x 1.7" x 16.9") Package: 605 x 203 x 686mm (23.8" x 8" x 27") Gross Weight: 27lbs (12.25kg) Net Weight: 15.5lbs (7.03kg)	1U rackmount 1.7" x 17.2" x 25.6"; Enclosure: 437 x 43 x 650mm (17.2" x 1.7" x 25.6") Package: 597 x 216 x 856mm (23.5" x 8.5" x 33.7") Gross Weight: 44lbs (19.96kg) Net Weight: 24lbs (10.89kg)	1U 17.2" (437mm) x 1.7" (43mm) x 25.6" (650mm); Enclosure: 437 x 43 x 635mm (17.2" x 1.7" x 25.6") Package: 597 x 216(23.5" x 8.5" x 33.7") Gross Weight: 35lbs (15.88kg) Net Weight: 24lbs (10.89kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

UP Servers

# X10 UPWIO

Flexible I/O, Storage Array

Flexible I/O, Storage Array

Multiple AOC, Expansion Option



MODEL	SYS-1018R-WR	SYS-1018R-WC0R	SYS-5018R-WR	SYS-5028R-WR
Processor Support	Intel® Xeon® Processor E5-1600 v3, Intel® Xeon® Processor E5-1600 v4, Intel® Xeon® processor E5-2600 v3, Intel® Xeon® processor E5-2600 v4. Single Socket R3 (LGA 2011) supported, CPU TDP support Up to 145W	Intel® Xeon® Processor E5-1600 v3, Intel® Xeon® Processor E5-1600 v4; Intel® Xeon® processor E5-2600 v3, Intel® Xeon® processor E5-2600 v4; Single Socket R3 (LGA 2011) supported, CPU TDP support Up to 145W	Intel® Xeon® Processor E5-1600 v3, Intel® Xeon® Processor E5-1600 v4; Intel® Xeon® processor E5-2600 v3, Intel® Xeon® processor E5-2600 v4; Single Socket R3 (LGA 2011) supported, CPU TDP support Up to 145W	Intel® Xeon® Processor E5-1600 v3, Intel® Xeon® Processor E5-1600 v4, Intel® Xeon® processor E5-2600 v3, Intel® Xeon® processor E5-2600 v4; Single Socket R3 (LGA 2011) supported, CPU TDP support Up to 145W
Key Applications	<ul style="list-style-type: none"> <li>Appliance Server</li> <li>Embedded Applications</li> </ul>	<ul style="list-style-type: none"> <li>Data Center</li> <li>Data Deduplication &amp; Replication</li> <li>Database Processing &amp; Storage</li> <li>DataCenter Applications</li> <li>Engineering Design</li> <li>FireWall Applications</li> </ul>	<ul style="list-style-type: none"> <li>Data Center</li> <li>Data Deduplication &amp; Replication</li> <li>Database Processing &amp; Storage</li> <li>DataCenter Applications</li> <li>Engineering Design</li> <li>FireWall Applications</li> </ul>	<ul style="list-style-type: none"> <li>Database Processing &amp; Storage</li> <li>Connectivity/Storage Computer Nodes</li> <li>Data Warehouse</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>1 x8, and 2 x16 expansion slots</li> <li>Support 1 double wide GPU cards</li> </ul>	<ul style="list-style-type: none"> <li>Hot-swap 8x SAS3 + 2x SATA3 drive bays</li> <li>1 PCI-E x8 slot</li> <li>2 PCI-E 3.0 x16 slots</li> <li>2 Gigabit Ethernet Ports</li> </ul>	<ul style="list-style-type: none"> <li>1 PCI-E 3.0 x8 slot</li> <li>2 PCI-E 3.0 x16 slots</li> <li>2 Gigabit Ethernet Ports</li> </ul>	<ul style="list-style-type: none"> <li>8x 3.5" Hot-swap SATA3 bays w/ RAID</li> <li>Redundant 500W Platinum Level power</li> <li>5 PCI-E 3.0 x8 slots</li> </ul>
Serverboard	SUPER● X10SRW-F	SUPER● X10SRW-F	SUPER● X10SRW-F	SUPER● X10SRW-F
Chipset	Intel® C612 chipset	Intel® C612 chipset	Intel® C612 chipset	Intel® C612 chipset
System Memory (Max.)*	Up to Up to 256GB Registered ECC RDIMM, DDR4-2400MHz; Up to 512GB LRDIMM LRDIMM, in 8 DIMM slots; Up to 1TB ECC 3DS LRDIMM; 8x 288-pin DDR4 DIMM slots	Up to 256GB Registered ECC RDIMM, DDR4-2400MHz; Up to 512GB LRDIMM LRDIMM, in 8 DIMM slots; Up to 1TB ECC 3DS LRDIMM; 8x 288-pin DDR4 DIMM slots	Up to 256GB Registered ECC RDIMM, DDR4-2400MHz; Up to 512GB LRDIMM LRDIMM, in 8 DIMM slots; Up to 1TB ECC 3DS LRDIMM; 8x 288-pin DDR4 DIMM slot	Up to 256GB Registered ECC RDIMM, DDR4-2400MHz; Up to 512GB LRDIMM LRDIMM, in 8 DIMM slots; Up to 1TB ECC 3DS LRDIMM; 8x 288-pin DDR4 DIMM slot
Expansion Slots	2 PCI-E 3.0 x16 Left Riser Slot; 1 PCI-E 3.0 x8 LP	2 PCI-E 3.0 x16, 1 PCI-E 3.0 x8 (total 3 add-on card slots)	2 PCI-E 3.0 x16, 1 PCI-E 3.0 x8 slot (total 3 add-on card slots)	5 PCI-E 3.0 x8 slots
Onboard Storage Controller	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C612 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	Dual LAN with Intel® Ethernet Controller I350-AM2;	2x GbE port, 2x USB 2.0, USB 3.0, VGA, Serial	2x GbE port, 2x USB 2.0, USB 3.0, VGA, Serial	2x GbE port, 1x dedicated IPMI port; 4x USB 2.0 (front/rear), USB 3.0, VGA, Serial
VGA/Audio	Aspeed AST2400 BMC	Aspeed AST2400 BMC	Aspeed AST2400 BMC	Aspeed AST2400 BMC
Management	IPMI2.0, SuperDoctor® 5, Watchdog	IPMI2.0, SuperDoctor® 5, Watchdog	IPMI2.0, SuperDoctor® 5, Watchdog	IPMI2.0, SuperDoctor® 5, Watchdog
Drive Bays	2x 2.5" fixed with bracket	Hot-swap 8x SAS3/SATA + 2x SATA3 drive bays	4x 3.5" hot-swap drive bay	8x 3.5" Hot-swap SATA3 bays w/ RAID; optional fixed drive bays
Peripheral Bays	N/A	N/A	1x Slim DVD-ROM Drive(option)	Option 1x slim DVD-ROM drive bay
Power Supply	PWS-407P-1R	PWS-706P-1R	PWS-504P-1R	PWS-609P-1R2
Cooling System	4x 40x56mm PWM fan; ; 2x fans for AOC cooling(option)	4x 40x56mm counter-rotation PWM fan; 2x fans for AOC cooling(option)	4x counter-rotating 40mm fans	3x 8cm (7000 RPM) hot-swap PWM cooling fan;
Form Factor	1U 17.2" (437mm) x 1.7" (43mm) x 16.9" (429mm); Enclosure: 437 x 43 x 429mm (17.2" x 1.7" x 16.9") Package: 605 x 203 x 686mm (23.8" x 8" x 27") Gross Weight: 27lbs (12.25kg) Net Weight: 15.5lbs (7.03kg)	1U rackmount, 1.7" H x 17.2" W x 23.5" D (43mm H x 437mm W x 597mm D); Enclosure: 437 x 43 x 597mm (17.2" x 1.7" x 23.5") Gross Weight: 40lbs (18.14kg) Net Weight: 25lbs (11.34kg)	1U rackmount, 1.7" H x 17.2" W x 25.6" D (43mm H x 437mm W x 650mm D); Enclosure: 437 x 43 x 650mm (17.2" x 1.7" x 25.6") Package: 597 x 216 x 856mm (23.5" x 8.5" x 33.7") Gross Weight: 40lbs (18.14kg) Net Weight: 25lbs (11.34kg)	2U Rackmount; Enclosure: 437 x 89 x 648mm (17.2" x 3.5" x 25.5") Gross Weight: 59lbs (26.76kg) Net Weight: 34lbs (15.42kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# X12 UP STORAGE



10x NVMe  
(For Complete System Only)



2U UP 12x Drives



MODEL	SSG-110P-NTR10	SSG-520P-ACTR12H SSG-520P-ACTR12L
Processor Support	3rd Gen Intel® Xeon® Scalable processors Single Socket LGA-4189 (Socket P+) supported TDP up to 270W;	3rd Gen Intel® Xeon® Scalable processors Single Socket LGA-4189 (Socket P+) supported TDP up to 270W;
Key Applications	<ul style="list-style-type: none"> <li>Virtualization</li> <li>Cloud Computing</li> <li>All Flash Storage</li> <li>CDN Optimized</li> </ul>	<ul style="list-style-type: none"> <li>Enterprise Server</li> <li>Database Processing &amp; Storage</li> <li>Appliance Optimized Storage</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>2x NVMe/SATA M.2 supported</li> <li>Optimized Cooling with support up to 270W TDP processor</li> <li>10x NVMe tool-less drive bays</li> </ul>	<ul style="list-style-type: none"> <li>Server remote management: IPMI 2.0/KVM over LAN/Media over LAN</li> <li>2x optional Gen 4 NVMe drives; onboard 1x M.2 NVMe/SATA</li> <li>Cost-effective 2U rackmount storage</li> <li>Direct-attached 12x 3.5" hot-swap SATA/SAS drive bays with PCI-E 4.0 SAS Controller</li> </ul>
Serverboard	SUPER <sup>®</sup> X12SPO-NTF	SUPER <sup>®</sup> X12SPI-TF
Chipset	Intel® C621A	Intel® C621A
System Memory (Max.)	8 DIMM slots ECC RDIMM, DDR4-3200MHz ECC LRDIMM, DDR4-3200MHz Intel® DCPMM, DDR4-3200MHz	8 DIMM slots ECC RDIMM, DDR4-3200MHz ECC LRDIMM, DDR4-3200MHz Intel® DCPMM, DDR4-3200MHz
Expansion Slots	PCI-E 4.0 x16 FHHL slot(s)	2 PCI-E 4.0 x16 LP slot(s) 2 PCI-E 4.0 x8 LP slot(s)
Onboard Storage Controller		-ACTR12H: Broadcom® 3916 -ACTR12L: Broadcom® 3816
Connectivity	2x 10GbE RJ45 port(s) with Intel® Ethernet Controller X550	2x 10GbE RJ45 port(s) with Intel® Ethernet Controller X550
VGA/Audio	1 onboard VGA port	1 onboard VGA port
Management	NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; Redfish API; IPMI2.0	NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; Redfish API; IPMI2.0
Drive Bays	10x 2.5" hot-swap NVMe drive bays;	12x 3.5" hot-swap SATA/SAS drive bays;
Peripheral Bays	None	2x 2.5" SATA or NVMe (optional)
Power Supply	Redundant 860W Platinum level (94%)	Redundant 800W Titanium level (96%)
Cooling System	6x (4cm x 4cm x 5.6cm) heavy duty fan(s)	3x (8cm x 8cm x 3.8cm) heavy duty fan(s)
Form Factor	1U rackmount Enclosure: 437 x 43 x 597mm (17.2" x 1.7" x 23.5") Package: 610 x 203 x 813mm (24" x 8" x 32")	2U rackmount Enclosure: 437 x 89 x 650mm (17.2" x 3.5" x 25.6") Package: 673 x 292 x 864mm (26.5" x 11.5" x 34")

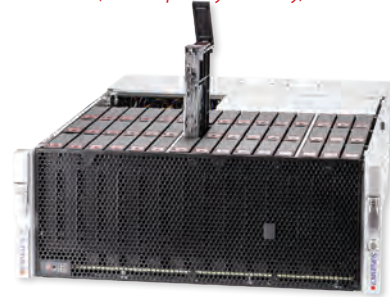
# X12 UP STORAGE



4U UP 36x Drives



4U UP 45x Drives  
(For Complete System Only)



MODEL	SSG-540P-E1 CTR36H SSG-540P-E1 CTR36L	SSG-540P-E1 CTR45H SSG-540P-E1 CTR45L
Processor Support	3rd Gen Intel® Xeon® Scalable processors Single Socket LGA-4189 (Socket P+) supported TDP up to 270W;	3rd Gen Intel® Xeon® Scalable processors Single Socket LGA-4189 (Socket P+) supported TDP up to 270W;
Key Applications	<ul style="list-style-type: none"> <li>Enterprise Server</li> <li>Database Processing &amp; Storage</li> <li>Appliance Optimized Storage</li> </ul>	<ul style="list-style-type: none"> <li>Database Applications</li> <li>Backup Storage, Cold Storage</li> <li>Data Warehousing, Archiving</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>2x optional Gen 4 NVMe drives; onboard 1x M.2 NVMe/SATA</li> <li>Expander chip and JBOD support, up to 36x SATA/SAS drives with PCI-E 4.0 SAS Controller</li> <li>4U 36 Bay High Density Storage</li> </ul>	<ul style="list-style-type: none"> <li>Top Loading with expander chip, up to 45x SATA/SAS drives with PCI-E 4.0 SAS Controller</li> <li>2x optional Gen 4 NVMe drives + 2 rear Hot-swap 2.5" SATA drive bays; onboard 1x M.2 NVMe/SATA</li> <li>5 Hot-Swap 8cm redundant PWM fans</li> <li>4U 45 Bay High Density Storage</li> </ul>
Serverboard	SUPERMICR® X12SPI-TF	SUPERMICR® X12SPI-TF
Chipset	Intel® C621A	Intel® C621A
System Memory (Max.)	8 DIMM slots ECC RDIMM, DDR4-3200MHz ECC LRDIMM, DDR4-3200MHz Intel® DCPMM, DDR4-3200MHz	8 DIMM slots ECC RDIMM, DDR4-3200MHz ECC LRDIMM, DDR4-3200MHz Intel® DCPMM, DDR4-3200MHz
Expansion Slots	2 PCI-E 4.0 x16 LP slot(s) 2 PCI-E 4.0 x8 LP slot(s)	2 PCI-E 4.0 x16 LP slot(s) 2 PCI-E 4.0 x8 LP slot(s)
Onboard Storage Controller	-E1CTR36H: Broadcom® 3908 -E1CTR36L: Broadcom® 3808	-E1CTR45H: Broadcom® 3908 -E1CTR45L: Broadcom® 3808
Connectivity	2x 10GbE RJ45 port(s) with Intel® Ethernet Controller X550	2x 10GbE RJ45 port(s) with Intel® Ethernet Controller X550
VGA/Audio	1 onboard VGA port	1 onboard VGA port
Management	NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; Redfish API; IPMI2.0	NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; Redfish API; IPMI2.0
Drive Bays	36x 3.5" hot-swap SATA/SAS drive bays;	45x 3.5" hot-swap SATA/SAS drive bays
Peripheral Bays	2x 2.5" SATA or NVMe (optional)	2x 2.5" SATA native; additional 2x 2.5" SATA or NVMe (optional)
Power Supply	Redundant 1200W Titanium level (96%)	Redundant 1600W Platinum level (94%)
Cooling System	7x (8cm x 8cm x 3.8cm) heavy duty fan(s)	5x (8cm x 8cm x 3.8cm) heavy duty fan(s)
Form Factor	4U rackmount Enclosure: 437 x 178 x 699mm (17.2" x 7" x 27.5") Package: 656 x 445 x 1003mm (27" x 17.5" x 39.5")	4U rackmount Enclosure: 437 x 178 x 660mm (17.2" x 7" x 26") Package: 711 x 559 x 1067mm (28" x 22" x 42")

# X11 UP STORAGE

Applications storage, Archive and cold storage

Applications storage, Archive and cold storage  
(For Complete System Only)



MODEL	SSG-5029P-E1CTR12L	SSG-5049P-E1CTR36L	SSG-5049P-E1CR45H SSG-5049P-E1CR45L
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Single Socket P (LGA 3647) supported, CPU TDP support 205W. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed <i>Cascade Lake Refresh</i> ).	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Single Socket P (LGA 3647) supported, CPU TDP support 205W. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed <i>Cascade Lake Refresh</i> ).	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Single Socket P (LGA 3647) supported, CPU TDP support 165W. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed <i>Cascade Lake Refresh</i> ).
Key Applications	<ul style="list-style-type: none"> <li>Connectivity/Storage Computer Nodes</li> <li>Application and data serving</li> <li>High Availability Storage Appliance Platform</li> </ul>	<ul style="list-style-type: none"> <li>Connectivity/Storage Computer Nodes</li> <li>Database Processing &amp; Storage</li> </ul>	<ul style="list-style-type: none"> <li>Backup storage</li> <li>Database Applications</li> <li>Data Warehousing, Archiving</li> <li>Cold Storage</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Optional 2x 2.5" NVMe/SATA rear drive kit</li> <li>Remote management via dedicated IPMI BMC</li> <li>12x 3.5" hot-swap SAS3 drive bays</li> <li>Broadcom® 3008 SW controller</li> </ul>	<ul style="list-style-type: none"> <li>2x 10GBase-T Ports</li> <li>Remote management via dedicated IPMI BMC</li> <li>36x 3.5" Hot-swap SAS3 bays</li> </ul>	<ul style="list-style-type: none"> <li>45x 3.5" Drive in 4U Form Factor</li> </ul>
Serverboard	SUPER● X11SPH-nCTF	SUPER● X11SPH-nCTF	SUPER● X11SPL-F
Chipset	Intel® C622 chipset	Intel® C622 chipset	Intel® C621 chipset
System Memory (Max.)*	Up to Up to 2TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 2TB 3DS ECC LRDIMM, DDR4-2933MHz, in 8 DIMM slots	Up to Up to 512GB Registered ECC RDIMM, DDR4-2933MHz; Up to 2TB 3DS ECC LRDIMM, DDR4-2933MHz, in 8 DIMM slots	Up to Up to 2TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 2TB 3DS ECC LRDIMM, DDR4-2933MHz, in 8 DIMM slots; Up to 1TB Intel Optane DC Persistent Memory in memory mode (Cascade Lake Only)
Expansion Slots	1 PCI-E 3.0 x16 (x16 or x8), 1 PCI-E 3.0 x8 (x0 or x8), 1 PCI-E 3.0 x8, 1 PCI-E 3.0 x4 (in x8 slot)	1 PCI-E 3.0 x16 (x16 or x8), 1 PCI-E 3.0 x8 (x0 or x8), 1 PCI-E 3.0 x8, 1 PCI-E 3.0 x4 (in x8 slot)	2 PCI-E 3.0 x8 (in x16 slot), 4 PCI-E 3.0 x8, 1 PCI-E 3.0 x4 (in x8 slot)
Storage Controller	Intel® C622 controller for 10 SATA3 (6 Gbps) ports; RAID 0,1,5,10; Broadcom® 3008 SW controller for 8 SAS3 (12Gbs) ports; RAID 0,1,10;	Broadcom® 3008 SW controller with expander to support total 14x SATA/SAS3 (12Gbs) IR mode RAID 0,1,10; or 36x SATA/SAS3 (12Gbs) IT mode	-E1CR45H: AOC-S3108L-H8IR-P -E1CR45L: AOC-S3008L-L8E
Connectivity	Dual LAN with 10GBase-T	2x 10GBase-T Ports	Dual LAN with 1GbE with Intel® I210
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	12x 3.5" hot-swap SAS/SATA drive bay with Optional 2x 2.5" NVMe/SATA rear drive kit	Optional 2x2.5" NVMe/SATA rear drive kit" to "Peripheral Bays	45x 3.5" SATA or SAS)+ 2x2.5"SATA ( Rear)
Peripheral Bays	N/A	2x 3.5" internal fixed drive bay or 4x 2.5" internal fixed drive bay, 2x M.2 Internal bays	2x 2.5"(SATA or NVMe w/AOC) option
Power Supply	PWS-802A-1R	Redundant 1200W Platinum Level high-efficiency Power Supply	PWS-1K66P-1R
Cooling System	3x 8cm high-performance PWM fans;	7x 80mm high-performance fan;	5x 80mm rear hot-swap exhaust PWM fan;
Form Factor	432 x 76 x 635mm (17.2" x 3.5" x 25.6")	4U 17.2" (437mm) x 7" (178mm) x 27.5" (699mm); Enclosure: 437 x 178 x 699mm (17.2" x 7" x 27.5") Package: 445 x 686 x 1003mm (17.5" x 27" x 39.5") Gross Weight: 102.5lbs (46.49kg) Net Weight: 65.5lbs (29.71kg)	4U Rackmount 437 x 178 x 660mm (17.2" x 7" x 26") ; Enclosure: 437 x 178 x 660mm (17.2" x 7" x 26") Package: 711 x 584 x 1080mm (28" x 23" x 42.5") Gross Weight: 120lbs (54.43kg) Net Weight: 85lbs (38.56kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

\* 2933 MHz in two DIMMs per channel can be achieved by using memory purchased from Supermicro.

\*\* For 2nd Gen Intel® Xeon® Scalable Processors (Cascade Lake Refresh / Cascade Lake) only. Contact your Supermicro sales rep for more info.

# X10 UP STORAGE

2U, SAS 3.0,  
12x 3.5" hot-swap HDDs



4U, SAS 3.0,  
36x 3.5" hot-swap HDDs



MODEL	SSG-5028R-E1 CR12L	SSG-5048R-E1 CR36L
Processor Support	Single Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>• Connectivity/Storage Computer Nodes</li> <li>• Application and data serving</li> <li>• High Availability Storage Appliance Platform</li> </ul>	<ul style="list-style-type: none"> <li>• Connectivity/Storage Computer Nodes</li> <li>• Database Processing &amp; Storage</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 3008 controller onboard</li> <li>• Remote management via dedicated IPMI BMC</li> <li>• 12x 3.5" hot-swap SAS3 drive bays</li> <li>• Dual JBOD expansion ports</li> </ul>	<ul style="list-style-type: none"> <li>• 3008 SAS3 HBA controller onboard</li> <li>• Remote management via dedicated IPMI BMC</li> <li>• 36x 3.5" Hot-swap SAS3 bays</li> <li>• External port for JBOD connect</li> </ul>
Serverboard	SUPER● X10SRH-CLN4F	SUPER● X10SRH-CLN4F
Chipset	Intel® C612 Express chipset	Intel® C612 Express chipset
System Memory (Max.)*	Up to 1TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 8 DIMM slots	Up to 1TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 8 DIMM slots
Expansion Slots	4x PCI-E 3.0 (x8/4, x16/8, x8) + 2x PCI-E 2.0 (x8/4, x4/2); Slot 1 occupied by JBOD expansion port	4x PCI-E 3.0 (x8/4, x16/8, x8) + 2x PCI-E 2.0 (x8/4, x4/2)
Onboard Storage Controller	3008 onboard controller IR mode	3008 SAS3 HBA controller onboard
Connectivity	4x GbE port, 1x dedicated IPMI port	4x GbE port, 1x dedicated IPMI port
VGA/Audio	AST2400 VGA	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	12x 3.5" Hot-swap SAS3 Drive Bays 2x 2.5" optional hot-swap drive bays	36x 3.5" Hot-swap SAS3 bays; 2x 2.5" optional rear hot-swap drive bays
Peripheral Bays	N/A	N/A
Power Supply	Redundant 920W Platinum Level Digital high-efficiency power supplies	1280W Redundant Platinum Level high-efficiency power supplies with i²C & PMBus
Cooling System	3x cooling fans	7x 80mm middle cooling fans
Form Factor	2U Rackmount 437 x 89 x 648mm (17.2"x3.5"x25.6")	4U Rackmount 437 x 178 x 699mm (17.2" x 7" x 27.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# X10 UP STORAGE

(For Complete System Only)

Cost-Efficient Cold Storage  
12x 3.5 HDDs in 1U



High-Density Cold Storage  
12x 3.5 HDDs in 1U



High-Density Warm Storage  
12x 3.5 HDDs in 1U



MODEL	SSG-5018D2-AR12L	SSG-5018D4-AR12L	SSG-5018D8-AR12L
Processor Support	Intel® Pentium® D 1508 Processor, SoC, 2 Core, 4 Thread 2.2 GHz (2.6 GHz Turbo), 25W	Intel® Xeon® D 1518 Processor, SoC, 4 Core, 8 Thread 2.2 GHz (2.2 GHz Turbo), 35W	Intel® Xeon® D 1537 Processor, SoC, 8 Core, 16 Thread 1.7 GHz (2.3 GHz Turbo), 35W
Key Applications	<ul style="list-style-type: none"> <li>Cold Storage</li> <li>Data Warehousing, Archiving</li> <li>Long Tail, Medical Records, Compliance Docs</li> <li>Low-Power Efficiency Appliance</li> </ul>	<ul style="list-style-type: none"> <li>Cold Storage</li> <li>Archiving, Mail/Finance, Security</li> <li>Scale-Out Density, VOD Delivery</li> <li>Low-Power Efficiency Appliance</li> </ul>	<ul style="list-style-type: none"> <li>Warm Storage</li> <li>CDN, Business Hosting</li> <li>OLTP/DB</li> <li>Low-Power Efficiency Appliance</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>12x Hot-Swap 3.5" SAS2/SATA3 bays (6 Gb/s)</li> <li>Option 4x 2.5" internal HDD drives</li> <li>Up to 128GB DDR4 2133MHz RDIMM or 64GB UDIMM</li> <li>2-Port 1G Base-T and 2-port 10G SFP+ Network Port</li> <li>M.2 2242, 2280, 22110 PCI-E 3.0 x4 with M-key</li> <li>IPMI 2.0 (dedicated LAN) with Virtual Media/KVM over LAN</li> </ul>	<ul style="list-style-type: none"> <li>12x Hot-Swap 3.5" SAS2/SATA3 bays (6 Gb/s)</li> <li>Option 4x 2.5" internal HDD drives</li> <li>Up to 128GB DDR4 2133MHz RDIMM or 64GB UDIMM</li> <li>2-Port 1G Base-T and 2-port 10G SFP+ Network Port</li> <li>M.2 2242, 2280, 22110 PCI-E 3.0 x4 with M-key</li> <li>IPMI 2.0 (dedicated LAN) with Virtual Media/KVM over LAN</li> </ul>	<ul style="list-style-type: none"> <li>12x Hot-Swap 3.5" SAS2/SATA3 bays (6 Gb/s)</li> <li>Option 4x 2.5" internal HDD drives</li> <li>Up to 128GB DDR4 2133MHz RDIMM or 64GB UDIMM</li> <li>2-Port 1G Base-T and 2-port 10G SFP+ Network Port</li> <li>M.2 2242, 2280, 22110 PCI-E 3.0 x4 with M-key</li> <li>IPMI 2.0 (dedicated LAN) with Virtual Media/KVM over LAN</li> </ul>
Serverboard	SUPER● X10SDV-2C-7TP4F	SUPER● X10SDV-4C-7TP4F	SUPER● X10SDV-7TP4F
Chipset	Intel® Pentium® D 1508 SoC Processor	Intel® Xeon® D 1518 SoC Processor	Intel® Xeon® D 1537 SoC Processor
System Memory (Max.)*	Up to 128GB DDR4 2133 MHz RDIMM or 64GB UDIMM	Up to 128GB DDR4 2133 MHz RDIMM or 64GB UDIMM	Up to 128GB DDR4 2133 MHz RDIMM or 64GB UDIMM
Expansion Slots	1 PCI-E 3.0 x8 full height	1 PCI-E 3.0 x8 full height	1 PCI-E 3.0 x8 full height
Onboard Storage Controller	2116 (IT mode)	2116 (IT mode)	2116 (IT mode)
Connectivity	2x USB 3.0, VGA	2x USB 3.0, VGA	2x USB 3.0, VGA
VGA/Audio	Built-in VGA from Aspeed BMC	Built-in VGA from Aspeed BMC	Built-in VGA from Aspeed BMC
Management	IPMI 2.0 w/ dedicated LAN port & KVM; 4 Pin PWM Fan Speed control; TPM option; Thermal and voltage monitoring	IPMI 2.0 w/ dedicated LAN port & KVM; 4 Pin PWM Fan Speed control; TPM option; Thermal and voltage monitoring	IPMI 2.0 w/ dedicated LAN port & KVM; 4 Pin PWM Fan Speed control; TPM option; Thermal and voltage monitoring
Drive Bays	12x Hot-Swap 3.5" SAS2/SATA3 drive bays (6 Gb/s), Option 4x 2.5" internal HDD drives	12x Hot-Swap 3.5" SAS2/SATA3 drive bays (6 Gb/s), Option 4x 2.5" internal HDD drives	12x Hot-Swap 3.5" SAS2/SATA3 drive bays (6 Gb/s), Option 4x 2.5" internal HDD drives
Peripheral Bays	N/A	N/A	N/A
Power Supply	400W Redundant Gold Level power supplies	400W Redundant Gold Level power supplies	400W Redundant Gold Level power supplies
Cooling System	5x 4cm middle fan	5x 4cm middle fan	5x 4cm middle fan
Form Factor	1U rackmount 437 x 43 x 813mm (17.2" x 1.7" x 32")	1U rackmount 437 x 43 x 813mm (17.2" x 1.7" x 32")	1U rackmount 437 x 43 x 813mm (17.2" x 1.7" x 32")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



# X12 IoT/EMBEDDED

(For Complete System Only)

**NEW!**

3rd Gen Intel® Xeon® Scalable processors Supported



Front I/O, Front DC PSU



Front I/O, Rear DC PSU



MODEL	SYS-110P-FDWTR	SYS-110P-FRDN2T
Processor Support	3rd Gen Intel® Xeon® Scalable processors Single Socket LGA-4189 (Socket P+) supported, CPU up to 38 cores and 205W TDP	3rd Gen Intel® Xeon® Scalable processors Single Socket LGA-4189 (Socket P+) supported, CPU up to 38 cores and 205W TDP
Key Applications	<ul style="list-style-type: none"> <li>• Telecom, Storage, GPU, DL/AI/ML</li> </ul>	<ul style="list-style-type: none"> <li>• 5G BBU DU applications, Telecom</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 8-DIMM, DDR4 -3200MHz, ECC, RDIMM(3DS), LRDIMM(3DS)</li> <li>• 2x PCI-E 4.0 x16 FHFL slots, 1x PCI-E 4.0 x16 low profile slot</li> <li>• 600W DC Redundant power supplies</li> <li>• 2x 10G Based-T LAN Ports</li> </ul>	<ul style="list-style-type: none"> <li>• 8-DIMM, DDR4 -3200MHz, ECC, RDIMM(3DS), LRDIMM(3DS)</li> <li>• 2x PCI-E 4.0 x16 FHFL slots</li> <li>• 600W DC Redundant power supplies</li> <li>• 2x 10G Based-T LAN Ports</li> </ul>
Serverboard	SUPERMICR X12SPW-TF	SUPERMICR X12SPW-TF
Chipset	Intel® C621A	Intel® C621A
System Memory (Max.)	8-DIMM, DDR4 -3200MHz, ECC, RDIMM(3DS), LRDIMM(3DS)	8-DIMM, DDR4 -3200MHz, ECC, RDIMM(3DS), LRDIMM(3DS)
Expansion Slots	2x PCI-E 4.0 x16 FHFL slots 1x PCI-E 4.0 x16 low profile slot	2x PCI-E 4.0 x16 FHFL slots
Onboard Storage Controller	Intel SATA	Intel SATA
Connectivity	2x 10G Based-T LAN Ports	2x 10G Based-T LAN Ports
VGA/Audio	1x onboard VGA port	1x onboard VGA port
Management	KVM with dedicated LAN, Super Doctor, Watch Dog, Redfish API	KVM with dedicated LAN, Super Doctor, Watch Dog, Redfish API
Drive Bays	2x Internal 2.5" SATA drive bays	2x Internal 2.5" SATA drive bays
Peripheral Bays	N/A	N/A
Power Supply	600W DC Redundant power supplies	600W DC Redundant power supplies
Cooling System	6x (40x40x56 mm) cooling fans	5x (40x40x56 mm) cooling fans
Form Factor	1U rackmount (Front I/O) Enclosure: 437 x 429 x 43mm (17.2" x 16.9" x 1.7")	1U rackmount (Front I/O) Enclosure: 437 x 399 x 43mm (17.2" x 15.7" x 1.7")

# X12 IOT/EMBEDDED

**NEW!**

3rd Gen Intel® Xeon® Scalable processors Supported



Front I/O, Rear AC Power

2U Compact Rackmount



MODEL	SYS-110P-FRN2T	SYS-210P-FRDN6T	SYS-E403-9P-FN2T
Processor Support	3rd Gen Intel® Xeon® Scalable processors Single Socket LGA-4189 (Socket P+) supported, CPU up to 38 cores and 205W TDP	3rd Gen Intel® Xeon® Scalable processors Single Socket LGA-4189 (Socket P+) supported TDP up to 250W;	<b>2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors.</b> Single Socket LGA-3647 (Socket P) supported, CPU TDP support Up to 205W TDP. <i>Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).</i>
Key Applications	<ul style="list-style-type: none"> <li>5G BBU DU applications, Telecom</li> </ul>	<ul style="list-style-type: none"> <li>5G Core and Edge</li> <li>AI Inference and Machine Learning</li> <li>Network Function Virtualization</li> <li>Cloud Computing</li> </ul>	<ul style="list-style-type: none"> <li>Multi-Access Edge Computing (MEC) Universal Customer Premise Equipment (uCPE)</li> <li>Network Function Virtualization (NFV)</li> <li>Artificial Intelligence (AI) on Edge, Machine Learning (ML)</li> <li>Industrial Automation, Retail, Smart Medical Expert Systems</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>8-DIMM, DDR4 -3200MHz, ECC, RDIMM(3DS), LRDIMM(3DS)</li> <li>2x PCI-E 4.0 x16 FHFL slots</li> <li>800W AC Redundant power supplies</li> <li>2x 10G Based-T LAN Ports</li> </ul>	<ul style="list-style-type: none"> <li>Front I/O</li> <li>Ultra-Short Depth Chassis (300mm)</li> <li>Redundant 600W -48V DC Power</li> <li>Up to 4 PCIe 4.0 I/O Slots (CPU Dependent)</li> </ul>	<ul style="list-style-type: none"> <li>Intel® Cascade Lake-SP Scalable Processors 1x PCIe 3.0 x16 + 2x PCIe 3.0 x8, or 2x PCIe 3.0 x16 (FH3/4L)</li> <li>2x 10 Gigabit Ethernet Ports</li> <li>4x USB 3.0, 2x USB 2.0</li> <li>4x 2.5" Internal Drive Bays</li> </ul>
Serverboard	SUPER● X12SPW-TF	SUPER● X12SPM-LN6TF	SUPER● X11SPW-TF
Chipset	Intel® C621A	Intel® C621A	Intel® C622 chipset
System Memory (Max.)	8-DIMM, DDR4 -3200MHz, ECC, RDIMM(3DS), LRDIMM(3DS)	8 DIMM slots Up to 2TB ECC LRDIMM, DDR4-3200MHz Up to 2TB ECC RDIMM, DDR4-3200MHz	Up to Up to 1.5TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 1.5TB 3DS ECC LRDIMM, DDR4-2933MHz, in 6 DIMM slots
Expansion Slots	2x PCI-E 4.0 x16 FHFL slots	2 PCI-E 4.0 x16 FHFL slot(s) PCI-E 4.0 x16 FHFL in certain configurations slot(s) PCI-E 4.0 x16 Low Profile or 2 x8 Low Profile slot(s) PCI-E 4.0 x8 FHFL in certain configurations slot(s)	1x PCIe 3.0 x16 + 2x PCIe 3.0 x8, or 2x PCIe 3.0 x16 (FH3/4L)
Onboard Storage Controller	Intel SATA	Intel® SATA	Intel® C622 controller; RAID 0,1,5,10
Connectivity	2x 10G Based-T LAN Ports	2x 1/10GbE and 4x 1GbE port(s)	2x 10GbE, 1x Dedicated IPMI LAN, 4 USB 3.0, 2 USB 2.0, 1x COM, 1x VGA
VGA/Audio	1x onboard VGA port	1 VGA port	Aspeed AST2500 BMC
Management	KVM with dedicated LAN, Super Doctor, Watch Dog, Redfish API	SuperDoctor® 5; Watch Dog; NMI; KVM with dedicated LAN; SPM; Intel® Node Manager; IPMI 2.0; Redfish API; SSM; SUM	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	2x Internal 2.5" SATA drive bays	2x 2.5" hot-swap SATA drive bays;	4x 2.5" Internal Drive Bays
Peripheral Bays	N/A	None	N/A
Power Supply	800W AC Redundant power supplies	600w -48V DC Redundant Power Supplies	600W multi-output Gold Level power supply
Cooling System	5x (40x40x56 mm) cooling fans	4 heavy duty fan(s)	3x 80x38mm PWM hot swap fans
Form Factor	1U rackmount (Front I/O) Enclosure: 437 x 399 x 43mm (17.2" x 15.7" x 1.7")	2U rackmount Enclosure: 436.88 x 88.9 x 298.8mm (17.2" x 3.5" x 11.8") Package: 490 x 188 x 590mm (19.3" x 7.4" x 23.3")	267 x 109 x 406mm (10.5" x 4.3" x 16")

# IoT/EMBEDDED

Cascade Lake & Cascade Lake Refresh  
Compact Front Access 1U WIO System

Compact System with  
600W DC Redundant Power Supply and  
Hot-Swappable Fan Tray

Compact System with  
800W AC Redundant Power Supply and  
Hot-Swappable Fan Tray



MODEL	SYS-1019P-FHN2T	SYS-1019P-FRDN2T	SYS-1019P-FRN2T
Processor Support	2nd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors. Single Socket LGA-3647 (Socket P) supported, CPU TDP support Up to 205W TDP. Note: BIOS version 3.2 or above is required to support 2nd Gen Intel® Xeon® Scalable processors (codenamed Cascade Lake Refresh).	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Single Socket LGA-3647 (Socket P) supported, CPU TDP support Up to 205W TDP	2nd Generation Intel® Xeon® Scalable Processors (Cascade Lake-SP), Intel® Xeon® Scalable Processors. Single Socket LGA-3647 (Socket P) supported, CPU TDP support Up to 205W TDP
Key Applications	<ul style="list-style-type: none"> <li>Multi-Access Edge Computing (MEC)</li> <li>Centralized/Cloud Radio Access Network (C-RAN)</li> <li>Universal Customer Premise Equipment (uCPE), Advanced Network Security</li> <li>Network Function Virtualization (NFV)</li> <li>Artificial Intelligence (AI) on Edge, Machine Learning (ML)</li> <li>Retail, Smart Medical Expert Systems</li> </ul>	<ul style="list-style-type: none"> <li>Multi-Access Edge Computing (MEC)</li> <li>Centralized/Cloud Radio Access Network (C-RAN)</li> <li>Universal Customer Premise Equipment (uCPE), Advanced Network Security</li> <li>Network Function Virtualization (NFV)</li> <li>Artificial Intelligence (AI) on Edge, Machine Learning (ML)</li> </ul>	<ul style="list-style-type: none"> <li>Multi-Access Edge Computing (MEC)</li> <li>Centralized/Cloud Radio Access Network (C-RAN)</li> <li>Universal Customer Premise Equipment (uCPE), Advanced Network Security</li> <li>Network Function Virtualization (NFV)</li> <li>Artificial Intelligence (AI) on Edge, Machine Learning (ML)</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Intel® Cascade Lake-SP Scalable Processors</li> <li>2x PCIe 3.0 x16 FHFL</li> <li>2x 10 Gigabit Ethernet Ports</li> <li>2x USB 3.0, 2x USB 2.0</li> <li>2x 2.5" Hot Swap SATA3 Drive Bays, 2x 2.5" Internal SATA3 Drive Bays (optional)</li> </ul>	<ul style="list-style-type: none"> <li>Intel® Cascade Lake-SP Scalable Processors</li> <li>2x PCIe 3.0 x16 FHFL</li> <li>2x 10 Gigabit Ethernet Ports</li> <li>2x USB 3.0, 2x USB 2.0</li> <li>600W DC Redundant Power Supply</li> <li>5x Hot-Swappable Fan Tray</li> </ul>	<ul style="list-style-type: none"> <li>Intel® Cascade Lake-SP Scalable Processors</li> <li>2x PCIe 3.0 x16 FHFL</li> <li>2x 10 Gigabit Ethernet Ports</li> <li>2x USB 3.0, 2x USB 2.0</li> <li>800W AC Redundant Power Supply</li> <li>5x Hot-Swappable Fan Tray</li> </ul>
Serverboard	SUPER● X11SPW-TF	SUPER● X11SPW-TF	SUPER● X11SPW-TF
Chipset	Intel® C622 chipset	Intel® C622 chipset	Intel® C622 chipset
System Memory (Max.)*	Up to Up to 1.5TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 1.5TB 3DS ECC LRDIMM, DDR4-2933MHz, in 6 DIMM slots	Up to 1.5TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 1.5TB 3DS ECC LRDIMM, DDR4-2933MHz, in 6 DIMM slots	Up to 1.5TB 3DS ECC RDIMM, DDR4-2933MHz; Up to 1.5TB 3DS ECC LRDIMM, DDR4-2933MHz, in 6 DIMM slots
Expansion Slots	2x PCIe 3.0 x16 FHFL	2 PCI-E 3.0 x16 (FH, FL)	2 PCI-E 3.0 x16 (FH, FL)
Onboard Storage Controller	Intel® C622 controller; RAID 0,1,5,10	Intel SATA	Intel SATA
Connectivity	2x 10GbE, 1x Dedicated IPMI LAN, 2x USB 3.0, 2x USB 2.0, 1x COM, 1x VGA	2x 10GbE, 1x Dedicated IPMI LAN, 2 USB 3.0, 2 USB 2.0, 1x COM, 1x VGA	2x 10GbE, 1x Dedicated IPMI LAN, 2 USB 3.0, 2 USB 2.0, 1x COM, 1x VGA
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SPM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	2x 2.5" Hot Swap SATA3 Drive Bays, 2x 2.5" Internal SATA3 Drive Bays (optional)	2x Fixed 2.5" Drive Bays	2x Fixed 2.5" Drive Bays
Peripheral Bays	N/A	N/A	N/A
Power Supply	1U 500W multi-output Platinum Level power supply w/ PMbus	600W DC Redundant Power Supplies	800W AC Redundant Power Supplies
Cooling System	6x 40x28mm PWM fans	5x 40x56 Hot-Swappable Fan Tray	5x 40x56 Hot-Swappable Fan Tray
Form Factor	437 x 43 x 381mm (17.2" x 1.7" x 15")	437 x 43 x 399mm (17.2" x 1.7" x 15.7")	437 x 43 x 399mm (17.2" x 1.7" x 15.7")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# IoT/EMBEDDED



Short Depth



Short Depth



MODEL	SYS-5019D-RN8TP	SYS-110A-FN10SP
Processor Support	Intel Skylake Xeon D-2146NT SoC, 2.3GHz, 8 Core, 80W † BIOS version 2.0 or above is required	Intel® Snow Ridge, 8-core SoC
Key Applications	<ul style="list-style-type: none"> <li>Network Security Appliance</li> <li>SDN-WAN, vCPE controller box</li> <li>NFV Edge Computing Server</li> <li>Virtualization Server</li> <li>IoT Edge Computing</li> </ul>	<ul style="list-style-type: none"> <li>Network Appliance</li> <li>Embedded IoT Computing</li> <li>SD-WAN and vCPE/uCPE</li> <li>Network Function Virtualization (NFV)</li> <li>Hyper Converged Infrastructure</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Built in Intel QAT up to 40Gbps Crypto/Compression</li> <li>Supports up to 8C high Density SKL-D SoC for Retail MEC</li> <li>4 DDR4 DIMMs(ECC LRDIMM or ECC RDIMM) with up to 2133 MHz, Max memory capacity up to 512GB on LRDIMM</li> <li>8 LAN ports support(2x 10G SFP+, 2x 10G Based-T, 4x 1GbE)</li> </ul>	<ul style="list-style-type: none"> <li>Cost Effective 1U Short-Depth Chassis and 4x 2.5" Internal Drive</li> <li>Plenty of M.2 selections (M.2 M-Key for SSD, B-Key for WAN or 4G-LTE module, E-Key for WiFi)</li> <li>Intel C5000 8-Core with embedded QAT support</li> <li>1 PCIe3.0 x8 expansion for AOC</li> <li>Onboard TPM Header, IPMI with OOB support</li> </ul>
Serverboard	X11SDV-8C-TP8F	A3SSV-16C-SPLN10F
Chipset	System On Chip	System on Chip chipset
System Memory (Max.)*	4x DDR4 DIMM 512 GB Up to 2667MHz LRDIMM or 256GB RDIMM, ECC	Up to 256GB Registered ECC RDIMM, DDR4-2933MHz Or 128GB Unbuffered ECC/non-ECC UDIMM, DDR4-2933MHz, in 4 DIMM slots
Expansion Slots	1 M.2 slot M key for SSD, 2242/80, 1 M.2 B Key for SSD/ WAN card, 1 Mini-PCI-E with mSATA Support, 1 PCI-E 3.0x8 slots	1 PCI-E 3.0 x8, 1 PCI-E 3.0 x4
Onboard Storage Controller	SoC controller for 4 SATA3 (6 Gbps) ports	SoC controller for 6 ports
Connectivity	2x 10G SFP+, 2x 10G Based-T, 4x 1GbE, 1x dedicated IPMI LAN, 2 USB 3.0	N/A
VGA/Audio	VGA via BMC	Aspeed AST2500 BMC
Management	IPMI 2.0	Intel® Node Manager, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, SPM, SSM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	2x hot-swap 2.5" drive tray	1x 3.5" Internal Drive Bay with 1 Full-height, Half-length PCI 2x 3.5" Internal Drive Bay 2x 2.5" Internal Drive Bay with 1 Full-height, Half-length PCI 4x 2.5" Internal Drive
Peripheral Bays	N/A	N/A
Power Supply	300W AC Redundant PSU	1U 200W Multi-output power supply Gold level w/20pin
Cooling System	2x 40x28mm 4-PIN PWM Fan(FAN-0065L4, 13K RPM)	1x High-efficiency power supply with thermal control fan
Form Factor	437 x 43 x 381mm (17.2" x 1.7" x 15")	437 x 43 x 249mm (17.2" x 1.7" x 9.8")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# IoT/EMBEDDED



Short Depth



Short Depth



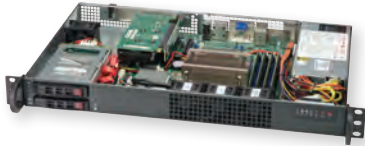
MODEL	SYS-110A-24C-RN10SP	SYS-110A-16C-RN10SP
Processor Support	Intel® Atom® Processor P5342, Socket FCBGA-2106 supported, CPU TDP support 71W TDP	Intel® Atom® Processor P5342, Socket FCBGA-2106 supported, CPU TDP support 71W TDP
Key Applications	<ul style="list-style-type: none"> <li>• Network Appliance</li> <li>• Embedded IoT Computing</li> <li>• Software Defined WAN (SD-WAN), Network Function Virtualization (NFV)</li> <li>• Hyper Converged Infrastructure</li> <li>• Network Security Appliance</li> </ul>	<ul style="list-style-type: none"> <li>• Network Appliance</li> <li>• Embedded IoT Computing</li> <li>• Software Defined WAN (SD-WAN), Network Function Virtualization (NFV)</li> <li>• Hyper Converged Infrastructure</li> <li>• Network Security Appliance</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• Cost Effective 1U Short-Depth Chassis and 4x 2.5" Internal Drive</li> </ul>	<ul style="list-style-type: none"> <li>• Cost Effective 1U Short-Depth Chassis and 4x 2.5" Internal Drive</li> </ul>
Serverboard	A3SSV-24C-SPLN10F	A3SSV-16C-SPLN10F
Chipset	System On Chip	System On Chip
System Memory (Max.)*	DDR4 Up to 2933MT/s Up to 256GB RDIMM, Up to 64GB for ECC/Non-ECC UDIMM	DDR4 Up to 2933MT/s Up to 256GB RDIMM, Up to 64GB for ECC/Non-ECC UDIMM
Expansion Slots	1 PCI-E 3.0 x8, 1 PCI-E 3.0 x4	1 PCI-E 3.0 x8, 1 PCI-E 3.0 x4
Onboard Storage Controller	SoC controller for 6 ports	SoC controller for 6 ports
Connectivity	N/A	N/A
VGA/Audio	Aspeed AST2500 BMC	Aspeed AST2500 BMC
Management	Intel® Node Manager, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, SPM, SSM, SUM, SuperDoctor® 5, Watchdog
Drive Bays	1x 3.5" Internal Drive Bay with 1 Full-height, Half-length PCI 2x 3.5" Internal Drive Bay 2x 2.5" Internal Drive Bay with 1 Full-height, Half-length PCI 4x 2.5" Internal Drive	1x 3.5" Internal Drive Bay with 1 Full-height, Half-length PCI 2x 3.5" Internal Drive Bay 2x 2.5" Internal Drive Bay with 1 Full-height, Half-length PCI 4x 2.5" Internal Drive
Peripheral Bays	N/A	N/A
Power Supply	1U 200W Multi-output power supply Gold level w/20pin	1U 200W Multi-output power supply Gold level w/20pin
Cooling System	1x High-efficiency power supply with thermal control fan	1x High-efficiency power supply with thermal control fan
Form Factor	437 x 43 x 249mm (17.2" x 1.7" x 9.8")	437 x 43 x 249mm (17.2" x 1.7" x 9.8")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# IoT/EMBEDDED



Intel® Gen 8th Coffee Lake-S  
Compact 1U Embedded System



Intel® Gen 8th Coffee Lake-S  
Compact 1U Embedded System



Short-Depth



MODEL	SYS-TN2	SYS-1019C-FHTN8	SYS-5019C-MHN2
Processor Support	Intel® 8th/9th Generation Core™ i9/Core™ i7/ Core™ i5/Core™ i3/Pentium®/Celeron® series Processor, Intel® Xeon® E-2100 series and E-2200 series Processor. Single Socket H4 (LGA 1151) supported, CPU TDP support Up to 80W TDP, A graphic integrated CPU is required to have onboard video from the DVI and DP ports	8th/9th Generation Intel® Core™ i3 Processors, Intel® Xeon® E-2100/2200 processor Server. Socket LGA 1151 supported, CPU TDP support Up to 80W TDP	Intel® 8th/9th Generation Core™ i9/Core™ i7/ Core™ i5/Core™ i3/Pentium®/Celeron® series Processor, Intel® Xeon® E-2100 and E-2200 Processor. Single Socket LGA-1151 (Socket H4) supported, CPU TDP support Up to 95W TDP A graphic integrated CPU is required to have onboard video from the DVI and DP ports
Key Applications	<ul style="list-style-type: none"> <li>Digital Signage</li> <li>DVR/NVR</li> <li>POS</li> <li>Office Server</li> <li>Network Security</li> <li>Security Appliance and Video Surveillance</li> </ul>	<ul style="list-style-type: none"> <li>uCPE Network Appliance</li> <li>Network Security Appliance</li> <li>Virtualization Server</li> </ul>	<ul style="list-style-type: none"> <li>General purpose, SMB, Web Hosting</li> <li>Application and data serving</li> <li>Archiving, Mail/Finance, Security</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>2x 2.5" Hot Swap SATA3 Drive Bay</li> <li>M.2 (M key), Onboard TPM</li> <li>Coffee Lake-S, Xeon E-2100, 8th Gen Core i3, Pentium, Celeron</li> <li>Remote management via dedicated IPMI BMC</li> <li>4 USB 3.1</li> <li>2 DP, DVI-I, VGA, Audio</li> <li>PCIe 3.0 x16,</li> </ul>	<ul style="list-style-type: none"> <li>8th/9th Generation Intel® Core™ i3 Processors, Intel® Xeon® E-2100/2200 processor</li> <li>8x 1GbE, 1 dedicated IPMI LAN</li> <li>1 VGA, 2 USB3.1, 2 USB2.0</li> <li>1 PCIe3.0 x16</li> <li>Dual M.2 M key (22110/2280)</li> <li>2x 2.5" Hot Swap, 2x 2.5" Internal SATA3 Drive Bay</li> </ul>	<ul style="list-style-type: none"> <li>Short-Depth(19.8"D)</li> <li>Quick Release Rails</li> </ul>
Serverboard	SUPER● X11SCZ-F	SUPER● X11SCM-LN8F	SUPER● X11SCZ-F
Chipset	Intel® C246 chipset	Intel® C246 chipset	Intel® C246 chipset
System Memory (Max.)*	Up to Up to 128GB Unbuffered ECC/non-ECC UDIMM, DDR4-2666MHz, in 4 DIMM slots	Up to 128GB ECC UDIMM, DDR4-2666MHz, in 4 DIMM slots	Up to Up to 128GB Unbuffered ECC/non-ECC UDIMM, DDR4-2666MHz, in 4 DIMM slots
Expansion Slots	PCIe 3.0 x 16 half height half length expansion slot; M.2 (M key, 22110/80, PCIe3.0 x4/SATA)	PCIe 3.0 x 16 full height full length expansion slot (limited to two drives populated);	1 PCI-E 3.0 x16
Onboard Storage Controller	Intel® C246 controller for 2 SATA3 (6 Gbps) ports; RAID 0,1;	Intel® C246 controller for 6 SATA3 (6 Gbps) ports; RAID 0,1,5,10;	Intel® C246 controller for 5 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	Dual GbE LAN, 1 dedicate IPMI, 4 USB3.1 (3 TYPE A and 1 TYPE C)	8x 1GbE LAN, 1 dedicate IPMI LAN, 2 USB3.1, 2 USB2.0	Dual LAN with Intel® Ethernet Controller I210-AT
VGA/Audio	VGA via BMC	VGA via BMC	Aspeed AST2500 BMC, Intel® HD Graphics
Management	IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, NMI, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, SuperDoctor® 5, Watchdog
Drive Bays	2 x 2.5" hot swap HDD (SATA3)	2x 2.5" Hot Swap, 2x 2.5" Internal(SSD recommended) SATA3 Drive Bay	4x 3.5" hot-swap SAS/SATA
Peripheral Bays	N/A	N/A	1x Slim DVD-ROM Drive
Power Supply	200W Low Noise AC-DC power supply with PFC, Gold Certified	350W AC-DC multiple output <b>Platinum Level</b> power supply	350W AC-DC multiple output <b>Platinum Level</b> power supply
Cooling System	4x 40x28mm chässis fan 4-PIN PWM FAN	4x 40x28mm PWM fan	5x 40x28mm PWM fan, 1x 40x28mm PWM fan
Form Factor	437 x 43 x 287mm (17.2" x 1.7" x 11.3")	1U Rackmount; Enclosure: 437 x 43 x 381mm (17.2" x 1.7" x 15") Package: 610 x 203 x 686mm (24" x 8" x 27") Gross Weight: 50lbs (22.68kg) Net Weight: 25lbs (11.34kg)	437 x 43 x 483mm (17.2" x 1.7" x 19.8")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# IoT/EMBEDDED



Intel® Xeon® D-2123IT  
SoC, 4 Core, 8 Thread  
Short Depth System



Intel® Xeon® D-2146NT  
SoC, 8 Cores System



Intel® Atom™ C3850,  
SoC, 12 Cores, Rear I/O  
Short-Depth System



Intel® Atom™ C3758,  
SoC, 8 Cores, Front I/O  
Short-Depth System



MODEL	5019D-4C-FN8TP	SYS-5019D-FN8TP	SYS-5019A-12TN4	SYS-5019A-FTN4
Processor Support	Intel® Xeon® D-2123IT, 4 Cores, 60W	Intel® Xeon® D-2146NT SoC, 2.3GHz, 8 Core, 80W † BIOS version 2.0 or above is required	Intel® Atom™ C3850, SoC, 12 Cores, 25W	Intel® Atom™ C3758, SoC, 8 Cores, 25W
Key Applications	<ul style="list-style-type: none"> <li>Network Security Appliance</li> <li>SDN-WAN, vCPE controller box</li> <li>NFV Edge Computing Server</li> <li>Virtualization Server</li> <li>IoT Edge Computing</li> </ul>	<ul style="list-style-type: none"> <li>Network Security Appliance</li> <li>SDN-WAN, vCPE controller box</li> <li>NFV Edge Computing Server</li> <li>Virtualization Server</li> <li>IoT Edge Computing</li> </ul>	<ul style="list-style-type: none"> <li>Virtual Router</li> <li>FireWall Applications</li> <li>Virtualization</li> <li>Low Power, Low Cost Applications</li> </ul>	<ul style="list-style-type: none"> <li>Network Security Appliance</li> <li>Edge Computing Server</li> <li>Virtualization Server</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>8 LAN ports support(2 x 10G SFP+, 2 x 10GBase-T, 4 x GbE)</li> <li>1 M.2 slot M key for SSD, 2242/80, 1 M.2 B Key for SSD/ WAN card, 1 Mini-PCI-E with mSATA Support</li> </ul>	<ul style="list-style-type: none"> <li>8 LAN ports support(2 x 10G SFP+, 2 x 10GBase-T, 4 x GbE)</li> <li>1 M.2 slot M key for SSD, 2242/80, 1 M.2 B Key for SSD/ WAN card, 1 Mini-PCI-E with mSATA Support</li> </ul>	<ul style="list-style-type: none"> <li>Short Depth</li> <li>Low Power</li> </ul>	<ul style="list-style-type: none"> <li>Intel QAT up to 20Gbps crypto + 20Gbps compression</li> <li>Intel® Quick Assist Technology</li> <li>256GB DDR4 ECC RDIMM/64GB ECC UDIMM</li> </ul>
Serverboard	SUPER● X11SDV-4C-TP8F	SUPER● X11SDV-8C-TP8F	SUPER● A2SDi-LN4F	SUPER● A2SDi-8C-HLN4F
Chipset	System On Chip	System On Chip	System On Chip	System On Chip
System Memory (Max.)*	4 x DDR4 DIMM 512 GB up to 2667MHz LRDIMM or 256GB RDIMM, ECC/non-ECC	4 x DDR4 DIMM 512 GB up to 2667MHz LRDIMM or 256GB RDIMM, ECC	Up to 64GB Unbuffered ECC/non-ECC SO-DIMM, DDR4-2400MHz, in 4 DIMM slots	Up to 256GB Registered ECC DDR4-2400MHz or 64GB Unbuffered ECC/Non-ECC DDR4-2400MHz; in 4 DIMM slots
Expansion Slots	1 M.2 slot M key for SSD, 2242/80, 1 M.2 B Key for SSD/ WAN card, 1 Mini-PCI-E with mSATA Support, 1 PCI-E 3.0x8 slots	1 M.2 slot M key for SSD, 2242/80, 1 M.2 B Key for SSD/ WAN card, 1 Mini-PCI-E with mSATA Support, 1 PCI-E 3.0x8 slots,	1 PCI-E 3.0 x4, 1 mini-PCIe with mSATA supports (half card only), 1 M.2(M Key for SSD 2242/80, PCIe/ SATA3.0)	1 PCI-E 3.0 x4, 1 x M.2 (M key for SSD, 2242/80, PCIe3.0 x2 or SATA3)
Onboard Storage Controller	SoC controller for 4 SATA3 (6 Gbps) ports	SoC controller for 4 SATA3 (6 Gbps) ports	SoC controller for 4 SATA3 (6 Gbps) ports	SoC controller for 4 SATA3 (6 Gbps) ports
Connectivity	2x 10G SFP+, 2x 10GbE LAN, 4x 1GbE LAN, 1x dedicated IPMI LAN, 2 USB 3.0	2 x 10G SFP+, 2 x 10GbE LAN, 4x 1GbE LAN, 1x dedicated IPMI LAN, 2 USB 3.0	4x 1GbE LAN, 1 dedicated management port, 2 USB3.0	4x 1GbE LAN, 1x dedicated IPMI LAN, 2x USB 2.0
VGA/Audio	VGA via BMC	VGA via BMC	VGA via BMC	VGA via BMC
Management	IPMI 2.0	IPMI 2.0	IPMI 2.0	IPMI 2.0
Drive Bays	1x 3.5" or 4x 2.5"	1x 3.5" or 4x 2.5"	1x 3.5" or 4x 2.5" HDD	1x 3.5" or 4x 2.5" HDD
Peripheral Bays	N/A	N/A	N/A	N/A
Power Supply	200W Low Noise AC-DC power supply with PFC	200W Low Noise AC-DC power supply with PFC	200W Low Noise AC-DC power supply with PFC	200W Low Noise AC-DC power supply with PFC
Cooling System	3x 40x28mm 4-PIN PWM Fan(FAN-0065L4, 13K RPM)	3x 40x28mm 4-PIN PWM Fan(FAN-0065L4, 13K RPM)	2x 40x28mm 4-PIN PWM Fan(FAN-0065L4, 13K RPM)	2x 40x28mm 4-PIN PWM Fan (FAN-0065L4, 13K RPM), Optional 1x 40x28mm 4-PIN PWM Fan
Form Factor	437 x 43 x 249mm (17.2" x 1.7" x 9.8")	437 x 43 x 249mm (17.2" x 1.7" x 9.8")	1U Short Depth Rackmount; Enclosure: 437 x 43 x 249mm (17.2" x 1.7" x 9.8") Package: 655 x 155 x 465mm (25.8" x 6.1" x 18.3") Gross Weight: 10lbs (4.54kg) Net Weight: 10lbs (4.54kg)	437 x 43 x 249mm (17.2" x 1.7" x 9.8")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# IoT/EMBEDDED



Intel® Skylake-D Compact Front Access  
1U 2-Slot System



Intel® Xeon® D-2146NT  
SoC 8 Core, 1U System



MODEL	SYS-1019D-FHN13TP SYS-1019D-4C-FHN13TP SYS-1019D-14CN-FHN13TP SYS-1019D-16C-FHN13TP	SYS-1019D-FRN8TP
Processor Support	Intel® D-2146NT, 8 Cores, 16 Threads, 2.3 GHz, 80W -4C: Intel® D-21231T, 4 Cores, 8 Threads, 2.2 GHz, 60W -14CN: Intel® D-2177NT, 14 Cores, 28 Threads, 1.9 GHz, 105W -16C: Intel® D-21831T, 16 Cores, 32 Threads, 2.2 GHz, 100W	Intel® 2nd Gen Xeon D-2146NT, 8 Core/16 Thread with built in QAT
Key Applications	<ul style="list-style-type: none"> <li>Multi-Access Edge Computing (MEC)</li> <li>Centralized/Cloud Radio Access Network (C-RAN)</li> <li>Universal Customer Premise Equipment (uCPE)</li> <li>Software Defined WAN (SD-WAN)</li> <li>Network Function Virtualization (NFV)</li> <li>Artificial Intelligence (AI)</li> </ul>	<ul style="list-style-type: none"> <li>Network Security Appliance</li> <li>FireWall Applications</li> <li>Virtualization</li> <li>SD-WAN and vCPE/uCPE</li> <li>vCPE</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Dual PCI-E 3.0 x16 FHFL</li> <li>2x 10GbE, 2x SFP+, 9x GbE (one for management), 1x dedicated IPMI LAN, 1x COM via RJ45</li> <li>1x M.2 M-Key 2280/110, 1x M.2 B-Key 3042, 1x M.2 E-Key</li> </ul>	<ul style="list-style-type: none"> <li>400W Redundant Platinum PSU</li> <li>Built in Intel QAT upto 40 Gbps Crypto/Compression</li> <li>8 LAN w/ 2x10G SFP + 2x10Gbase-T and 4x1GbE LAN</li> <li>4x 2.5" HDD</li> <li>256GB DDR4-2133MHz Registered ECC RDIMM or 512GB LRDIMM</li> </ul>
Serverboard	SUPER● X11SDW-8C-TP13F -4C: SUPER● X11SDW-16C-TP13F -14CN: SUPER● X11SDW-14CNT-TP13F -16C: SUPER● X11SDW-16C-TP13F	SUPER● X11SDV-8C-TP8F
Chipset	System on Chip (SoC)	SoC chipset
System Memory (Max.)*	Up to 256GB Registered ECC RDIMM, DDR4-2133MHz; Up to 512GB LRDIMM LRDIMM, in 4 DIMM slots	DDR4-2666 512 LRDIMM or 256 Registered ECC RDIMM in 4 DIMM slots
Expansion Slots	Dual PCIe 3.0 x 16 full height full length expansion slot	1 PCI-E 3.0 x16, 1 M.2 M-Key for storage with 2242/2280, 1 M.2 B-Key for SSD & WAN with 2242, 1 Mini PCI-E x1
Onboard Storage Controller	SoC controller for 4 SATA3 (6 Gbps) ports	SoC with 12 SATA3 for RAID 0,1,5,10
Connectivity	2x 10GbE, 2x SFP+, 9x GbE (one for Ethernet management), 1x dedicated IPMI LAN, 1x COM via RJ45, 2x USB 3.0	4x 1GbE, 2x 10 GBase-T, 2x 10G SFP+, 1 dedicate IPMI LAN, 2x USB3.0
VGA/Audio	VGA via BMC	VGA via BMC
Management	IPMI 2.0	IPMI 2.0 (RJ45) with dedicated LAN port and KVM via BMC VGA
Drive Bays	2x External Hot-swap 2.5" Drive Bays, 2x Internal 2.5" Drive Bays	2 X 2.5" Internal Fixed HDD bracket
Peripheral Bays	N/A	4 x 2.5" HDD
Power Supply	1019D-FHN13TP / -4C: 350W Multi-output <b>Platinum Level</b> power supply; -14CN / -16C: 500W Multi-output <b>Platinum Level</b> power supply	Redundant 400W 80Plus Platinum Level power supplies;
Cooling System	4 or 6 40x28mm PWM fans (up to 6)	4x 40x56mm cooling fan
Form Factor	437 x 43 x 381mm (17.2" x 1.7" x 15")	437 x 43 x 249mm (17.2" x 1.7" x 9.8")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



# IoT/EMBEDDED



Intel® Xeon® Processor D Compact Front Access 1U 2-Slot,  
Redundant AC PSUs, and Hot Swappable Fans



Intel® Xeon® Processor D Compact Front Access 1U 2-Slot,  
Redundant DC PSUs, and Hot Swappable Fans



MODEL	<b>SYS-1019D-4C-RAN13TP+</b> <b>SYS-1019D-14CN-RAN13TP+</b> <b>SYS-1019D-16C-RAN13TP+</b>	<b>1019D-4C-RDN13TP+</b> <b>1019D-14CN-RDN13TP+</b> <b>1019D-16C-RDN13TP+</b>
Processor Support	-4C: Intel® Xeon® Processor D-2123IT Single Socket FCBGA-2518 supported, CPU TDP support Up to 60W TDP -14CN: Intel® Xeon® Processor D-2177NT. Single Socket FCBGA-2518 supported, CPU TDP support Up to 105W TDP -16C: Intel® Xeon® Processor D-2183IT Single Socket FCBGA-2518 supported, CPU TDP support Up to 100W TDP	-4C: Intel® Xeon® Processor D-2123IT Single Socket FCBGA-2518 supported, CPU TDP support Up to 60W TDP -14CN: Intel® Xeon® Processor D-2177NT. Single Socket FCBGA-2518 supported, CPU TDP support Up to 105W TDP -16C: Intel® Xeon® Processor D-2183IT. Single Socket FCBGA-2518 supported, CPU TDP support Up to 100W TDP
Key Applications	<ul style="list-style-type: none"> <li>Multi-Access Edge Computing (MEC)</li> <li>Centralized/Cloud Radio Access Network (C-RAN)</li> <li>Universal Customer Premise Equipment (uCPE)</li> <li>Software Defined WAN (SD-WAN)</li> <li>Network Function Virtualization (NFV)</li> <li>Artificial Intelligence (AI)</li> </ul>	<ul style="list-style-type: none"> <li>Multi-Access Edge Computing (MEC)</li> <li>Centralized/Cloud Radio Access Network (C-RAN)</li> <li>Universal Customer Premise Equipment (uCPE)</li> <li>Software Defined WAN (SD-WAN)</li> <li>Network Function Virtualization (NFV)</li> <li>Artificial Intelligence (AI)</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Intel® Xeon® Processor D-2123IT, 4 Cores, 8 Threads, 2.2 GHz, 60W</li> <li>2x PCIe 3.0 x16 FHFL</li> <li>4x 10GbE SFP+, 9x GbE (one for management), 1x dedicated IPMI LAN, 1x COM via RJ45, 1x VGA Port</li> <li>1x M.2 M-Key 2280/22110, 1x M.2 B-Key 2242, 1x M.2 E-Key 2230</li> <li>2x 2.5" Internal Drive Bay</li> <li>800W AC Redundant PSU, 5x Hot-Swappable Fans</li> </ul>	<ul style="list-style-type: none"> <li>Intel® Xeon® Processor D-2183IT Processor, 16 Cores, 32 Threads, 2.2 GHz, 100W</li> <li>2x PCIe3.0 x16 FHFL</li> <li>4x 10GbE SFP+, 9x GbE (one for management), 1x dedicated IPMI LAN, 1x COM via RJ45, 1x VGA Port</li> <li>1x M.2 M-Key 2280/22110, 1x M.2 B-Key 2242, 1x M.2 E-Key 2230</li> <li>2x 2.5" Internal Drive Bay</li> <li>600W DC Redundant PSU, 5x Hot-Swappable Fans</li> </ul>
Serverboard	-4C: SUPER● X11SDW-4C-TP13F+ -14CN: SUPER● X11SDW-14CN-TP13F+ -16C: SUPER● X11SDW-16C-TP13F+	-4C: SUPER● X11SDW-4C-TP13F+ -14CN: SUPER● X11SDW-14CN-TP13F+ -16C: SUPER● X11SDW-16C-TP13F+
Chipset	System on Chip (SoC)	System on Chip (SoC)
System Memory (Max.)*	Up to Up to 256GB Registered ECC RDIMM, DDR4-2400MHz; Up to 512GB LRDIMM LRDIMM, DDR4-2400MHz, in 4 DIMM slots	Up to Up to 256GB Registered ECC RDIMM, DDR4-2400MHz; Up to 512GB LRDIMM LRDIMM, DDR4-2400MHz, in 4 DIMM slots
Expansion Slots	2x PCIe 3.0 x16 FHFL	2x PCIe 3.0 x16 FHFL
Onboard Storage Controller	SoC controller for 4 SATA3 (6 Gbps) ports; RAID 0,1,5,10	SoC controller for 4 SATA3 (6 Gbps) ports; RAID 0,1,5,10
Connectivity	4 SFP+, 9 GbE (one for Ethernet management), 1 dedicated IPMI LAN, 1 COM via RJ45, 2 USB 3.0	4 SFP+, 9 GbE (one for Ethernet management), 1 dedicated IPMI LAN, 1 COM via RJ45, 2 USB 3.0
VGA/Audio	VGA via Aspeed AST2500 BMC	VGA via Aspeed AST2500 BMC
Management	IPMI 2.0	IPMI 2.0
Drive Bays	2x 2.5" Internal Drive Bays	2x 2.5" Internal Drive Bays
Peripheral Bays	N/A	N/A
Power Supply	800W Redundant Power Supply 80 PLUS Platinum	600W DC-48V input Redundant Power Supply
Cooling System	5x 40x56mm Hot Swappable Counter-Rotation PWM Fans	5x 40x56mm Hot Swappable Counter-Rotation PWM Fans
Form Factor	437 x 43 x 399mm (17.2" x 1.7" x 15.7")	437 x 43 x 399mm (17.2" x 1.7" x 15.7")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# IoT/EMBEDDED

Intel® Xeon® D2100 Series  
12/14/16-Core, Compact 1U  
Front Access Modular I/O Edge Platform

Intel® Xeon® D2100 Series  
8-Core, Compact 1U  
Front Access Modular I/O Edge Platform

Intel® Atom® C3858  
SoC, 12 Cores



MODEL	SYS-1019D-16C-FRN5TP SYS-1019D-14C-FRN5TP SYS-1019D-12C-FRN5TP	SYS-1019D-FRN5TP	SYS-E300-9A
Processor Support	-16C: Intel® D-2183IT, 16C/32T, 2.2GHz, 100W -14C: Intel® D-2173IT, 14C/28T, 1.7GHz, 70W -12C: Intel® D-2163IT, 12C/24T, 2.1GHz, 75W	Intel® D-2146NT, 8C/16T, 2.3GHz, 80W	Intel® Atom™ C3858, SoC 12 Cores, 25W, 2.0 GHz
Key Applications	<ul style="list-style-type: none"> <li>Centralized/Cloud Radio Access Network (C-RAN)</li> <li>Universal Customer Premise Equipment (uCPE)</li> <li>Software Defined Wide Area Network (SD-WAN)</li> <li>Network Function Virtualization (NFV)</li> </ul>	<ul style="list-style-type: none"> <li>Centralized/Cloud Radio Access Network (C-RAN)</li> <li>Universal Customer Premise Equipment (uCPE)</li> <li>Software Defined WAN (SD-WAN)</li> <li>Network Function Virtualization (NFV)</li> </ul>	<ul style="list-style-type: none"> <li>Embedded Networking Applications</li> <li>Network Security Appliance</li> <li>FireWall Applications</li> <li>Virtualization Server</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>4x PCI-E 3.0 x8 slots for AIOM</li> <li>2x 10GbE(share with IPMI), 2x SFP+, 1x Ethernet Management Port, 1x COM via RJ45/micro USB</li> <li>2x M.2 M-Key 2280/110, 1x M.2 B-Key 3042, 1x M.2 E-Key</li> <li>2x EDSFF</li> </ul>	<ul style="list-style-type: none"> <li>Intel® Skylake D-2146NT Processor, 8 Cores, 16 Threads, 2.3 GHz, 80W</li> <li>4x PCIe3.0 x8 slots for AIOM</li> <li>2x 10GbE(share with IPMI), 2x SFP+, 1x Ethernet Management Port, 1x COM via RJ45/micro USB</li> <li>2x M.2 M-Key 2280/110, 1x M.2 B-Key 3042, 1x M.2 E-Key</li> <li>2x EDSFF</li> </ul>	<ul style="list-style-type: none"> <li>Dual SFP+, Dual 10GBase-T and Quad GbE</li> <li>Short depth (less than 10 depth)</li> <li>Best Performance per Watt</li> <li>7 year life cycle</li> <li>IPMI 2.0 management with dedicated LAN</li> </ul>
Serverboard	-12C: SUPER● X11SDS-12C -14C: SUPER● X11SDS-14C -16C: SUPER● X11SDS-16C	SUPER● X11SDS-8C	SUPER● A2SDi-TP8F
Chipset	System on Chip (SoC)	System on Chip (SoC)	System on Chip
System Memory (Max.)*	Up to 256GB Registered ECC RDIMM or 512GB LRDIMM, DDR4-2400MHz in 4 DIMM slots	Up to 256GB Registered ECC RDIMM, DDR4-2133MHz; Up to 512GB LRDIMM, in 4 DIMM slots	Up to 64GB Unbuffered ECC/non-ECC SO-DIMM, DDR4-2400MHz, in 4 DIMM slots
Expansion Slots	4 PCI-E3.0 x8 slots for AIOM** ** AIOM sold separately	4 PCI-E3.0 x8 slots for AIOM** ** AIOM sold separately	1 PCI Express 3.0 x4 AOC slot (LP), 1 M.2(M Key for SSD 2242/80, PCIe/SATA3.0), 1 Mini-PCIe /w mSATA Half Size
Onboard Storage Controller	SoC controller for 2 SATA3 (6 Gbps) ports	SoC controller for 2 SATA3 (6 Gbps) ports	SoC controller for 4x SATA3.0
Connectivity	2x 10GbE(share with IPMI), 2x SFP+, 1x Ethernet Management Port, 1x COM via RJ45/micro USB, 2x USB 3.0	2x 10GbE(share with IPMI), 2x SFP+, 1x Ethernet Management Port, 1x COM via RJ45/micro USB, 2x USB 3.0	2x 10GbE SFP+, 2x 10GbE LAN, 4x 1GbE LAN, 1 dedicated IPMI LAN, 2 USB 3.0
VGA/Audio	VGA via BMC	VGA via BMC	VGA via BMC
Management	Intel® Node Manager, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, SPM, SSM, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SUM, SuperDoctor® 5, Watchdog
Drive Bays	2x 2.5" Drive Bays(one drive space shares with M.2), 2x EDSFF	2x 2.5" Drive Bays(one drive space shares with M.2), 2x E1.S(35°C ambient temperature only)	2x 2.5" fixed drive bay: one with bracket, one on base mount.  (1x 2.5" fixed drive bay when AOC area is occupied.)
Peripheral Bays	N/A	N/A	N/A
Power Supply	400W Redundant Power Supply, 80 PLUS Platinum	400W Redundant Power Supply, 80 PLUS Platinum	Lockable 12V DC 84W power adapter
Cooling System	5x 40x40x56 mm 13K-11K RPM Counter-rotating Fans	5x 40x40x56 mm 13K-11K RPM Counter-rotating Fans	2x 40x28mm 4-PIN PWM Fan(FAN-0065L4, 13K RPM)
Form Factor	1U Rackmount 437 x 43 x 381mm (17.2" x 1.7" x 15")	437 x 43 x 381mm (17.2" x 1.7" x 15")	1U Compact Box; Enclosure: 254 x 43 x 226mm (10" x 1.7" x 8.9") Package: 381 x 276 x 142mm (15" x 10.87" x 5.59") Gross Weight: 6.1lbs (2.77kg) Net Weight: 3.45lbs (1.56kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# IoT/EMBEDDED

Intel® Atom™ C3558  
SoC, 4 Cores

Intel® Xeon® D Wall-mount System  
with 3 PCI-E slots

Intel® Xeon® D Wall-mount System  
with 3 PCI-E slots



MODEL	SYS-E200-9A	SYS-E403-9D-4C-FN13TP SYS-E403-9D-12C-FN13TP SYS-E403-9D-14C-FN13TP SYS-E403-9D-16C-FN13TP	SYS-E403-9D-8CN-FN13TP SYS-E403-9D-14CN-FN13TP
Processor Support	Intel® Atom™ C3558, SoC 4 Cores, 16W, 2.2 GHz	-4C: Intel® D-2123IT, 4 Cores, 8 Threads, 2.2 GHz, 60W -12C: Intel® D-2163IT, 12 Cores, 24 Threads, 2.1 GHz, 75W -14C: Intel® D-2173IT, 14 Cores, 28 Threads, 1.7 GHz, 70W -16C: Intel® D-2183IT, 16 Cores, 32 Threads, 2.2 GHz, 100W	-8CN: Intel® D-2146NT, 8 Cores, 16 Threads, 2.3 GHz, 80W -14CN: Intel® D-2177NT, 14 Cores, 28 Threads, 1.9 GHz, 105W
Key Applications	<ul style="list-style-type: none"> <li>Virtualization Server</li> <li>Virtual-CPE White Box</li> <li>Entry-level Network Appliance</li> </ul>	<ul style="list-style-type: none"> <li>Multi-Access Edge Computing (MEC) Universal Customer Premise Equipment (uCPE)</li> <li>Network Function Virtualization (NFV) Edge Computing, Vehicle to Everything Application (C-V2X / V2X)</li> </ul>	<ul style="list-style-type: none"> <li>Multi-Access Edge Computing (MEC) Universal Customer Premise Equipment (uCPE)</li> <li>Network Function Virtualization (NFV) Edge Computing, Vehicle to Everything Application (C-V2X / V2X)</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Intel TXT, improved AES-NI, QuickAssist Technology</li> <li>Intel VT-x and VT-d for virtualization</li> <li>NEW flexible I/O model for peripheral connectivity</li> <li>TDP lowered and increased from Rangeley 8 or more SATA III ports – Potentially with port multiplier support*</li> <li>Significantly improved IPC compared to the Avonton/ Rangeley cores. We expect a 70% or so raw performance improvement per core</li> </ul>	<ul style="list-style-type: none"> <li>Dual PCI-E 3.0 x16 or Dual x8, One x16 PCI-E 3.0 (FH3/4L)</li> <li>2x 10GbE, 2x SFP+, 9x GbE (one for management), 1x dedicated IPMI LAN, 1x COM via RJ45</li> <li>2x USB 3.0, 2x USB 2.0</li> <li>1x M.2 M-Key 2280/110, 1x M.2 B-Key 3042, 1x M.2 E-Key 2230</li> </ul>	<ul style="list-style-type: none"> <li>Dual PCI-E 3.0 x16 or Dual x8, One x16 PCI-E 3.0 (FH3/4L)</li> <li>2x 10GbE, 2x SFP+, 9x GbE (one for management), 1x dedicated IPMI LAN, 1x COM via RJ45</li> <li>2x USB 3.0, 2x USB 2.0</li> <li>1x M.2 M-Key 2280/110, 1x M.2 B-Key 3042, 1x M.2 E-Key 2230</li> </ul>
Serverboard	SUPER● A2SDi-4C-HLN4F	-4C: SUPER● X11SDW-4C-TP13F -12C: SUPER● X11SDW-12C-TP13F -14C: SUPER● X11SDW-14C-TP13F -16C: SUPER● X11SDW-16C-TP13F	-8CN: SUPER● X11SDW-8C-TP13F -14CN: SUPER● X11SDW-14CNT-TP13F
Chipset	System on Chip	System on Chip (SoC)	System on Chip (SoC)
System Memory (Max.)*	256GB Registered ECC, DDR4-2133MHz 64GB Unbuffered ECC/non-ECC, DDR4-2133MHz in 4 DIMM slots	Up to 256GB Registered ECC RDIMM, or up to 512GB LRDIMM, DDR4-2400/2133 MHz; in 4 DIMM slots	Up to 256GB Registered ECC RDIMM, or up to 512GB LRDIMM, DDR4-2667 MHz; in 4 DIMM slots
Expansion Slots	1 M.2 (M key, 2242/2280, PCIe3.0 x2 or SATA3)	Dual x16 or Dual x8, One x16 PCIe3.0 full height 3/4 length expansion slot	Dual x16 or Dual x8, One x16 PCIe3.0 full height 3/4 length expansion slot
Onboard Storage Controller	SoC controller for 4x SATA 3.0	SoC controller for 4 SATA3 (6 Gbps) ports; RAID 0,1,5,10	SoC controller for 4 SATA3 (6 Gbps) ports; RAID 0,1,5,10
Connectivity	4x 1GbE LAN, 1 dedicated IPMI LAN, 2 USB 2.0, 1 USB 3.0 type A	2x 10GbE, 2x SFP+, 9x GbE (one for Ethernet management), 1x dedicated IPMI LAN, 1x COM via RJ45, 2x USB 3.0, 2x USB 2.0	2x 10GbE, 2x SFP+, 9x GbE (one for Ethernet management), 1x dedicated IPMI LAN, 1x COM via RJ45, 2x USB 3.0, 2x USB 2.0
VGA/Audio	VGA via BMC	VGA via BMC	VGA via BMC
Management	IPMI2.0, KVM with dedicated LAN, NMI, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, IPMI2.0, KVM with dedicated LAN, NMI, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI (Intelligent Platform Management Interface) v2.0 with KVM support, IPMI2.0, KVM with dedicated LAN, NMI, SUM, SuperDoctor® 5, Watchdog
Drive Bays	1x 2.5" SSD fixed drive bay	4x Internal 2.5" Drive Bays	4x Internal 2.5" Drive Bays
Peripheral Bays	N/A	N/A	N/A
Power Supply	Lockable 12V DC 60W power adapter	600W Multi-output power supply, 80Plus Gold	600W Multi-output power supply, 80Plus Gold
Cooling System	2x 40x28mm 4-PIN PWM FAN(FAN-0065L4, 13K RPM)	3x 80x80mm PWM redundant fans	3x 80x80mm PWM redundant fans
Form Factor	1U Compact Box; Enclosure: 195 x 43 x 226mm (7.68" x 1.7" x 8.9") Package: 381 x 142 x 276mm (15" x 5.59" x 10.87") Gross Weight: 6.5lbs (2.95kg) Net Weight: 3lbs (1.36kg)	Enclosure: 267 x 109 x 406mm (10.5" x 4.3" x 16") Package: 406 x 248 x 546mm (16" x 9.75" x 21.5") Gross Weight: 23lbs (10.43kg) Net Weight: 17lbs (7.71kg)	Enclosure: 267 x 109 x 406mm (10.5" x 4.3" x 16") Package: 406 x 248 x 546mm (16" x 9.75" x 21.5") Gross Weight: 23lbs (10.43kg) Net Weight: 17lbs (7.71kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# IoT/EMBEDDED



Intel® Xeon® D-2146NT  
SoC, 8 Core, 16 Thread, Compact



Fanless Deverton  
Edge Computing System



Intel® Xeon® D-2123IT  
Fanless, SoC, 4 Cores



MODEL	SYS-E301-9D-8CN8TP	SYS-E302-9A	SYS-E302-9D
Processor Support	Intel® Xeon® D-2146NT, 8 Core, 80W	Intel® Atom® Processor C3558. Single Socket FCBGA-1310 supported, CPU TDP support Up to 16W TDP	Intel® Xeon® D-2123IT, 4-Core, 60W
Key Applications	<ul style="list-style-type: none"> <li>SDN-WAN, vCPE controller box</li> <li>NFV Edge Computing Server</li> <li>Virtualization Server</li> <li>FireWall Applications</li> <li>IoT Edge Computing</li> </ul>	IoT Edge Computing Retail, Smart Medical Expert Systems Networking Appliance Industrial Automation & Control Embedded IoT Gateway	<ul style="list-style-type: none"> <li>IoT Edge Computing</li> <li>Industrial Automation, Retail, Smart Medical Expert Systems</li> <li>Artificial Intelligence (AI) on Edge, Machine Learning (ML)</li> <li>FireWall Applications</li> <li>Networking Appliance</li> <li>8 LAN ports support(2 x 10G SFP+, 2 x 10GBase-T, 4 x GbE)</li> <li>Support on board 1 M.2 slot M key for SSD, 2242/80, 1 M.2 B Key for SSD/ WAN card, 1 Mini PCI-E with mSATA Support</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Built in Intel QAT up to 40Gbps Crypto/Compression</li> <li>8 LAN ports support (2 x 10G SFP+, 2 x 10GBase-T, 4 x GbE)</li> </ul>	7 year life cycle IPMI 2.0 management with dedicated LAN Fanless compact design	
Serverboard	SUPER® X11SDV-8C-TP8F	SUPER® A2SDI-4C-HLN4F	SUPER® X11SDV-4C-TP8F-01
Chipset	System On Chip	System on Chip chipset	System on Chip chipset
System Memory (Max.)*	DDR4-2666 512GB LRDIMM or 256GB Registered ECC RDIMM in 4 DIMM slots	Up to 256GB Registered ECC RDIMM, DDR4-2133MHz  Or 64GB Unbuffered ECC/non-ECC UDIMM, DDR4-2133MHz, in 4 DIMM slots	Up to 256GB Registered ECC RDIMM, DDR4-2133MHz; Up to 512GB LRDIMM LRDIMM, DDR4-2133MHz, in 4 DIMM slots
Expansion Slots	1 Mini-PCI-E with mSATA Support, 1 PCI-E 3.0x8 slots	1x M.2 M Key 2242/2280(PCI-E 3.0 x2)	1 PCI-E 3.0 x8
Onboard Storage Controller	SoC controller for 4x SATA3 (6 Gbps) ports, (or 2x NVMe U.2 / 8x SATA3 through two Port Eight Intel® PCH SATA 3.0 Ports or Two MINI-SAS HD ports)	SoC controller for 2x SATA 3.0	SoC controller for 2 SATA3 ports; RAID 0,1
Connectivity	2x 10G SFP+, 2x 10GbE LAN, 4x 1GbE LAN, 1x dedicated IPMI LAN, 2 USB 3.0	4x 1GbE, 1x dedicated IPMI LAN, 2x USB 2.0	2x 10G SFP+, 2x 10GbE LAN, 4x 1GbE LAN, 1x dedicated IPMI LAN, 2 USB 3.0
VGA/Audio	VGA via BMC	Aspeed AST2400 BMC	Aspeed AST2500 BMC
Management	IPMI 2.0, KVM with dedicated LAN, Watchdog	IPMI2.0, KVM with dedicated LAN, NMI, SuperDoctor® 5, Watchdog	IPMI2.0, KVM with dedicated LAN, Watchdog
Drive Bays	Support up to 4x 7mm SSD	2x 2.5" 7mm fixed drive bay	2x 2.5" fixed drive bay with bracket
Peripheral Bays	N/A	N/A	N/A
Power Supply	DC power adapter	Lockable 12V DC 60W power adapter	150W 12V Lockable DC Power Adapter; Optional 180W 12V Lockable DC Power Adapter)
Cooling System	Passive CPU heat sink, 3x 40x28mm 4-PIN PWM Fan for System level (FAN-0100L4, 8.5K RPM)	Fanless	Fanless
Form Factor	254 x 66 x 226mm (10" x 2.6" x 8.9")	295 x 76 x 206mm (11.6" x 3" x 8.1")	295 x 76 x 206mm (11.6" x 3" x 8.1")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# IoT/EMBEDDED



Intel® Atom™ C3558/C3758,  
SoC, 4/8 Cores



Intel® Atom™ C3558/C3758,  
SoC, 4/8 Cores



Intel® Atom™ C3558/C3758,  
SoC, 4/8 Cores



MODEL	SYS-E300-9A-4CN10P SYS-E300-9A-8CN10P	SYS-E300-9A-4CN8 SYS-E300-9A-8CN8	SYS-E300-9A-4C SYS-E300-9A-8C
Processor Support	-4CN10P: Intel® Atom™ Processor Denverton C3558, SoC 4 Cores, 16W, 2.2 GHz -8CN10P: Intel® Atom™ Processor Denverton C3758, SoC 8 Cores, 25W, 2.2 GHz	-4CN8: Intel® Atom™ Processor Denverton C3558, SoC 4 Cores, 16W, 2.2 GHz -8CN8: Intel® Atom™ Processor Denverton C3758, SoC 8 Cores, 25W, 2.2 GHz	-4C: Intel® Atom™ Processor Denverton C3558, SoC 4 Cores, 16W, 2.2 GHz -8C: Intel® Atom™ Processor Denverton C3758, SoC 8 Cores, 25W, 2.2 GHz
Key Applications	<ul style="list-style-type: none"> <li>Virtual-CPE White Box Solution</li> <li>Network Security Appliance</li> <li>Embedded IoT Gateway</li> <li>Networking Edge Device</li> </ul>	<ul style="list-style-type: none"> <li>Virtual-CPE White Box Solution</li> <li>Network Security Appliance</li> <li>Embedded IoT Gateway</li> <li>Networking Edge Device</li> </ul>	<ul style="list-style-type: none"> <li>Network Security Appliance</li> <li>Embedded IoT Gateway</li> <li>Networking Edge Device</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>8x 1GbE RJ45 and 2x 1G SFP ports onboard</li> <li>LED indicator for each LAN port</li> <li>Best Performance per Watt</li> <li>7 year life cycle</li> <li>IPMI 2.0 management with dedicated LAN</li> </ul>	<ul style="list-style-type: none"> <li>8x 1G LAN port onboard</li> <li>LED indicator for each LAN port</li> <li>Best Performance per Watt</li> <li>7 year life cycle</li> <li>IPMI 2.0 management with dedicated LAN</li> </ul>	<ul style="list-style-type: none"> <li>Best Performance per Watt</li> <li>7 year life cycle</li> <li>IPMI 2.0 management with dedicated LAN</li> </ul>
Serverboard	-4CN10P: SUPER● A2SDV-4C-LN10PF -8CN10P: SUPER● A2SDV-8C-LN10PF	-4CN8: SUPER● A2SDV-4C-LN8F -8CN8: SUPER● A2SDV-8C-LN8F	-4C: SUPER● A2SDi-4C-HLN4F -8C: SUPER● A2SDi-8C-HLN4F
Chipset	System on Chip	System on Chip	System on Chip
System Memory (Max.)*	Up to 256GB Registered ECC DDR4-2133MHz, Up to 64GB Unbuffered ECC/Non-ECC DDR4-2133MHz; in 4 DIMM slots	Up to 256GB Registered ECC DDR4-2400MHz, Up to 64GB Unbuffered ECC/Non-ECC DDR4-2400MHz; in 4 DIMM slots	Up to 256GB Registered ECC DDR4-2400MHz, Up to 64GB Unbuffered ECC/Non-ECC DDR4-2400MHz; in 4 DIMM slots
Expansion Slots	-4CN10P: 1x PCI Express 3.0 x2 AOC slot (LP) when SSD isn't populated, 1 M.2 B Key 3042/2280(PCIe 3.0 x2) -8CN10P: 1x PCI Express 3.0 x4 AOC slot (LP) when SSD isn't populated, 1x M.2 M Key 2242/2280 (PCIe 3.0 x2 or SATA3.0), 1x M.2 B Key 3042/2280(PCIe 3.0 x2)	-4CN8: 1x PCI Express 3.0 x2 AOC slot (LP) when only 1 SSD populated, 1 M.2 B Key 3042/2280(PCIe 3.0 x2) -8CN8: 1x PCI Express 3.0 x4 AOC slot (LP) when only 1 SSD populated, 1x M.2 M Key 2242/2280 (PCIe 3.0 x2 or SATA3.0), 1x M.2 B Key 3042/2280(PCIe 3.0 x2)	1x PCI Express 3.0 x4 AOC slot (LP), 1x M.2 M Key 2242/2280(PCIe 3.0 x2)
Onboard Storage Controller	SoC controller for 3x SATA3.0	SoC controller for 4x SATA3.0	SoC controller for 4x SATA3.0
Connectivity	8x 1GbE RJ45 and 2x 1G SFP, 1 dedicated IPMI LAN, 2 USB3.0, Optional Console port by request	8x 1GbE, 1 dedicated IPMI LAN, 2 USB3.0, Optional Console port by request	4x 1GbE, 1 dedicated IPMI LAN, 2 USB 2.0, Optional Console port by request
VGA/Audio	VGA via BMC	VGA via BMC	VGA via BMC
Management	OoB, IPMI2.0, KVM with dedicated LAN, NMI, SUM, SuperDoctor™ 5, Watchdog	OoB, IPMI2.0, KVM with dedicated LAN, NMI, SUM, SuperDoctor™ 5, Watchdog	OoB, IPMI2.0, KVM with dedicated LAN, NMI, SUM, SuperDoctor™ 5, Watchdog
Drive Bays	1x 2.5" fixed drive bay when AOC area is not occupied.	1x 2.5" fixed drive bay when AOC area is not occupied.	1x 2.5" fixed drive bay (2x 2.5" fixed drive bay when AOC area is not occupied.)
Peripheral Bays	N/A	N/A	N/A
Power Supply	Lockable 12V DC 84W power adapter	Lockable 12V DC 84W power adapter	Lockable 12V DC 84W power adapter
Cooling System	1x 40x28mm 4-PIN PWM Fan(FAN-0065L4, 13K RPM), Optional 1x Fan by request	1x 40x28mm 4-PIN PWM Fan(FAN-0065L4, 13K RPM), Optional 1x Fan by request	1x 40x28mm 4-PIN PWM Fan(FAN-0065L4, 13K RPM), Optional 1x Fan by request
Form Factor	254 x 43 x 226mm (10" x 1.7" x 8.9")	1U Compact Box; Enclosure: 254 x 43 x 226mm (10" x 1.7" x 8.9") Package: 381 x 276 x 142mm (15" x 10.87" x 5.59") Gross Weight: 6.4lbs (2.9kg) Net Weight: 3.8lbs (1.72kg)	1U Compact Box; Enclosure: 254 x 43 x 226mm (10" x 1.7" x 8.9") Package: 381 x 276 x 142mm (15" x 10.87" x 5.59") Gross Weight: 6.3lbs (2.86kg) Net Weight: 3.6lbs (1.63kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# IoT/EMBEDDED



8th Generation Intel® Core™ i7/i5/i3 Processor Edge Computing



Intel® Xeon® D-2146NT SoC, 8 Core, 16 Thread



Intel® Xeon® D-2123IT, 4 Cores, 8 Threads



Intel® Atom™ C3958 SoC, 16 Cores



MODEL	SYS-E300-9C	SYS-E300-9D-8CN8TP	SYS-E300-9D-4CN8TP	SYS-E300-9A-16CN8TP
Processor Support	8th Generation Intel® Core™ i7/i5/i3/ Pentium®/Celeron® Processor	Intel Skylake Xeon D-2146NT SoC, 2.3GHz, 8 Core, 80W	Intel® Xeon® D-2123IT, 4 Cores, 60W	Intel® Atom™ Processor Denverton C3958, SoC 16 Cores, 31W, 2.0 GHz
Key Applications	<ul style="list-style-type: none"> <li>IoT Edge Computing</li> <li>DVR/NVR</li> <li>Machine Automation</li> <li>Digital Signage</li> <li>Medical Applications</li> <li>IoT Gateway</li> <li>Coffee Lake 8th Gen Core i3/i5/i7</li> <li>Embedded long life</li> <li>1U Box Edge Devices</li> <li>TPM onboard</li> </ul>	<ul style="list-style-type: none"> <li>SDN-WAN, vCPE controller box</li> <li>NFV Edge Computing Server</li> <li>Virtualization Server</li> <li>FireWall Applications</li> <li>IoT Edge Computing</li> <li>Built in Intel QAT up to 40Gbps Crypto/Compression</li> <li>Supports up to 8C high Density SKL-D SoC processor for edge network computing</li> <li>High Memory Bandwidth-Supports 4 DDR4 channel DIMMs(ECC LRDIMM or ECC RDIMM) with up to 2133 MHz memory speed, Max memory capacity up to 512GB on LRDIMM</li> <li>8 LAN ports support(2 x 10G SFP+, 2 x 10GBase-T, 4 x GbE)</li> <li>Support on board 1 M.2 slot M key for SSD, 2242/80, 1 M.2 B Key for SSD/ WAN card, 1 Mini-PCI-E with mSATA Support</li> <li>2 x USB 3.0, 4 x SATA 3.0 ports(SATA/SAS HDD/SSD)</li> </ul>	<ul style="list-style-type: none"> <li>SDN-WAN, vCPE controller box</li> <li>NFV Edge Computing Server</li> <li>Virtualization Server</li> <li>FireWall Applications</li> <li>IoT Edge Computing</li> <li>8 LAN ports support (2 x 10G SFP+, 2 x 10GBase-T, 4 x GbE)</li> <li>1 M.2 slot M key for SSD, 2242/80, 1 M.2 B Key for SSD/ WAN card, 1 Mini-PCI-E with mSATA Support</li> </ul>	<ul style="list-style-type: none"> <li>Embedded Networking Applications</li> <li>Network Security Appliance</li> <li>FireWall Applications</li> <li>Virtualization Server</li> <li>Dual SFP+, Dual 10GBase-T and Quad GbE</li> <li>Short depth (less than 10 depth)</li> <li>Best Performance per Watt</li> <li>7 year life cycle</li> <li>IPMI 2.0 management with dedicated LAN</li> </ul>
Outstanding Features				
Serverboard Chipset	SUPER● X11SCV-Q Intel® Q370 chipset	SUPER● X11SDV-8C-TP8F System On Chip	SUPER● X11SDV-4C-TP8F System On Chip	SUPER● A2SDi-16C-TP8F System on Chip
System Memory (Max.)*	Up to 32GB Unbuffered non-ECC SO-DIMM, DDR4-2666MHz, in 2 DIMM slots	DDR4-2666 512GB LRDIMM or 256GB Registered ECC RDIMM in 4 DIMM slots	DDR4-2666 512GB LRDIMM or 256GB Registered ECC RDIMM in 4 DIMM slots	Up to 64GB Unbuffered ECC/non-ECC SO-DIMM, DDR4-2400MHz, in 4 DIMM slots
Expansion Slots	1x PCI Express 3.0 x16 AOC slot (LP) and M.2 M key: SATA/PCI-E 3.0 x4, support 2242/2280 length; M.2 E KEY: PCI-E 3.0 x1, support 2230 length	1 Mini-PCI-E with mSATA Support, 1 PCI-E 3.0x8 slots,	1 Mini-PCI-E with mSATA Support, 1 PCI-E 3.0x8 slots,	1 PCI Express 3.0 x4 AOC slot (LP), 1 M.2(M Key for SSD 2242/80, PCIe/SATA3.0), 1 Mini-PCIe /w mSATA Half Size
Onboard Storage Controller	Q370 controller for 2 SATA3 ports; RAID 0,1	SoC controller for 4x SATA3 (6 Gbps) ports	SoC controller for 4x SATA3 (6 Gbps) ports	SoC controller for 4x SATA3.0
Connectivity	2 X 1GbE LAN with AMT, 4 x USB 3.1 (2 type A & 2 type C in rear), HD Audio(Mic In/Line Out)	2 x 10G SFP+, 2 x 10GbE LAN, 4x 1GbE LAN, 1x dedicated IPMI LAN, 2 USB 3.0	2 x 10G SFP+, 2 x 10GbE LAN, 4x 1GbE LAN, 1x dedicated IPMI LAN, 2 USB 3.0	2x 10GbE SFP+, 2x 10GbE LAN, 4x 1GbE LAN, 1 dedicated IPMI LAN, 2 USB 3.0
VGA/Audio	1 DVI-D, 1HDMI, 1DP(DisplayPort), 3 Independent displays; 1 eDP(Embedded DisplayPort)	VGA via BMC	VGA via BMC	VGA via BMC
Management	AMT, NMI, SuperDoctor® 5, vPro, Watchdog	IPMI 2.0, KVM with dedicated LAN, Watchdog	IPMI 2.0, KVM with dedicated LAN, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SUM, SuperDoctor® 5, Watchdog
Drive Bays	2x 2.5" fixed drive bay	1x 2.5" fixed drive bay with bracket. (No 2.5" fixed drive bay when AOC area is occupied.)	1x 2.5" fixed drive bay with bracket. (No 2.5" fixed drive bay when AOC area is occupied.)	2x 2.5" fixed drive bay: one with bracket, one on base mount. (1x 2.5" fixed drive bay when AOC area is occupied.)
Peripheral Bays	N/A	N/A	N/A	N/A
Power Supply	Lockable 12V DC 150W power adapter	DC power adapter	DC power adapter	Lockable 12V DC 84W power adapter
Cooling System	2x 4cm high performance PWM fan; optional for 1x fan to add-on card area cooling	Passive CPU heat sink, 3x 40x28mm 4-PIN PWM Fan for System level (FAN-0100L4, 8.5K RPM)	Passive CPU heat sink, 3x 40x28mm 4-PIN PWM Fan for System level (FAN-0100L4, 8.5K RPM)	2x 40x28mm 4-PIN PWM Fan(FAN-0065L4, 13K RPM)
Form Factor	254 x 43 x 226mm (10" x 1.7" x 8.9")	254 x 43 x 226mm (10" x 1.7" x 8.9")	254 x 43 x 226mm (10" x 1.7" x 8.9")	254 x 43 x 226mm (10" x 1.7" x 8.9")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# IoT/EMBEDDED



Intel® Xeon® D2123IT  
SoC, 4-Cores, 8 Thread



Intel® Xeon® D-1518  
SoC, 4 Core



Intel® Xeon® D-1528  
SoC, 6-Cores



MODEL	SYS-E300-9D	SYS-E300-8D	SYS-E200-8D
Processor Support	Intel Skylake Xeon D-2123IT SoC, 2.2GHz, 4 Core, 8 Thread, TDP 60W	Intel® Xeon® Processor D-1518, SoC 4 Core, 35W, 2.2 GHz	Intel® Xeon® Processor D-1528, SoC 6 Core, 35W, 1.9 GHz
Key Applications	<ul style="list-style-type: none"> <li>Network Security Appliance</li> <li>SDN-WAN, vCPE controller box</li> <li>NFV Edge Computing Server</li> <li>Virtualization Server</li> <li>IoT Edge Computing</li> <li>IoT Gateway</li> </ul>	<ul style="list-style-type: none"> <li>Embedded Networking Applications</li> <li>Network Security Appliance</li> <li>FireWall Applications</li> <li>Virtualization Server</li> </ul>	<ul style="list-style-type: none"> <li>Embedded Networking Applications</li> <li>Network Security Appliance</li> <li>FireWall Applications</li> <li>Virtualization Server</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Supports up to 4C high Density SKL-D SoC processor for edge network computing</li> <li>High Memory Bandwidth-Supports 4 DDR4 channel DIMMs(ECC LRDIMM or ECC RDIMM) with up to 2400 MHz memory speed , Max memory capacity up to 512GB on LRDIMM</li> <li>1x Low Profile PCIe 3.0 x 8 slot, 1 on board Oculink port(or 1x PCIe4 NVMe for NVMe SSD)</li> <li>2 x 10GBase-T ethernet ports RMDA support</li> <li>2 x USB 3.0, 1 x SATA 3.0 ports(SATA/SAS HDD/SSD)</li> <li>1 x TPM 2.0 header</li> </ul>	<ul style="list-style-type: none"> <li>Dual SFP+ and 6 GbE</li> <li>Short depth (less than 10 depth)</li> <li>Low Power Xeon D SoC 4 Core</li> <li>Best Performance per Watt</li> <li>7 year life cycle</li> <li>IPMI 2.0 management with dedicated LAN</li> </ul>	<ul style="list-style-type: none"> <li>Smallest Xeon Server BOX</li> <li>Low Power Xeon D SoC 6 Core</li> <li>Best Performance per Watt</li> <li>7 year life cycle</li> <li>IPMI 2.0 management with dedicated LAN</li> </ul>
Serverboard Chipset	SUPER● X11SDV-4C-TLN2F System On Chip	SUPER● X10SDV-TP8F System on Chip	SUPER● X10SDV-6C-TLN4F System on Chip
System Memory (Max.)*	4 x DDR4 DIMM 512 GB up to 2400MHz LRDIMM or 256GB RDIMM, ECC/non-ECC	Up to 128GB ECC RDIMM DDR4 2133MHz or 64GB ECC/non-ECC UDIMM in 4 sockets	128GB Registered ECC, DDR4-2133MHz 64GB Unbuffered ECC/non-ECC, DDR4-2133MHz in 4 DIMM slots
Expansion Slots	1 PCI-E 3.0x8(L/P)	1 PCIe 3.0 x8 AOC slot (LP), 1 M.2(M Key for SSD 2242/80/110, PCIe/SATA3.0, 1 Mini-PCIe /w mSATA	1 M.2(M Key for SSD 2242/80, PCIe/SATA3.0)
Onboard Storage Controller	SoC controller for 4 SATA3 (6 Gbps) ports; support RAID 0,1,5,10, 4 SATA ports via OCuLink (or PCIe3.0 x4 for NVMe)	SoC controller for 4x SATA3.0	SoC controller for 6x SATA3.0
Connectivity	2x 10GBase-T LAN, 1 dedicated IPMI LAN, 2 USB 3.0	6x GbE and 2 SFP+, 1 dedicated management port, 2x USB 3.0	2x GbE and 2x 10G LAN ports, 1 dedicated management port, 2 USB 3.0
VGA/Audio	VGA via BMC	VGA via BMC	VGA via BMC
Management	IPMI 2.0	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SUM, SuperDoctor® 5, Watchdog
Drive Bays	1x 2.5" internal drive bay	1x 2.5" fixed drive bay with bracket. (No 2.5" fixed drive bay when AOC area is occupied.)	1x 2.5" fixed drive bay with bracket. (Design for 9.5mm thickness HDD with Low Profile Memory)
Peripheral Bays	N/A	N/A	N/A
Power Supply	MCP-250-10128-0N (150W)	DC power adapter	DC power adapter
Cooling System	3x 40x28mm 4-PIN PWM Fan(FAN-0065L4, 13K RPM), none	Passive CPU heat sink and 2x 40mm chassis fans	Passive CPU heat sink and 2x 40mm chassis fans
Form Factor	254 x 43 x 226mm (10" x 1.7" x 8.9")	1U Compact Box; Enclosure: 254 x 43 x 226mm (10" x 1.7" x 8.9") Package: 381 x 276 x 142mm (15" x 10.87" x 5.59") Gross Weight: 6.1lbs (2.77kg) Net Weight: 3.45lbs (1.56kg)	1U compact BOX; Enclosure: 193 x 43 x 226mm (7.6" x 1.7" x 8.9") Package: 381 x 276 x 127mm (15" x 10.87" x 5.59") Gross Weight: 6.5lbs (2.95kg) Net Weight: 3.0lbs (1.36kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# IoT/EMBEDDED

Fanless IoT Gateway/Server

Fanless IoT Gateway/Server

Fanless IoT Gateway/Server



MODEL	SYS-E100-9S	SYS-E100-9S-E	SYS-E100-9S-L
Processor Support	7th Generation Intel® Core™ i7-7600U Processor	7th Generation Intel® Core™ i5-7300U Processor	7th Generation Intel® Core™ i3-7100U Processor
Key Applications	<ul style="list-style-type: none"> <li>IoT Edge Computing</li> <li>Kiosk, Interactive information system</li> <li>Environmental Monitor</li> </ul>	<ul style="list-style-type: none"> <li>AIoT Edge Computing</li> <li>Kiosk, Interactive information system</li> <li>Environmental Monitor</li> </ul>	<ul style="list-style-type: none"> <li>IoT Edge Computing</li> <li>Kiosk, Interactive information system</li> <li>Environmental Monitor</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Core i Fanless Compact Ruggedized Box PC</li> <li>1 HDMI and 1 Display Port</li> <li>1 USB3.1, 2 USB 3.0, 4 USB 2.0</li> <li>4 COM (RS-232/422/485), 1 DIO via DB9</li> <li>2 Gigabit Ethernet Ports</li> <li>TPM2.0 onboard</li> </ul>	<ul style="list-style-type: none"> <li>Core i Fanless Compact Ruggedized Box PC</li> <li>Support Cloud-based Management Software</li> <li>Support Dual Independent Displays by HDMI &amp; DP</li> <li>Fanless compact design</li> </ul>	<ul style="list-style-type: none"> <li>1 HDMI and 1 Display Port</li> <li>1 USB3.1, 2 USB 3.0, 4 USB 2.0</li> <li>4 COM (RS-232/422/485), 1 DIO via DB9</li> <li>2 Gigabit Ethernet Ports</li> <li>TPM2.0 onboard</li> </ul>
Serverboard	SUPER● X11SSN-H-WOHS	SUPER● X11SSN-E-WOHS	SUPER● X11SSN-L-WOHS
Chipset	System on Chip	System on Chip	System on Chip
System Memory (Max.)*	Up to 32GB Unbuffered non-ECC SO-DIMM, DDR4-2133MHz, in 2 DIMM slots	Up to 32GB Unbuffered non-ECC SO-DIMM, DDR4-2133MHz, in 2 DIMM slots	Up to 32GB Unbuffered non-ECC SO-DIMM, DDR4-2133MHz, in 2 DIMM slots
Expansion Slots	1 Full size Mini-PCIe; 1 M.2 2280 B-Key	1 Full size Mini-PCIe; 1 M.2 2280 B-Key	1 Full size Mini-PCIe; 1 M.2 2280 B-Key
Onboard Storage Controller	1 M.2 2280 B-Key for SATA SSD	1 M.2 2280 B-Key for SATA SSD	1 M.2 2280 B-Key for SATA SSD
Connectivity	Dual LAN with Intel®PHY I219LM, 1 USB3.1, 2 USB3.0, 4 USB2.0, 4 COM (RS-232/422/485), 1 DIO via DB9, TPM2.0 onboard	Dual LAN with Intel®PHY I219LM, 1 USB3.1, 2 USB3.0, 4 USB2.0, 4 COM (RS-232/422/485), 1 DIO via DB9, TPM2.0 onboard	Dual LAN with Intel®PHY I219LM, 1 USB3.1, 2 USB3.0, 4 USB2.0, 4 COM (RS-232/422/485), 1 DIO via DB9, TPM2.0 onboard
VGA/Audio	1 DisplayPort, 1 HDMI	1 DisplayPort, 1 HDMI	1 DisplayPort, 1 HDMI
Management	AMT, SuperDoctor® 5, vPro, Watchdog		SuperDoctor® 5, Watchdog
Drive Bays	N/A	N/A	N/A
Peripheral Bays	N/A	N/A	N/A
Power Supply	Lockable 12V DC 60W power adapter	Lockable 12V DC 60W power adapter	Lockable 12V DC 60W power adapter
Cooling System	Fanless	Fanless	Fanless
Form Factor	195 x 44 x 151mm (7.68" x 1.73" x 5.94")	195 x 44 x 151mm (7.68" x 1.73" x 5.94")	195 x 44 x 151mm (7.68" x 1.73" x 5.94")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



# IoT/EMBEDDED

IP51 Fanless IoT Gateway/Server

Fanless IoT Gateway/Server, Cost Effective

Fanless IoT Gateway/Server



MODEL	SYS-E50-9AP	SYS-E50-9AP-L	SYS-E50-9AP-N5
Processor Support	Intel® Atom™ Processor x5-E3940	Intel® Atom™ Processor x5-E3940	Intel® Atom™ Processor x5-E3940
Key Applications	<ul style="list-style-type: none"> <li>IoT Gateway</li> <li>Commercial Appliance</li> <li>Support Cloud-based Management Software</li> </ul>	<ul style="list-style-type: none"> <li>Cost Optimized IoT Gateway</li> <li>Commercial Appliance</li> </ul>	<ul style="list-style-type: none"> <li>5 LAN Fanless Embedded System</li> <li>Entry Networking Appliance</li> <li>IoT Gateway</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>IP51 with plastic chassis design for water/dust proof</li> <li>Palm-size for space-limited environment</li> <li>Built-in Antenna</li> </ul>	<ul style="list-style-type: none"> <li>Palm-size for space-limited environment</li> <li>Cost optimized</li> </ul>	<ul style="list-style-type: none"> <li>5 LAN Fanless Embedded System</li> <li>TPM 2.0 onboard</li> <li>Built-in Antenna</li> </ul>
Serverboard	SUPER● A2SAP-H	SUPER● A2SAP-H	SUPER● A2SAP-H
Chipset	System on Chip	System on Chip	System on Chip
System Memory (Max.)*	Up to 8GB Unbuffered non-ECC SO-DIMM, DDR3L-1866MHz, in 1 DIMM socket	Up to 8GB Unbuffered non-ECC SO-DIMM, DDR3L-1866MHz, in 1 DIMM socket	Up to 8GB Unbuffered non-ECC SO-DIMM, DDR3L-1866MHz, in 1 DIMM socket
Expansion Slots	1 Full size Mini-PCIe; 1 Half size Mini-PCIe; 1 M.2 B-Key 2242; 1 M.2 E-Key 2230	1 Half size Mini-PCIe; 1 M.2 B-Key 2242	1 Half size Mini-PCIe; 1 M.2 B-Key 2242; 1 M.2 E-Key 2230
Onboard Storage Controller	1 M.2 B-Key 2242 for SATA SSD, 1 SATA 3.0 for 7mm 2.5" SATA SSD	1 M.2 B-Key 2242 for SATA SSD	1 M.2 B-Key 2242 for SATA SSD, 1 SATA 3.0 for 7mm 2.5" SATA SSD
Connectivity	Dual LAN with Intel® I210-IT, 2 USB3.0, 2 USB2.0, 2 COM (RS-232/422/485), TPM2.0 onboard	Dual LAN with Intel® I210-IT, 2 USB3.0	5 LAN with Intel® I210-IT, 2 USB3.0, 2 USB2.0, 1 COM, TPM2.0 onboard
VGA/Audio	2 HDMI	1 HDMI	2 HDMI
Management	SuperDoctor® 5, Watchdog	SuperDoctor® 5, Watchdog	SuperDoctor® 5, Watchdog
Drive Bays	1 SATA 3.0 for 7mm 2.5" SATA SSD	N/A	1 SATA 3.0 for 7mm 2.5" SATA SSD
Peripheral Bays	N/A	N/A	N/A
Power Supply	Lockable 12V DC 40W power adapter	Lockable 12V DC 40W power adapter	Lockable 12V DC 40W power adapter
Cooling System	Fanless	Fanless	Fanless
Form Factor	148 x 44 x 118mm (5.82" x 1.72" x 4.64")	148 x 44 x 118mm (5.82" x 1.72" x 4.64")	148 x 44 x 118mm (5.82" x 1.72" x 4.64")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# IoT/EMBEDDED

Supports Wireless communication

Compact Embedded Server



MODEL	SYS-E50-9AP-Wifi**	SYS-E102-9AP-L
Processor Support	Intel® Atom® X5-E3940	Intel® Atom® X5-E3930
Key Applications	<ul style="list-style-type: none"> <li>IoT Gateway</li> <li>Commercial Appliance</li> </ul>	<ul style="list-style-type: none"> <li>Embedded Applications</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Built-in Antenna and Dual band Wireless/Bluetooth combo module</li> <li>IP51 with plastic chassis design for water/dust proof</li> <li>Cable-less design for easy maintenance</li> <li>Fanless design with palm-size dimension</li> <li>Support Cloud-based Management Software</li> </ul>	<ul style="list-style-type: none"> <li>Building Block Solution for Embedded Applications</li> <li>Easy integration</li> </ul>
Serverboard	SUPER● A2SAP-H	SUPER● A2SAN-L
Chipset	System on Chip	System on Chip
System Memory (Max.)*	Up to 8GB Unbuffered non-ECC SO-DIMM, DDR3L-1866MHz, in 1 DIMM socket	Up to 8GB Unbuffered non-ECC SO-DIMM, DDR3L-1866MHz, in 1 DIMM slot
Expansion Slots	1 Full size Mini-PCIe; 1 Half size Mini-PCIe; 1 M.2 B-Key 2242	1 Full Size Mini-PCI-E; 1 M.2 2280 B-Key
Onboard Storage Controller	1 M.2 B-Key 2242 for SATA SSD, 1 SATA 3.0 for 7mm 2.5" SATA SSD	1 M.2 B-Key 2280 for SATA SSD, 1 SATA 3.0 for 7mm 2.5" SATA SSD
Connectivity	Dual LAN with Intel I120-IT, 2 USB3.0, 2 USB2.0, 2 COM (RS-232/422/485), TPM 2.0 onboard, Dual Band Wireless and Bluetooth 4.2	Dual LAN with Intel I210-IT, 2 USB3.0, TPM2.0 onboard
VGA/Audio	2 HDMI	1 VGA 1 HDMI
Management	SuperDoctor® 5, Watchdog	SuperDoctor® 5; Watchdog
Drive Bays	1 SATA 3.0 for 7mm 2.5" SATA SSD	1 SATA 3.0 for 7mm 2.5" SATA SSD
Peripheral Bays	N/A	N/A
Power Supply	Lockable 12V DC 40W power adapter	Lockable 12V DC 40W power adapter
Cooling System	Fanless	Passive CPU heat sink and 1x 40mm chassis fans
Form Factor	148 x 44 x 118mm (5.82" x 1.72" x 4.64")	1U Box; Enclosure: 190 x 44 x 120mm (7.48" x 1.72" x 4.72") Package: 241 x 140 x 203mm (9.5" x 5.5" x 8")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

\*\* Only available for NA and EU region. For other regions, please contact your sale representatives

# IoT/EMBEDDED



Extended Temperature  
Fanless IoT Gateway/Server



Fanless IoT Gateway/Server



Industrial Ruggedized Fanless PC



MODEL	SYS-E100-9AP	SYS-E100-9APP	SYS-E100-9AP-IA
Processor Support	Intel® Atom® X5-E3940	Intel® Pentium™ N4200	Intel® Atom® X5-E3940
Key Applications	<ul style="list-style-type: none"> <li>IoT Gateway for Smart Factory, Smart Building, Smart Home Kiosk, Interactive information system</li> <li>Environmental Monitor</li> <li>Industrial Application</li> </ul>	<ul style="list-style-type: none"> <li>IoT Gateway for Smart Factory, Smart Building, Smart Home Kiosk, Interactive information system</li> <li>Environmental Monitor</li> </ul>	<ul style="list-style-type: none"> <li>IoT Gateway for Smart Factory, Smart Building</li> <li>Machine Automation</li> <li>Industrial Application</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Low power Apollo Lake Atom E3940, 4C</li> <li>Fanless Compact Ruggedized Box PC</li> <li>Supports wide-temp: -20~60°C</li> <li>TPM2.0 onboard</li> <li>Operational vibration: 5Grms, IEC 60068-2-64</li> <li>Operational Shock: 30G, IEC 60068-2-27</li> </ul>	<ul style="list-style-type: none"> <li>Supports temp: 0-60C</li> <li>TPM2.0 onboard</li> <li>Operational vibration: 5Grms, IEC 60068-2-64</li> <li>Operational Shock: 30G, IEC 60068-2-27</li> </ul>	<ul style="list-style-type: none"> <li>Low power Apollo Lake Atom E3940, 4C</li> <li>Din-rail Fanless Box PC</li> <li>Din-rail Fanless Ruggedized Box PC</li> <li>1 Flexible I/O Slot (via MiniPCI-E)</li> <li>9-36VDC wide range power input</li> <li>Supports wide-temp: -20-60C</li> <li>Operational vibration: 5Grms, IEC 60068-2-64</li> <li>Operational Shock: 30G, IEC 60068-2-27</li> </ul>
Serverboard	SUPER● A2SAN-E-WOHS	SUPER● X11SAN-WOHS	SUPER● A2SAN-E-WOHS
Chipset	System on Chip	System on Chip	System on Chip
System Memory (Max.)*	Up to 8GB Unbuffered non-ECC SO-DIMM, DDR3L-1866MHz, in 1 DIMM socket	Up to 8GB Unbuffered non-ECC SO-DIMM, DDR3L-1866MHz, in 1 DIMM socket	Up to 8GB Unbuffered non-ECC SO-DIMM, DDR3L-1866MHz, in 1 DIMM socket
Expansion Slots	1 Full size Mini-PCIe; 1 M.2 2280 B-Key	1 Full size Mini-PCIe; 1 M.2 2280 B-Key	1 Full size Mini-PCIe; 1 M.2 2280 B-Key
Onboard Storage Controller	1 M.2 2280 B-Key for SATA SSD	1 M.2 2280 B-Key for SATA SSD	1 M.2 2280 B-Key for SATA SSD, 1 SATA3 2.5" SSD
Connectivity	Dual LAN with Intel I210-IT, 2 USB3.0, 4 USB2.0, 4 COM (RS-232/422/485), 1 DIO via DB9, TPM2.0 onboard	Dual LAN with Intel I210-IT, 1 USB3.1, 2 USB3.0, 4 USB2.0, 4 COM (RS-232/422/485), 1 DIO via DB9, TPM2.0 onboard	Dual LAN with Intel I210-IT, 2 USB3.0, 4 USB2.0, 4 COM (RS-232/422/485), 1 DIO via DB9, TPM2.0 onboard
VGA/Audio	1 VGA 1 HDMI	1 VGA 1 HDMI	1 VGA 1 HDMI
Management	SuperDoctor® 5, Watchdog	SuperDoctor® 5, Watchdog	SuperDoctor® 5, Watchdog
Drive Bays	N/A	N/A	1 SATA 3.0 for 2.5" SATA SSD
Peripheral Bays	N/A	N/A	N/A
Power Supply	Lockable 12V DC 40W power adapter	Lockable 12V DC 40W power adapter	12V DC 60W power adapter, Terminal Block
Cooling System	Fanless	Fanless	Fanless
Form Factor	195 x 44 x 151mm (7.68" x 1.73" x 5.94")	195 x 44 x 151mm (7.68" x 1.73" x 5.94")	194 x 80 x 126mm (7.64" x 3.15" x 4.96")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# IoT/EMBEDDED



Fanless IoT Gateway/Server



Fanless IoT Gateway/Server



Fanless IoT Gateway/Server



Fanless IoT Gateway/Server



MODEL	SYS-E100-9W-H	SYS-E100-9W-E	SYS-E100-9W-L	SYS-E100-9W-C
Processor Support	8th Generation Intel® Core™ i7-8665UE Processor	8th Generation Intel® Core™ i5-8365UE Processor	8th Generation Intel® Core™ i3-8145UE Processor	Intel® Celeron® Processor 4305UE Processor
Key Applications	<ul style="list-style-type: none"> <li>Industrial Automation, Retail, Smart Medical Expert Systems</li> <li>Kiosk, Interactive information system</li> <li>Digital Signage</li> </ul>	<ul style="list-style-type: none"> <li>Industrial Automation, Retail, Smart Medical Expert Systems</li> <li>Kiosk, Interactive information system</li> <li>Digital Signage</li> </ul>	<ul style="list-style-type: none"> <li>Industrial Automation, Retail, Smart Medical Expert Systems</li> <li>Kiosk, Interactive information system</li> <li>Digital Signage</li> </ul>	<ul style="list-style-type: none"> <li>Industrial Automation, Retail, Smart Medical Expert Systems</li> <li>Kiosk, Interactive information system</li> <li>Digital Signage</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Supports wide-temp: 0~50°C</li> <li>TPM2.0 onboard</li> <li>Operational vibration: 5Grms, IEC 60068-2-64</li> <li>Operational Shock: 30G, IEC 60068-2-27</li> </ul>	<ul style="list-style-type: none"> <li>Supports wide-temp: 0~50°C</li> <li>TPM2.0 onboard</li> <li>Operational vibration: 5Grms, IEC 60068-2-64</li> <li>Operational Shock: 30G, IEC 60068-2-27</li> </ul>	<ul style="list-style-type: none"> <li>Supports wide-temp: 0~50°C</li> <li>TPM2.0 onboard</li> <li>Operational vibration: 5Grms, IEC 60068-2-64</li> <li>Operational Shock: 30G, IEC 60068-2-27</li> </ul>	<ul style="list-style-type: none"> <li>Supports wide-temp: 0~50°C</li> <li>TPM2.0 onboard</li> <li>Operational vibration: 5Grms, IEC 60068-2-64</li> <li>Operational Shock: 30G, IEC 60068-2-27</li> </ul>
Serverboard	SUPER● X11SWN-H-WOHS	SUPER● X11SWN-E-WOHS	SUPER● X11SWN-L-WOHS	SUPER● X11SWN-C-WOHS
Chipset	System on Chip chipset	System on Chip chipset	System on Chip chipset	System on Chip chipset
System Memory (Max.)*	Up to 64GB Unbuffered non-ECC SO-DIMM, DDR4-2400MHz, in 2 DIMM slots	Up to 64GB Unbuffered non-ECC SO-DIMM, DDR4-2400MHz, in 2 DIMM slots	Up to 64GB Unbuffered non-ECC SO-DIMM, DDR4-2400MHz, in 2 DIMM slots	Up to 64GB Unbuffered non-ECC SO-DIMM, DDR4-2400MHz, in 2 DIMM slots
Expansion Slots	N/A	N/A	N/A	N/A
Onboard Storage Controller	N/A	N/A	N/A	N/A
Connectivity	Single LAN with Intel® Ethernet Controller I210IT; Single LAN with Intel® PHY I219LM LAN controller	Single LAN with Intel® Ethernet Controller I210IT; Single LAN with Intel® PHY I219LM LAN controller	Single LAN with Intel® Ethernet Controller I210IT; Single LAN with Intel® PHY I219LM LAN controller	Single LAN with Intel® Ethernet Controller I210IT Single LAN with Intel® PHY I219LM LAN controller
VGA/Audio	Intel® UHD Graphics 610, ALC 888S HD Audio	Intel® UHD Graphics 610, ALC 888S HD Audio	Intel® UHD Graphics 610, ALC 888S HD Audio	Intel® UHD Graphics 610, ALC 888S HD Audio
Management	SuperDoctor® 5, Watchdog	SuperDoctor® 5, Watchdog	SuperDoctor® 5, Watchdog	SuperDoctor® 5, Watchdog
Drive Bays	N/A	N/A	N/A	N/A
Peripheral Bays	N/A	N/A	N/A	N/A
Power Supply	Lockable 12V DC 60W power adapter	Lockable 12V DC 60W power adapter	Lockable 12V DC 60W power adapter	Lockable 12V DC 60W power adapter
Cooling System	Fanless	Fanless	Fanless	Fanless
Form Factor	195 x 44 x 159mm (7.68" x 1.73" x 6.25")	195 x 44 x 159mm (7.68" x 1.73" x 6.25")	195 x 44 x 159mm (7.68" x 1.73" x 6.25")	195 x 44 x 159mm (7.68" x 1.73" x 6.25")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# IoT/EMBEDDED



Industrial Fanless SuperServer



Industrial Fanless SuperServer



Industrial Fanless SuperServer



Industrial Fanless SuperServer



MODEL	SYS-E100-9W-IA-H	SYS-E100-9W-IA-E	SYS-E100-9W-IA-L	SYS-E100-9W-IA-C
Processor Support	8th Generation Intel® Core™ i7-8665UE Processor Single Socket FCBGA-1528 supported, CPU TDP support Up to 15W TDP † BIOS version 2.0 or above is required	8th Generation Intel® Core™ i5-8365UE Processor Single Socket FCBGA-1528 supported, CPU TDP support Up to 15W TDP † BIOS version 2.0 or above is required	8th Generation Intel® Core™ i3-8145UE Processor Single Socket FCBGA-1528 supported, CPU TDP support Up to 15W TDP † BIOS version 2.0 or above is required	8th Generation Intel® Celeron® 4305UE Processor Single Socket FCBGA-1528 supported, CPU TDP support Up to 15W TDP † BIOS version 2.0 or above is required
Key Applications	<ul style="list-style-type: none"> <li>Industrial Automation &amp; Control</li> <li>Machine Automation</li> </ul>	<ul style="list-style-type: none"> <li>Industrial Automation &amp; Control</li> <li>Machine Automation</li> </ul>	<ul style="list-style-type: none"> <li>Industrial Automation &amp; Control</li> <li>Machine Automation</li> </ul>	<ul style="list-style-type: none"> <li>Industrial Automation &amp; Control</li> <li>Machine Automation</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>1 HDMI and 1 Display Port</li> <li>4 USB 3.1</li> <li>2 Gigabit Ethernet Ports</li> <li>1 M.2 M-Key, 1 M.2 B-Key with Nano SIM, 1 M.2 E-Key</li> <li>9-36 VDC Wide Range Power</li> <li>4 COM (RS-232/422/485), 1 DIO via DB9</li> </ul>	<ul style="list-style-type: none"> <li>1 HDMI and 1 Display Port</li> <li>4 USB 3.1</li> <li>2 Gigabit Ethernet Ports</li> <li>1 M.2 M-Key, 1 M.2 B-Key with Nano SIM, 1 M.2 E-Key</li> <li>9-36 VDC Wide Range Power</li> <li>4 COM (RS-232/422/485), 1 DIO via DB9</li> </ul>	<ul style="list-style-type: none"> <li>1 HDMI and 1 Display Port</li> <li>4 USB 3.1</li> <li>2 Gigabit Ethernet Ports</li> <li>1 M.2 M-Key, 1 M.2 B-Key with Nano SIM, 1 M.2 E-Key</li> <li>9-36 VDC Wide Range Power</li> <li>4 COM (RS-232/422/485), 1 DIO via DB9</li> </ul>	<ul style="list-style-type: none"> <li>1 HDMI and 1 Display Port</li> <li>4 USB 3.1</li> <li>2 Gigabit Ethernet Ports</li> <li>1 M.2 M-Key, 1 M.2 B-Key with Nano SIM, 1 M.2 E-Key</li> <li>9-36 VDC Wide Range Power</li> <li>4 COM (RS-232/422/485), 1 DIO via DB9</li> </ul>
Serverboard	SUPER● X11SWN-H-WOHS	SUPER● X11SWN-E-WOHS	SUPER● X11SWN-L-WOHS	SUPER● X11SWN-C-WOHS
Chipset	System on Chip chipset	System on Chip chipset	System on Chip chipset	System on Chip chipset
System Memory (Max.)*	Up to 64GB Unbuffered non-ECC SO-DIMM, DDR4-2400MHz, in 2 DIMM slots	Up to 64GB Unbuffered non-ECC SO-DIMM, DDR4-2400MHz, in 2 DIMM slots	Up to 64GB Unbuffered non-ECC SO-DIMM, DDR4-2400MHz, in 2 DIMM slots	Up to 64GB Unbuffered non-ECC SO-DIMM, DDR4-2133MHz, in 2 DIMM slots
Expansion Slots	N/A	N/A	N/A	N/A
Onboard Storage Controller	System on Chip	System on Chip	System on Chip	System on Chip
Connectivity	Single LAN with Intel® Ethernet Controller I210IT Single LAN with Intel® PHY I219LM LAN controller	Single LAN with Intel® Ethernet Controller I210IT Single LAN with Intel® PHY I219LM LAN controller	Single LAN with Intel® Ethernet Controller I210IT Single LAN with Intel® PHY I219LM LAN controller	Single LAN with Intel® Ethernet Controller I210IT Single LAN with Intel® PHY I219LM LAN controller
VGA/Audio	Intel® UHD Graphics 620 ALC 888S HD Audio	Intel® UHD Graphics 620 ALC 888S HD Audio	Intel® UHD Graphics 620 ALC 888S HD Audio	Intel® UHD Graphics 620 ALC 888S HD Audio
Management	AMT, SuperDoctor® 5, vPro, Watchdog	AMT, SuperDoctor® 5, vPro, Watchdog	AMT, SuperDoctor® 5, vPro, Watchdog	AMT, SuperDoctor® 5, vPro, Watchdog
Drive Bays	1 SATA SSD	1 SATA SSD	1 SATA SSD	1 SATA SSD
Peripheral Bays	N/A	N/A	N/A	N/A
Power Supply	12V DC 60W power adapter with Terminal Block	12V DC 60W power adapter with Terminal Block	12V DC 60W power adapter with Terminal Block	12V DC 60W power adapter with Terminal Block
Cooling System	Fanless	Fanless	Fanless	Fanless
Form Factor	194 x 115 x 126mm (7.64" x 4.52" x 4.96")	194 x 115 x 126mm (7.64" x 4.52" x 4.96")	194 x 115 x 126mm (7.64" x 4.52" x 4.96")	194 x 115 x 126mm (7.64" x 4.52" x 4.96")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# IoT/EMBEDDED



Building Block SBC



Building Block SBC



Building Block SBC



Building Block SBC



MODEL	SYS-E102-9W-H	SYS-E102-9W-E	SYS-E102-9W-L	SYS-E102-9W-C
Processor Support	8th Generation Intel® Core i7-8665UE Processor Single Socket FCBGA-1528 supported, CPU TDP supports Up to 15W TDP 4 cores, 8 threads / 8MB cache † BIOS version 2.0 or above is required	8th Generation Intel® Core i5-8365UE Processor Single Socket FCBGA-1528 supported, CPU TDP supports Up to 15W TDP 4 cores, 8 threads / 8MB cache † BIOS version 2.0 or above is required	8th Generation Intel® Core i3-8145UE Processor Single Socket FCBGA-1528 supported, CPU TDP supports Up to 15W TDP 4 cores, 8 threads / 8MB cache † BIOS version 2.0 or above is required	Intel® Celeron® Processor 4305UE. Single Socket FCBGA-1528 supported, CPU TDP support Up to 15W TDP † BIOS version 2.0 or above is required
Key Applications	<ul style="list-style-type: none"> <li>Industrial Automation, Retail, Smart Medical Expert Systems</li> <li>Kiosk, Interactive information system</li> <li>Digital Signage</li> <li>Retail, Smart Medical Expert Systems</li> </ul>	<ul style="list-style-type: none"> <li>Industrial Automation, Retail, Smart Medical Expert Systems</li> <li>Kiosk, Interactive information system</li> <li>Digital Signage</li> <li>Retail, Smart Medical Expert Systems</li> </ul>	<ul style="list-style-type: none"> <li>Industrial Automation, Retail, Smart Medical Expert Systems</li> <li>Kiosk, Interactive information system</li> <li>Digital Signage</li> <li>Retail, Smart Medical Expert Systems</li> </ul>	<ul style="list-style-type: none"> <li>Industrial Automation, Retail, Smart Medical Expert Systems</li> <li>Kiosk, Interactive information system</li> <li>Digital Signage</li> <li>Retail, Smart Medical Expert Systems</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>1 HDMI and 1 Display Port</li> <li>4 USB 3.1</li> <li>4 COM (RS-232/422/485), 1 DIO via DB9</li> <li>2 Gigabit Ethernet Ports</li> <li>1 M.2 M-Key, 1 M.2 B-Key with Nano SIM, 1 M.2 E-Key</li> </ul>	<ul style="list-style-type: none"> <li>1 HDMI and 1 Display Port</li> <li>4 USB 3.1</li> <li>4 COM (RS-232/422/485), 1 DIO via DB9</li> <li>2 Gigabit Ethernet Ports</li> <li>1 M.2 M-Key, 1 M.2 B-Key with Nano SIM, 1 M.2 E-Key</li> </ul>	<ul style="list-style-type: none"> <li>1 HDMI and 1 Display Port</li> <li>4 USB 3.1</li> <li>4 COM (RS-232/422/485), 1 DIO via DB9</li> <li>2 Gigabit Ethernet Ports</li> <li>1 M.2 M-Key, 1 M.2 B-Key with Nano SIM, 1 M.2 E-Key</li> </ul>	<ul style="list-style-type: none"> <li>1 HDMI and 1 Display Port</li> <li>4 USB 3.1</li> <li>4 COM (RS-232/422/485), 1 DIO via DB9</li> <li>2 Gigabit Ethernet Ports</li> <li>1 M.2 M-Key, 1 M.2 B-Key with Nano SIM, 1 M.2 E-Key</li> </ul>
Serverboard	SUPER● X11SWN-H	SUPER● X11SWN-E	SUPER● X11SWN-L	SUPER● X11SWN-C
Chipset	System on Chip chipset	System on Chip chipset	System on Chip chipset	System on Chip chipset
System Memory (Max.)*	Up to 64GB Unbuffered non-ECC SO-DIMM, DDR4-2400MHz, in 2 DIMM slots	Up to 64GB Unbuffered non-ECC SO-DIMM, DDR4-2400MHz, in 2 DIMM slots	Up to 64GB Unbuffered non-ECC SO-DIMM, DDR4-2400MHz, in 2 DIMM slots	Up to 64GB Unbuffered non-ECC SO-DIMM, DDR4-2400MHz, in 2 DIMM slots
Expansion Slots	N/A	N/A	N/A	N/A
Onboard Storage Controller	N/A	N/A	N/A	N/A
Connectivity	Single LAN with Intel® Ethernet Controller I210IT Single LAN with Intel® PHY I219LM LAN controller	Single LAN with Intel® Ethernet Controller I210IT Single LAN with Intel® PHY I219LM LAN controller	Single LAN with Intel® Ethernet Controller I210IT Single LAN with Intel® PHY I219LM LAN controller	Single LAN with Intel® Ethernet Controller I210IT Single LAN with Intel® PHY I219LM LAN controller
VGA/Audio	Intel® UHD Graphics 610	Intel® UHD Graphics 610	Intel® UHD Graphics 610	Intel® UHD Graphics 610 ALC 888S HD Audio
Management	SuperDoctor® 5, Watchdog	SuperDoctor® 5, Watchdog	SuperDoctor® 5, Watchdog	SuperDoctor® 5, Watchdog
Drive Bays	1 SATA 3.0 for 2.5" 7mm SATA HDD/SSD 1 M.2 2242/3042/2280 B-Key (USB3.0/2.0x 1,SATA Gen3x 1) 1 M.2 2242/2280 M-Key (PCI-E 3.0x4,SATA Gen3x 1), NVMe support	1 SATA 3.0 for 2.5" 7mm SATA HDD/SSD 1 M.2 2242/3042/2280 B-Key (USB3.0/2.0x 1,SATA Gen3x 1) 1 M.2 2242/2280 M-Key (PCI-E 3.0x4,SATA Gen3x 1), NVMe support	1 SATA 3.0 for 2.5" 7mm SATA HDD/SSD 1 M.2 2242/3042/2280 B-Key (USB3.0/2.0x 1,SATA Gen3x 1) 1 M.2 2242/2280 M-Key (PCI-E 3.0x4,SATA Gen3x 1), NVMe support	1 SATA 3.0 for 2.5" 7mm SATA HDD/SSD 1 M.2 2242/3042/2280 B-Key (USB3.0/2.0x 1,SATA Gen3x 1) 1 M.2 2242/2280 M-Key (PCI-E 3.0x4,SATA Gen3x 1), NVMe support
Peripheral Bays	N/A	N/A	N/A	N/A
Power Supply	Lockable 12V DC 60W power adapter	Lockable 12V DC 60W power adapter	Lockable 12V DC 60W power adapter	Lockable 12V DC 60W power adapter
Cooling System	Passive CPU Heat Sink and 1x 40mm Chassis Fan	Passive CPU Heat Sink and 1x 40mm Chassis Fan	Passive CPU Heat Sink and 1x 40mm Chassis Fan	Passive CPU Heat Sink and 1x 40mm Chassis Fan
Form Factor	190 x 44 x 120mm (7.48" x 1.72" x 4.72")	190 x 44 x 120mm (7.48" x 1.72" x 4.72")	190 x 44 x 120mm (7.48" x 1.72" x 4.72")	190 x 44 x 120mm (7.48" x 1.72" x 4.72")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# IoT/EMBEDDED



Intel® Coffee Lake-S,  
8th Gen. Core™



Atom C3338  
SoC, 2 Cores



Atom™ E3940  
SoC, 4 Cores



Intel® Core™ i3,i5, i7 series,  
Pentium®, Celeron®



MODEL	SYS-5029C-TN2	SYS-5029A-2TN4	SYS-5029AP-TN2	SYS-5029S-TN2
Processor Support	Intel® 8th/9th Generation Core™ i9/Core™ i7/Core™ i5/Core™ i3/Pentium®/Celeron® series Processor. Single Socket LGA-1151 (Socket H4) supported, CPU TDP support Up to 65W TDP	Intel® Atom® C3338 Denverton Processor, SoC 2 Core, 9W, 1.5 GHz	Intel® Atom™ E3940 Apollo Lake Processor, SoC 4 Cores, 9.5W, 1.6 GHz	Intel® 6th/7th Generation Core™ i3 ,i5, i7 series Intel®, Pentium®, Celeron®; CPU TDP support up to 65W TDP
Key Applications	<ul style="list-style-type: none"> <li>Surveillance Security Server</li> <li>Compact Storage Appliance</li> <li>Video processing and streaming</li> <li>Small Medium Business Edge Server</li> </ul>	<ul style="list-style-type: none"> <li>7 Years Life Cycle</li> <li>Compact Cloud Server</li> <li>Edge Computing Device</li> </ul>	<ul style="list-style-type: none"> <li>Database Processing &amp; Storage</li> <li>High Performance NAS Servers</li> <li>Medical Applications</li> <li>Security Appliance and Video Surveillance</li> <li>Web Server for Small and Medium Business</li> <li>Indoor Kiosk</li> </ul>	<ul style="list-style-type: none"> <li>Database Processing &amp; Storage</li> <li>Web Server for Small and Medium Business</li> <li>Medical Applications</li> <li>Security Appliance and Video Surveillance</li> <li>Indoor Kiosk</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Up to 32GB Non ECC SO-DIMM DDR4 2666 MHz</li> <li>TPM chip onboard with jumper disable</li> <li>Up to 4 Hot-Swap 3.5" SATA3 HDD and 2 internal 2.5" fixed HDD</li> <li>4 x USB 3.1 (2 type A &amp; 2 type C in rear)</li> <li>M.2 Key: M-Key, E-Key for WiFi (or CNVi) card</li> </ul>	<ul style="list-style-type: none"> <li>Quad Gigabit Ethernet LAN</li> <li>Up to 4x hot-swap 3.5" SATA3 drives</li> <li>IPMI 2.0 (dedicated LAN) with Virtual Media/KVM over LAN</li> <li>7 year life cycle</li> </ul>	<ul style="list-style-type: none"> <li>Up to 4 Hot-Swap 3.5" SATA3 HDD, 1 internal 2.5" fixed HDD and 1 M.2 (M key 2242/80 PCIe 2.0x2)</li> <li>Embedded long life</li> <li>2x Gigabit LAN ports</li> <li>Quiet Operation</li> </ul>	<ul style="list-style-type: none"> <li>DP, HDMI and DVI-I: 3 independent displays</li> <li>Remote management via vPro technology</li> <li>2x Gigabit LAN ports</li> <li>Quiet Operation</li> </ul>
Serverboard Chipset	SUPER● X11SCV-Q System on Chip	SUPER● A2SDi-2C-HLN4F System on Chip	SUPER● A2SAV System on Chip	SUPER● X11SSV-Q Intel® Q170
System Memory (Max.)*	Up to 32GB Unbuffered non-ECC SO-DIMM, DDR4-2666MHz, in 2 DIMM slots	Up to 128GB RDIMM or 32GB ECC/NON ECC UDIMM, DDR4-1866MHz in 2 DIMM slots	8GB Unbuffered non-ECC DDR3-1866MHz SO-DIMM in 1 DIMM slot	32GB Unbuffered non-ECC SO-DIMM, DDR4-2133MHz, in 2 DIMM slots
Expansion Slots	1 PCI-E 3.0 x16(Low Profile); 1 M.2 PCIe 3.0x4 M Key 2242/2280	1x PCIe 3.0 x2 (in x4 open ended slot)	1 PCIe 2.0 x2 in x8 slot, 1 M.2 (M key 2242/80 PCIe 2.0x2), 1 Mini-PCIe with mSATA support	1 x PCIe 3.0 x16 slot 1 x M.2 (M key 2242/80 PCIe 3.0x4) 1 x Mini-PCIe with mSATA support
Onboard Storage Controller		SoC controller for 6 SATA3 (6 Gbps) ports	Marvel 88SE9230 controller for 4 SATA3 (6 Gbps) ports; RAID 0,1,5,10; SoC controller for 2 SATA3 (6 Gbps) ports	Intel® Q170 Express controller for 5 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
Connectivity	4 x USB 3.1 (2 type A & 2 type C in rear)	4 x 1GbE LAN, 1 dedicated IPMI LAN, 2 USB2.0	2x 1GbE LAN, 2 USB3.0, 3 USB2.0(2 front, 1 Type A), 1 Serial Port (RJ45) ALC 8885 HD Audio	2x 1GbE, 4 USB3.0, 3 USB2.0 (2 front, 1 Type A), 2 RS232 ALC 8885 HD Audio
VGA/Audio		VGA via BMC	1 HDMI, 1 DP, 1 VGA or 1 eDP, Intel HD Graphic 3 independent displays	1 HDMI, 1 DP (Display Port), 1 DVI - D, 1 Intel® HD Graphics 3 Independent Displays
Management			vPro and AMT	vPro and AMT
Drive Bays	4x 3.5" SATA Hot Swap drive bay and 2 x2.5" internal drive bay	4x 3.5" hot-swap drive bay, 2x 2.5" fixed drive bay	4x 3.5" hot-swap SAS/SATA 2x 2.5" fixed drive bay	4x 3.5" hot-swap SAS/SATA 1x 2.5" fixed drive bay
Peripheral Bays	N/A	1x slim DVD-ROM drive bay (shared with 1 x 2.5" fixed drive bay)	1x slim DVD-ROM drive bay (shared with 1 x 2.5" fixed drive bay)	1x slim DVD-ROM drive bay (shared with 1 x 2.5" fixed drive bay)
Power Supply		PWS-251-1H 250W Flex ATX Multi-output Bronze Power Supply	PWS-251-1H 250W Flex ATX Multi-output Bronze Power Supply	PWS-251-1H 250W Flex ATX Multi-output Bronze Power Supply
Cooling System	1x Active CPU cooler		1x 12cm rear exhaust fan;	1x 12cm rear exhaust fan; SNK-P0046A4 - optional
Form Factor	210 x 240 x 279mm (8.27" x 9.45" x 11")	210 x 240 x 279mm (8.27" x 9.45" x 11")	210 x 240 x 279mm (8.27" x 9.45" x 11")	210 x 240 x 279mm (8.27" x 9.45" x 11")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# IoT/EMBEDDED

Intel® Atom™ E3940,  
Apollo Lake SoC, 4-Cores



Intel® Pentium® N3700  
SoC, 4-Cores



Intel® Celeron™ J1900  
SoC, 4-Cores



MODEL	SYS-E200-9AP	SYS-E200-9B	SYS-E200-8B
Processor Support	Intel® Atom™ E3940 Apollo Lake Processor, SoC 4 Cores, 9.5W, 1.6 GHz	Intel® Pentium® N3700 Processor SoC, 4 Cores, 6W, 1.6GHz	Intel® Celeron™ J1900 Processor, SoC 4-Core, 10W 2.0GHz
Key Applications	<ul style="list-style-type: none"> <li>Digital Signage</li> <li>Security Appliance and Video Surveillance</li> <li>Indoor Kiosk</li> </ul>	<ul style="list-style-type: none"> <li>Embedded Applications</li> <li>Thin Client</li> <li>Digital Signage</li> <li>Indoor Kiosk</li> <li>Networking Appliance</li> </ul>	<ul style="list-style-type: none"> <li>Embedded Applications</li> <li>Thin Client</li> <li>Digital Signage</li> <li>Indoor Kiosk</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>M.2 2242, 2280, 22110 with M-key (full size) mSATA support</li> <li>Dual display for HDMI, Display Port, VGA</li> <li>2x Gbe LAN</li> </ul>	<ul style="list-style-type: none"> <li>Cost Effective Embedded Mini ITX System</li> <li>Low Power Consumption</li> <li>1U Compact Mini ITX BOX System</li> <li>Low power SoC Intel® Pentium® N3700 (10W, 4C)</li> <li>Dual display for HDMI, Display Port, VGA</li> <li>Intel® i210AT Quad GbE LAN</li> <li>2 x USB 3.0 ports , 2 x USB 2.0 (Rear I/O)</li> <li>COM port (Rear I/O)</li> </ul>	<ul style="list-style-type: none"> <li>Cost Effective Embedded Mini ITX System</li> <li>1U Compact Mini ITX BOX System</li> <li>Low power SoC Intel® Celeron™ J1900 (10W, 4C)</li> <li>Dual display for HDMI, Display Port, VGA</li> <li>Intel® i210AT dual port GbE LAN</li> </ul>
Serverboard	SUPER● A2SAV-L	SUPER● X11SBA-LN4F	SUPER● X10SBA
Chipset	System on Chip	System on Chip	System on Chip
System Memory (Max.)*	8GB Unbuffered non-ECC DDR3L-1866MHz SODIMM	Up to 8GB 1600MHz DDR3 Non-ECC SO-DIMM in 2 sockets	Up to 8GB 1333MHz DDR3L Non-ECC SO-DIMM in 2 socket
Expansion Slots	1 M.2 PCIe 2.0 x2, M Key 2242/2280	1 mini-PCIe slot with mSATA support	1 mini-PCIe slot with mSATA support
Onboard Storage Controller	N/A	SoC controller for 2 SATA3 (6 Gbps) ports	SATA 2.0 (3Gbps) from Intel® SoC, SATA 3.0 (6Gbps) from Marvell 88SE9230
Connectivity	2x 1GbE LAN, 2 USB3.0, 2 USB2.0, 2 Serial Port (RJ45 and DB9)	4x 1GbE, 1 dedicate IPMI LAN, 2 USB3.0, 2 USB2.0Realtek ALC888S HD Audio	2x 1GbE LAN, 1 USB3.0, 1 USB2.0Realtek ALC888S-VD2 HD Audio
VGA/Audio	1 HDMI, 1 DP, 1 VGA or 1 eDP, Intel HD Graphic 3 independent displays	1 Display Port, 1 HDMI, 1 VGA (Two Independent Displays)	1 Display Port, 1 HDMI, 1 VGA (two Independent Displays)
Management	SuperDoctor® 5; Watchdog;	IPMI 2.0 with KVM support	SuperDoctor® 5, Watch Dog
Drive Bays	N/A	1x 2.5" internal HDD support	1x 2.5" internal HDD support
Peripheral Bays	N/A	N/A	N/A
Power Supply	Lockable 12V DC 60W power adapter	Lockable 12V DC 60W power adapter	Lockable 12V DC 60W power adapter
Cooling System	1x 4cm fan	1 x 4cm high performance PWM fan, support up to 2 chassis fans	1 x 4cm high performance PWM fan, support up to 2 chassis fans
Form Factor	1U Compact Box; Enclosure: 195 x 44 x 195mm (7.68" x 1.75" x 7.68") Package: 381 x 276 x 142mm (15" x 10.87" x 5.59") Gross Weight: 5.5lbs (2.49kg) Net Weight: 2.45lbs (1.11kg)	195 x 44 x 195mm (7.68" x 1.75" x 7.68")	1U Compact Box; Enclosure: 195 x 44 x 195mm (7.68" x 1.75" x 7.68") Package: 381 x 276 x 142mm (15" x 10.87" x 5.59") Gross Weight: 5.5lbs (2.49kg) Net Weight: 2.45lbs (1.11kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details



# IoT/EMBEDDED



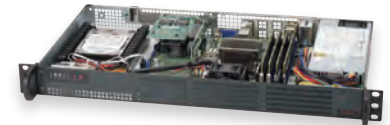
Intel® Atom® C2758, 8-Cores,  
7 LAN with 3-pair LAN bypass



Intel® Xeon® D-1537  
SoC, 8 Core



Intel® Pentium® D1508  
SoC, Dual Core



MODEL	SYS-5018A-TN7B	SYS-5018D-MHR7N4P	SYS-5018D-LN4T
Processor Support	Intel® Atom™ C2758 Processor, SoC 8-Core, 20W, 2.4GHz	Intel® Xeon® Processor D-1537, SoC 8 Core, 35W, 1.7-2.3GHz	Intel® Pentium® Processor D1508, FCBGA1667 supported, CPU TDP support 25W
Key Applications	<ul style="list-style-type: none"> <li>Network Security Appliance</li> <li>FireWall Applications</li> <li>Virtualization Server</li> <li>Embedded Applications</li> </ul>	<ul style="list-style-type: none"> <li>Hyper-Converged Appliance</li> <li>Enterprise Server</li> <li>Edge Computing Server</li> <li>Private Cloud Server</li> <li>Virtualization Server</li> </ul>	<ul style="list-style-type: none"> <li>Compact Network Appliance</li> <li>FireWall Applications</li> <li>Software Defined WAN</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>7xGbE LAN with 3-pair bypass</li> <li>Embedded long life</li> </ul>	<ul style="list-style-type: none"> <li>4 Hot Swap SATA3/SAS2 Drive Bays</li> <li>Dual SFP+ and Dual GbE</li> <li>Low Power Xeon D SoC 8 Core with Dual 10GbE and Dual GbE</li> <li>Remote management via dedicated IPMI BMC</li> <li>400W high-efficiency redundant power supply</li> <li>7 year life cycle</li> </ul>	<ul style="list-style-type: none"> <li>Dual 10GbE SFP+ and Dual GbE [nid:7111] Short depth (less than 10 depth)</li> <li>Intel® Xeon® processor D-1508, Dual-Core, 25W</li> <li>Up to 128GB ECC RDIMM DDR4 2133MHz or 64GB ECC/non-ECC UDIMM in 4 sockets</li> <li>4 x 2.5" SATA3 HDD, and 1 M.2 (M key 2242/80/110 PCIe 3.0x4)</li> </ul>
Serverboard	SUPER● A1SRM-LN7F-2758	SUPER● X10SDV-7TP4F	SUPER● X10SDV-2C-TP4F
Chipset	System on Chip	System on Chip	System on Chip
System Memory (Max.)*	64GB Unbuffered ECC/non-ECC, DDR3-1600MHz in 4 DIMM slots	Up to Up to 128GB Registered ECC RDIMM, DDR4-2133MHz Up to 64GB Unbuffered ECC/non-ECC UDIMM, DDR4-2133MHz, in 4 DIMM slots	Up to 128GB Registered ECC RDIMM, DDR4-2133MHz 64GB Unbuffered ECC/non-ECC UDIMM, DDR4-2133MHz, in 4 DIMM slots
Expansion Slots	1 PCI-E 2.0 x4 (in x8) slot	PCI-E 3.0 x8 full height expansion slot; M.2 PCIe 3.0x4, M Key 2242/2280/22110, Mini-PCIe with mSATA support	1 PCI-E 3.0 x8; M.2 PCIe 3.0x4, M Key 2242/2280/22110, Mini-PCIe with mSATA support
Onboard Storage Controller	SoC controller for 4 SATA2 (3 Gbps) ports; 2 SATA3 ports(6 Gbps)	4 SATA3 support RAID 0,1,5,10(RSTe) or 4 SAS2 (No RAID support and require one optional cable, CBL-SAST-0811)	SoC controller for 4 SATA3 (6 Gbps) ports; RAID 0,1,5,10 RSTe;
Connectivity	7x 1GbE (3-pair bypass), 1 dedicated IPMI LAN (share with one LAN), 4x USB2.0, 1 Serial Port (RJ45)	2x 1GbE LAN, 2x 10G SFP+, 1 dedicate IPMI LAN, 2 USB3.0, 1 USB2.0 Type A	2x 1GbE LAN, 2x 10G SFP+, 1 dedicate IPMI LAN, 2 USB3.0
VGA/Audio	VGA via BMC	VGA via BMC	VGA via BMC
Management	IPMI2.0; NMI; SUM; SuperDoctor® 5; Watchdog;	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SUM, SuperDoctor® 5, Watchdog	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SUM, SuperDoctor® 5, Watchdog
Drive Bays	1x 3.5" fixed drive bay or 4x2.5" drive bay with optional bracket	4x 3.5" hot-swap SATA3/SAS2(require one optional cable, CBL-SAST-0811)	1x 3.5" fixed drive bay or up to 4x 2.5" fixed drive bay
Peripheral Bays	N/A	1 slim DVD-ROM drive bay	N/A
Power Supply	200W Multi-output 80Plus Gold PWS	Redundant 400W Platinum Level power supplies, PWS-407P-1R	200W Low-Noise AC-DC power supply with PFC
Cooling System	2x 4cm counter-rotating PWM fan, support up to three system fans	3x 40x28mm PWM fan for CPU and Memories; 1x 40x28mm PWM fan for AOC cooling	1x 40x28mm 13K RPM 4-PIN PWM FAN
Form Factor	Short Depth 1U Rack Mount; Enclosure: 437 x 43 x 287mm (17.2" x 1.7" x 11.3") Package: 645 x 155 x 503mm (25.4" x 6.1" x 19.8") Gross Weight: 12.55lbs (5.69kg) Net Weight: 8.45lbs (3.83kg)	1U Rackmount; Enclosure: 437 x 43 x 503mm (17.2" x 1.7" x 19.8") Package: 610 x 216 x 749mm (24" x 8.5" x 29.5") Gross Weight: 33lbs (14.97kg) Net Weight: 20lbs (9.07kg)	1U Short Depth Rackmount; Enclosure: 437 x 43 x 249mm (17.2" x 1.7" x 9.8") Package: 655 x 155 x 465mm (25.8" x 6.1" x 18.3") Gross Weight: 12lbs (5.44kg) Net Weight: 8lbs (3.63kg)

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# IoT/EMBEDDED



Intel® Xeon® D-1537  
SoC, 4-Core



Intel® Xeon® D-1587  
SoC 16 Core



MODEL	SYS-5018D-FN8T	SYS-1018D-FRN8T
Processor Support	Intel® Xeon® Processor D-1518, SoC 4 Core, 35W, 2.2 GHz	Intel® Xeon® Processor D-1587 SoC 16 Core, 65W 1.7-2.3GHz
Key Applications	<ul style="list-style-type: none"> <li>Networking Appliance</li> <li>Network Security Appliance</li> <li>FireWall Applications</li> <li>Embedded Applications</li> <li>Virtualization Server</li> </ul>	<ul style="list-style-type: none"> <li>Network Security Appliance</li> <li>FireWall Applications</li> <li>Virtualization</li> <li>SD-WAN</li> <li>vCPE</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Dual SFP+ and 6x GbE</li> <li>Short depth (less than 10 inch)</li> <li>Low Power Xeon D SoC 4 Core</li> <li>Best Performance per Watt</li> <li>7 year life cycle</li> <li>IPMI 2.0 management with dedicated LAN</li> </ul>	<ul style="list-style-type: none"> <li>400W Redundant Platinum PSU</li> <li>1x Low Profile PCIe 3.0 x 8 and 1x M.2 PCIe 3.0 x4, MiniPCIe with mSata</li> <li>2x 2.5" HDD</li> <li>8 LAN w/ 2x10G SFP+ and 6x1GbE LAN</li> <li>128G DDR4 RAM</li> </ul>
Serverboard	SUPER● X10SDV-TP8F	SUPER● X10SDV-7TP8F
Chipset	System on Chip	System on Chip
System Memory (Max.)*	Up to 128GB ECC RDIMM DDR4 2133MHz or 64GB ECC/non-ECC UDIMM in 4 sockets	128 GB of DDR4 ECC RDIMM 2133MHz or 64 GB of DDR4 ECC UDIMM 2133MHz
Expansion Slots	1 PCI-E 3.0 x8; M.2 PCIe 3.0x4, M Key 2242/2280/22110, Mini-PCIe with mSATA support	1 PCI-E 3.0 x8; M.2 PCIe 3.0x4, M Key 2242/2280/22110, Mini-PCIe with mSATA support
Onboard Storage Controller	SoC controller for 4x SATA3.0	SoC controller for 2 SATA3 (6 Gbps) ports; RAID 0,1,5,10RSTe; Broadcom® 2116 SW controller for 16 SATA3/SAS2 (6 Gbps) ports
Connectivity	6x 1GbE LAN, 2x 10G SFP+, 1 dedicate IPMI LAN, 2 USB3.0	6x 1GbE LAN, 2x 10G SFP+, 1 dedicate IPMI LAN, 2 USB3.0
VGA/Audio	VGA via BMC	VGA via BMC
Management	Intel® Node Manager, IPMI2.0, KVM with dedicated LAN, NMI, SUM, SuperDoctor® 5, Watchdog	IPMI 2.0 (RJ45) with dedicated LAN port and KVM via BMC VGA
Drive Bays	1x 3.5" fix drive bay or 4x 2.5" fixed drive bay with bracket	4x 2.5" HDD
Peripheral Bays	N/A	N/A
Power Supply	200W Multi-output power supply Gold level w/20pin	Redundant 400W <b>Platinum Level</b> power supplies
Cooling System	Passive CPU heat sink and 3x 40mm chassis fans	4x 40x56mm cooling fan
Form Factor	437 x 43 x 249mm (17.2" x 1.7" x 9.8")	1U Rackmount; Enclosure: 437 x 43 x 249mm (17.2" x 1.7" x 9.8") Package: 686 x 203 x 610mm (27" x 8" x 24")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

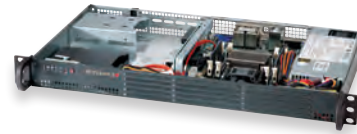
# IoT/EMBEDDED



Best Performance per Watt,  
Less than 10" Depth



Low-Power



MODEL	SYS-5018D-FN4T	SYS-5018A-TN4
Processor Support	Intel® Xeon® Processor D-1541.  Socket FCBGA1667 supported, CPU TDP support 45W	Intel® Atom® C2750
Key Applications	<ul style="list-style-type: none"> <li>Networking Appliance</li> <li>Edge Computing Device</li> <li>Security Gateway</li> <li>Compact Cloud Server</li> </ul>	<ul style="list-style-type: none"> <li>Application and data serving, Automation, Cloud and Virtualization needs</li> <li>Corporate- WINS, DNS, Print, Login, e-Business, Embedded Applications, Hosting &amp; Application delivery, Industrial Automation &amp; Control, NAS Servers, Security</li> <li>SOHO Entry-Level Server, Web Server, Web Server for Small and Medium Business</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>2x Gigabit + 2x 10G LAN ports</li> <li>Less than 10" depth</li> <li>Up to 2x 3.5" or 4x 2.5" SATA3 device</li> <li>1x PCI-E x16 Gen 3 add-on card slot</li> <li>Dedicated management port</li> </ul>	<ul style="list-style-type: none"> <li>1 PCI-E x8 slot</li> <li>200W Low-Noise power supply</li> <li>4x 2.5" SATA drives</li> <li>Compact size chassis, cost-effective UP platform</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>Optimized for small business</li> </ul>
Serverboard	SUPER● X10SDV-8C-TLN4F	SUPER● A1SAI-2750F
Chipset	Intel Xeon D-1540, SoC	System on Chip
System Memory (Max.)*	Up to Up to 128GB Registered ECC RDIMM, DDR4-2133MHz Up to 64GB Unbuffered ECC/non-ECC UDIMM, DDR4-2133MHz, in 4 DIMM slots	Up to 32GB ECC DDR3 1600/1333MHz SODIMM in 4 DIMM slots
Expansion Slots	1x PCI Express 3.0 x16 add-on card slot	1x PCI-E 2.0 x8 slot via riser card
Onboard Storage Controller	Intel SoC-based 2x 3.5" or 4x 2.5" SATA3 bays, SATA DOM support	SoC controller for 4 SATA2 (3Gbps) ports; 2 SATA3 (6Gbps)
Connectivity	2x GbE + 2x 10G LAN ports 1x dedicated management port 2x USB 3.0 (rear) 2x USB 3.0, 4x USB 2.0 ports (via header), 1x M.2 slot (M key for SSD, 2242/2280, PCIe3.0 x4)	4x RJ45 Gigabit Ethernet LAN ports 1x RJ45 Dedicated IPMI LAN port 4x USB 3.0 ports (2 rear, 1 Type A, 1 via header) 2x USB 2.0 ports (2 rear) 2x Fast UART 16550 Serial Port (1 rear, 1 via header)
VGA/Audio	Aspeed AST2400 BMC	AST2400 VGA 4x USB3.0, 2 x USB2.0
Management	Integrated remote management with dedicated port	IPMI 2.0 + KVM with dedicated LAN, SuperDoctor® 5, Watchdog
Drive Bays	Intel® SoC-based 2x 3.5" or 4x 2.5" SATA3 bays	2x 3.5" fixed HDD (no expansion slot), or 1x 3.5" fixed HDD (low profile slot only), or 4x 2.5" fixed HDD (no expansion slot), or 2x 2.5" fixed HDD (full height and half length)
Peripheral Bays	N/A	N/A
Power Supply	PWS-203-1H	200W Low-Noise AC-DC power supply with PFC
Cooling System	Active CPU fan, 40mm chassis fan	Built-in CPU heatsink; optional 40x28mm fan; 1x high-efficiency power supply with thermal control fan
Form Factor	1U rackmount form factor, less than 10" depth; Enclosure: 437 x 43 x 249mm (17.2" x 1.7" x 9.8") Package: 655 x 155 x 465mm (25.8" x 6.1" x 18.3") Gross Weight: 12lbs (5.44kg) Net Weight: 8lbs (3.63kg)	Mini-1U Rackmount 437 x 43 x 249mm (17.2" x 1.7" x 9.8")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# IoT/EMBEDDED



Front I/O Network Appliance for Security Atom Appliance



Intel® Atom® C2758, 8-Core Rangeley



MODEL	SYS-5018A-FTN4	SYS-5018A-MHN4
Processor Support	Intel Atom 2758 SoC, 8C, 22nm (Rangeley, 20W)	Intel® Atom™ Processor C2758, SoC 8-Core, 20W, 2.4GHz
Key Applications	<ul style="list-style-type: none"> <li>• Cloud and Virtualization needs</li> <li>• Cloud Computing</li> <li>• Embedded Applications</li> <li>• Gateway, provisioning servers</li> <li>• Industrial Automation &amp; Control</li> <li>• Security</li> </ul>	<ul style="list-style-type: none"> <li>• Cloud and Virtualization needs</li> <li>• Cloud Computing</li> <li>• Data Center</li> <li>• Data Warehouse</li> <li>• Database Applications</li> <li>• e-Business</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>• 1 PCI-E x8 slot</li> <li>• 4x 2.5" SATA drives</li> </ul>	<ul style="list-style-type: none"> <li>• IPMI 2.0 + KVM with dedicated LAN</li> <li>• Optimized for Power Saving and Improved Cooling</li> <li>• 4 hot-swap 3.5" SATA/SAS Drive Bays</li> </ul>
Serverboard	SUPER● A1SRi-2758F	SUPER● A1SRM-2758F
Chipset	System on Chip chipset	System on Chip
System Memory (Max.)*	Up to 32GB DDR3-1600 Un-buffered ECC-SODIMM	Up to 64GB ECC/non-ECC UDIMM, DDR3-1600MHz in 4 sockets
Expansion Slots	1 PCI Express 2.0 x8 on riser	1 PCI-E 2.0 x8(FH,HL)
Onboard Storage Controller	N/A	SoC controller for 4 SATA2 (3 Gbps); 2 SATA3 (6 Gbps)
Price Connectivity	4x RJ45 Gigabit Ethernet LAN ports 1x RJ45 Dedicated IPMI LAN port 4x USB 3.0 ports (2 rear, 1 Type A, 1 via header) 2x USB 2.0 ports (2 rear) 2x Fast UART 16550 Serial Port (1 rear, 1 via header) 1x SATA DOM (Disk on Module) power connector	4x 1GbE LAN, 1 dedicate IPMI LAN, 4 USB2.0, 1 serial port(DB9)
VGA/Audio	BMC integrated Aspeed AST2400, 1x VGA port	VGA via BMC
Management	IPMI 2.0 on dedicated LAN port	IPMI2.0, KVM with dedicated LAN, NMI, SuperDoctor® 5, Watchdog
Drive Bays	2x 3.5" fixed SATA3 (opt 4x 2.5")	1x 3.5" fixed drive bay or up to 4x 2.5" fixed drive bay
Peripheral Bays	N/A	1 slim DVD-ROM drive bay
Power Supply	200W	200W Low Noise AC-DC power supply with PFC
Cooling System	1x High-efficiency power supply with thermal control fan; Up to 3x 40mm fan (optional, require mounting bracket)	2x 4cm high performance PWM fan
Form Factor	1U compact, less than 10"	1U Rackmount; Enclosure: 437 x 43 x 504mm (17.2" x 1.7" x 19.85") Package: 594 x 216 x 754mm (23.4" x 8.5" x 29.7")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# IoT/EMBEDDED

Compact Mini Tower  
3 Independent Displays



Intel® Atom® C2758  
8-Core, Rangeley



Intel® Xeon® D-1541, 8-Core,  
Dual 10GbE LAN and Dual GbE



MODEL	SYS-5028L-TN2	SYS-5028A-TN4	SYS-5028D-TN4T
Processor Support	Intel® Xeon® E3-1200 v3 and 4 Gen. Core i3/i5/i7, Celeron®, Pentium®	Intel® Atom™ C2758 Processor, SoC 8-Core, 20W, 2.4GHz	Intel® Xeon® Processor D-1541 SoC 8 Core 16 Thread, TDP 45W
Key Applications	<ul style="list-style-type: none"> <li>Compact Cloud Server</li> <li>Database Processing &amp; Storage</li> <li>High Performance NAS Servers</li> <li>Business Intelligence</li> <li>Security Appliance and Video Surveillance</li> <li>Web Server for Small and Medium Business</li> </ul>	<ul style="list-style-type: none"> <li>Embedded Applications</li> <li>Cloud and Virtualization needs</li> <li>NAS Servers</li> <li>SOHO Entry-Level Server</li> <li>Corporate- WINS, DNS, Print, Login</li> <li>e-Business</li> </ul>	<ul style="list-style-type: none"> <li>Network Security Appliance</li> <li>Compact Cloud Server</li> <li>High Performance NAS Servers</li> <li>Virtualization Server</li> <li>Business Critical Applications</li> <li>Web Server for Small and Medium Business</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>Up to 4 Hot-Swap 3.5" SATA3 HDD and 2 internal 2.5" fixed HDD</li> <li>DP, HDMI and DVI-I: 3 independent displays</li> <li>2x Gigabit LAN ports</li> <li>TPM 1.2 Headers</li> <li>Up to 16GB DDR3 non-ECC 1600MHz SODIMM</li> <li>1x PCI-E 3.0 x16 slot</li> </ul>	<ul style="list-style-type: none"> <li>4x 3.5" SATA Hot Swap Tray and 2 x2.5" internal HDD bay</li> <li>Support up to 64G ECC SODIMM</li> <li>One low profile expansion slot for PCIe2.0x8</li> </ul>	<ul style="list-style-type: none"> <li>Up to 128GB ECC RDIMM DDR4 2133MHz or 64GB ECC/non-ECC UDIMM in 4 sockets</li> <li>2x Gigabit + 2x 10G LAN ports</li> <li>Up to 4 Hot-Swap 3.5" SATA3 HDD and 2 internal 2.5" fixed HDD</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>1x Low Profile PCIe 3.0 x16 and 1x M.2 PCIe 3.0 x4, M Key 2242/2280</li> </ul>
Serverboard	SUPER● X10SLV-Q	SUPER● A1SRi-2758F	SUPER● X10SDV-TLN4F
Chipset	Intel® Q87 chipset	System on Chip	System on Chip
System Memory (Max.)*	16 GB, DDR3-1600MHz non-ECC SODIMM in 2 sockets	Up to 64GB DDR3 1600MHz ECC SODIMM in 4 DIMM sockets	128GB Registered ECC, DDR4-2133MHz 64GB Unbuffered ECC/non-ECC, DDR4-2133MHz in 4 DIMM slots
Expansion Slots	1x PCI-E 3.0 x16 slot 1x Mini-PCIe w/ mSATA support	PCI-E 2.0 x8	1 PCI-E 3.0 x16(Low Profile); 1 M.2 PCIe 3.0x4 M Key 2242/2280
Onboard Storage Controller	SoC controller for 4x SATA 3.0 ports (6Gbps) with RAID 0.1.5.10	SoC controller for 4 SATA2 (3 Gbps) ports; 2 SATA3 (6 Gbps)	SoC controller for 6 SATA3 (6 Gbps) ports
Connectivity	2x 1GbE LAN, 2 USB3.0, 2 USB2.0	4x 1GbE LAN, 1 dedicate IPMI LAN, 2 USB3.0, 2 USB2.0, 1 serial port(DB9)	2x 1GbE LAN, 2x 10GBase-T LAN, 1 dedicate IPMI LAN, 2 USB3.0(rear), 2 USB2.0(front)
VGA/Audio	Intel HD 4600 Graphics, 1 DisplayPort, 1 HDMI, 1 DVI-I, 3 Independent Displays	VGA via BMC	VGA via BMC
Management	SuperDoctor® III Watch Dog NMI	IPMI2.0; NMI; SuperDoctor V; Watch Dog;	
Drive Bays	4x 3.5" hot-swap SAS/SATA drive bay	4x 3.5" SATA Hot Swap drive bay and 2 x2.5" internal drive bay	4x 3.5" SATA Hot Swap drive bay and 2 x2.5" internal drive bay
Peripheral Bays	1 slim DVD-ROM drive bay (share with one 3.5" drive bay)	1 slim DVD-ROM drive bay (share with one 2.5" drive bay)	1 slim DVD-ROM drive bay (shared with 1x 2.5" fixed drive bay)
Power Supply	No Redundant 1 Qty. PWS-251-1H	250W Flex ATX Multi-output Bronze Power Supply	
Cooling System	1x 12cm rear exhaust fan, SNK-P0046A4 (optional)	1x 12cm rear exhaust fan	1x Active CPU cooler
Form Factor	210 x 240 x 279mm (8.27" x 9.45" x 11")	210 x 240 x 279mm (8.27" x 9.45" x 11")	210 x 240 x 279mm (8.27" x 9.45" x 11")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# IoT/EMBEDDED

vPro, 3 Independent Displays

Skylake-H, SoC, 4 Cores



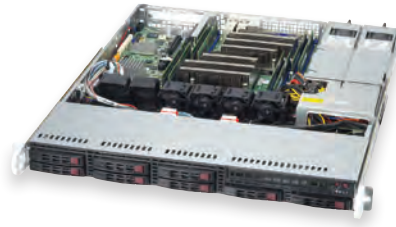
MODEL	SYS-1019S-M2	SYS-5019S-TN4
Processor Support	Intel® 6th/7th Generation Core™ i3, i5, i7 series Intel®, Pentium®, Celeron®	Intel® Xeon® Processor Skylake-H E3-1585v5 SoC, 4 Cores, 65W
Key Applications	<ul style="list-style-type: none"> <li>Industrial Automation &amp; Control</li> <li>Military Compact Server</li> <li>VOIP and Network Appliances</li> <li>Medical Applications</li> <li>7 Years Life Cycle</li> </ul>	<ul style="list-style-type: none"> <li>Virtual Hosted Desktop(VHD)</li> <li>Digital Recording System</li> <li>Media/Content Streaming Server</li> <li>Support Intel Quick Sync Video</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>6th/7th Generation Intel Core i7, i5, i3, Pentium and Celeron Processor</li> <li>Remote management via IPMI or vPro</li> <li>2x Gigabit LAN ports, HDMI/DP/DVI-I, 3 independent displays</li> <li>Full Height and Full Length add on card support</li> <li>Power redundancy or BBP support</li> </ul>	<ul style="list-style-type: none"> <li>Faster Transcoding for Web Streaming</li> <li>4x SATA3(6Gbps) via C236; RAID 0, 1, 5, 10</li> <li>Intel Iris Pro Graphics with 128M B of on-Package cache (eDRAM) for high performance graphics</li> <li>VHD, Media CODEC (HEVC, JPEG, VP8) and IPMI 2.0 (Shared LAN)</li> <li>Up to 18 AVC streams or 8 HEVC streams at 1080p 30FPS, or 2 HEVC streams at 4K 30FPS</li> </ul>
Serverboard	SUPER● X11SSZ-QF	SUPER● X11SSV-M4F
Chipset	Intel® Q170 Express chipset	System On Chip
System Memory (Max.)*	Up to Up to 64GB Unbuffered non-ECC UDIMM, DDR4-2400MHz, in 4 DIMM slots	Up to 32GB ECC Unbuffered SO-DIMM DDR4 2133MHz; 2 DIMM slots
Expansion Slots	1 PCI-E 3.0 x16	1x PCIe 3.0 x16 1x M.2 (M key, 2242/80/110, PCIe3.0 x4 or SATA3) 1x Mini PCIe w/ mSATA
Onboard Storage Controller	Intel® Q170 Express controller for 2 SATA3 (6 Gbps) ports; RAID 0,1	Intel® C236 controller for 4 SATA3 (6 Gbps) ports; RAID 0,1,5,10 Intel RSTe
Connectivity	2x 1GbE, 1 dedicated IPMI LAN, 2 USB3.0, 2 USB2.0	4x 1GbE LAN, 1 dedicated IPMI LAN, 4 USB 3.0
VGA/Audio	2 DP (DisplayPort), 1 DVI-I, 1 VGA, Intel® HD Graphics, Aspeed AST2400 BMC	DVI-A via BMC
Management	AMT, IPMI2.0, KVM with dedicated LAN, NMI, SuperDoctor® 5, vPro, Watchdog	IPMI2.0; NMI; SPM; SSM; SUM; SuperDoctor® 5; Watchdog;
Drive Bays	2x 2.5" fixed with bracket	1x 3.5" or 4x 2.5" HDD
Peripheral Bays	N/A	N/A
Power Supply	1x PWS-407P-1R, Platinum Level and support 2nd redundant PSU PWS-407P-1R or battery backup unit PWS-206B-1R	200W Low Noise AC-DC power supply with PFC
Cooling System	4x 40x56mm PWM fan; 2x fans for AOC cooling	3x 40x28mm 4-PIN PWM FAN(FAN-0154L4, 22K RPM) with air shroud
Form Factor	1U rackmount; Enclosure: 437 x 43 x 429mm (17.2" x 1.7" x 16.9") Package: 686 x 203 x 610mm (27" x 8" x 24")	1U Short Depth Rackmount; Enclosure: 437 x 43 x 249mm (17.2" x 1.7" x 9.8") Package: 655 x 155 x 465mm (25.8" x 6.1" x 18.3")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# IoT/EMBEDDED

Short-Depth  
10GbE, SAS3, Redundant Power

Data Center Optimized



MODEL	SYS-1028R-MCT SYS-1028R-MCTR (shown)	SYS-1028R-TDW
Processor Support	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s	Dual Intel® Xeon® Processor E5-2600 v4/v3 product families supported; QPI up to 9.6GT/s
Key Applications	<ul style="list-style-type: none"> <li>Data Center</li> <li>Web Server</li> <li>Enterprise Server</li> <li>Managed Hosting</li> </ul>	<ul style="list-style-type: none"> <li>Data Center</li> <li>Cloud and Virtualization needs</li> <li>Hosting &amp; Application delivery</li> <li>Database Processing &amp; Storage</li> <li>Simulation &amp; Automation</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>Redundant 600W <b>Platinum Level</b> high-efficiency power supplies</li> <li>Short-Depth</li> <li>2x 10GBase-T Ports</li> <li>3108 controller for 8 <b>SAS3</b> (12Gbps) hot-swappable drives</li> </ul>	<ul style="list-style-type: none"> <li>600W <b>Platinum Level</b> high-efficiency power supply</li> <li>IPMI 2.0 + KVM with Dedicated LAN</li> <li>16 DIMM DDR4-2133MHz</li> <li>Up to 3 add-on cards</li> </ul>
Serverboard	SUPER● X10DRL-CT	SUPER● X10DDW-i
Chipset	Intel® C612 Chipset	Intel® C612 Chipset
System Memory (Max.)*	Up to 1TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 8 DIMM slots	Up to 2TB ECC 3DS LRDIMM or RDIMM DDR4-2400MHz in 16 DIMM slots
Expansion Slots	1 PCI-E 3.0 x8	2 PCI-E 3.0 x16 (Full-Height, Half-Length) 1 PCI-E 3.0 (LP) 1 slot for SAS controller mezzanine card
Onboard Storage Controller	3108 HW with 2G Cache controller for 8 <b>SAS3</b> (12Gbps) ports; RAID 0,1,5,6,10,50,60; Intel® C612 controller for 6 SATA3 (6Gbps) ports; RAID 0,1,5,10	Intel® C612 controller for 8 SATA3 (6Gbps) Ports; RAID 0,1,5,10
Connectivity	Dual LAN with Intel® Ethernet Controller I210; Dual LAN with Intel® X540 10GBase-T Ethernet Controller	Dual LAN with Intel® i350 Gigabit Ethernet controller
VGA/Audio	AST2400 VGA	AST2400 VGA
Management	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog	IPMI 2.0 + KVM with dedicated LAN, Intel® Node Manager, SUM, SPM, SSM, SuperDoctor® 5, Watchdog
Drive Bays	8x 2.5" hot-swap SATA/SAS drive bays	8x 2.5" hot-swap SATA HDD drive bays
Peripheral Bays	1 slim DVD-ROM drive (optional)	1 slim DVD-ROM drive (optional)
Power Supply	-MCT: 600W <b>Platinum Level</b> high-efficiency power supply -MCTR: Redundant 600W <b>Platinum Level</b> high-efficiency power supplies	600W <b>Platinum Level</b> high-efficiency power supply
Cooling System	4x 4cm high performance PWM fans with optimal fan speed control	5x 4cm heavy duty counter-rotating fans with optimal fan speed control
Form Factor	1U Rackmount 437 x 43 x 503mm (17.2" x 1.7" x 19.8")	1U Rackmount 437 x 43 x 597mm (17.2" x 1.7" x 23.5")

\* Please check with your Supermicro sales representative and website for compatibility and configuration details

# IoT/EMBEDDED

4-Core Intel® Atom® Processor

AVOTON Solution  
Best for Entry Web Hosting  
Low-Power



We Power the Cloud



MODEL	SYS-5018A-MLHN4	SYS-5018A-MLTN4
Processor Support	Intel® Atom® C2550	Intel® Atom® C2550
Key Applications	<ul style="list-style-type: none"> <li>Cloud and Virtualization needs, Cloud Computing, Corporate- WINS, DNS, Print, Login, Data Center, Database Applications, DataCenter Applications</li> <li>e-Business, Enterprise Server</li> <li>FireWall Applications, Gateway, provisioning servers, High End Enterprise Server, Server Appliance</li> <li>Virtualization Server</li> <li>Web Server, Web Server for Small and Medium Business</li> </ul>	<ul style="list-style-type: none"> <li>Cloud and Virtualization needs, Cloud Computing, Corporate- WINS, DNS, Print, Login, Data Center, Database Applications, DataCenter Applications</li> <li>e-Business, Enterprise Server</li> <li>FireWall Applications, Gateway, provisioning servers, High End Enterprise Server, Server Appliance</li> <li>Virtualization Server</li> <li>Web Server, Web Server for Small and Medium Business</li> </ul>
Outstanding Features	<ul style="list-style-type: none"> <li>1 PCI-E x8 slot</li> <li>200W low-power supply</li> <li>4 hot-swap 3.5" SATA/SAS Drive Bays</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>Optimized for Power Saving and Improved Cooling</li> <li>SATA 3.0 (6Gbps) support</li> </ul>	<ul style="list-style-type: none"> <li>1 PCI-E x8 slot</li> <li>2 Internal 3.5" SATA drive bays</li> <li>200W low-power supply</li> <li>Compact size chassis</li> <li>Cost effective UP platform</li> <li>IPMI 2.0 + KVM with dedicated LAN</li> <li>SATA 3.0 (6Gbps) support</li> <li>Short-depth, space saving design</li> </ul>
Serverboard	SUPER● A1SAM-2550F	SUPER● A1SAM-2550F
Chipset	System on Chip chipset	System on Chip chipset
System Memory (Max.)*	Up to 64GB ECC/non-ECC UDIMM, DDR3-1600MHz in 4 DIMM slots	Up to 64GB Unbuffered ECC/non-ECC, DDR3-1600MHz in 4 DIMM slots
Expansion Slots	1 PCI-E 2.0 x8 (FH/HL)	1 PCI-E 2.0 x8 (FH/HL)
Onboard Storage Controller	SoC controller for 4 SATA2 (3Gbps) ports; RAID 2 SATA3 (6Gbps)	SoC controller for 4 SATA2 (3Gbps) ports; RAID 2 SATA3 (6Gbps);
Connectivity	Quad LAN with SoC	Quad LAN with SoC
VGA/Audio	AST2400 VGA	AST2400 VGA
Management	IPMI2.0; NMI; SuperDoctor V; Watchdog	IPMI2.0; NMI; SuperDoctor V; Watchdog
Drive Bays	4x 3.5" hot-swap SAS/SATA	2x 3.5" internal drive bays 4x 2.5" fixed SATA3 (optional)
Peripheral Bays	N/A	N/A
Power Supply	200W Low Noise AC-DC power supply with PFC	200W Low Noise AC-DC power supply with PFC
Cooling System	2x 4cm high performance PWM fan	1x 10cm 3,800 RPM PWM blower fan
Form Factor	1U rackmount 437 x 43 x 503mm (17.2" x 1.7" x 19.85")	1U rackmount 426x 43 x 356mm(16.8" x 1.7" x 14")

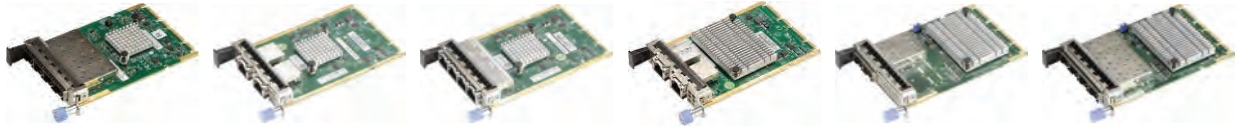
\* Please check with your Supermicro sales representative and website for compatibility and configuration details



# X12 AIOM Networking

## New Supermicro Advanced I/O Module (AIOM) Cards Provide I/O Flexibility with OCP Superset

Optimized Shared Resources for up to 50% Reduction in Power and Cooling TCO



Model	AOC-AG-i4SM	AOC-AG-i2M	AOC-AG-i4M	AOC-ATG-i2TM	AOC-ATG-i2SM	AOC-ATG-i4SM
<b>Description</b>	Quad-Port GbE	Dual-Port GbE	Quad-Port GbE	Dual-Port 10GbE	Dual-Port 10GbE	Quad-Port 10GbE
<b>Port</b>	4x SFP	2x RJ45	4x RJ45	2x RJ45	2x SFP+	4x SFP+
<b>Speed</b>	1Gbps	1Gbps	1Gbps	10Gbps	10Gbps	10Gbps
<b>Controller</b>	Intel® i350-AM4	Intel® i350-AM2	Intel® i350-AM4	Intel® X550-AT2	Intel® X710-BM2	Intel® XL710-BM1
<b>PCI-E</b>	PCI-E 2.1 x4	PCI-E 2.1 x4	PCI-E 2.1 x4	PCI-E 3.0 x4	PCI-E 3.0 x8	PCI-E 3.0 x8
<b>Power</b>	4.4W	3.7W	4.4W	13W	6.2W	7W

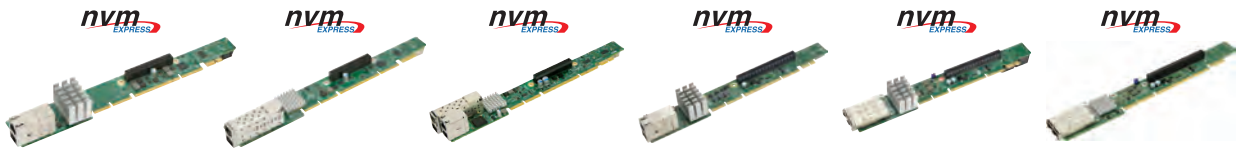


Model	AOC-ATG-i2T2SM	AOC-ATGC-i2TM	AOC-A25G-b2SM	AOC-AH25G-m2S2TM	AOC-A25G-m2SM	AOC-A100G-b2CM	AOC-A100G-m2CM
<b>Description</b>	Quad-Port 10GbE	Dual-Port 10GbE	Dual-Port 25GbE	2-Port 25GbE & 2-Port 10GbE	Dual-Port 25GbE	Dual-Port 100GbE	Dual-Port 100GbE
<b>Port</b>	2x RJ45 2x SFP+	2x RJ45	2x SFP28	2x SFP28 2x RJ45	2x SFP28	2x QSFP28	2x QSFP28
<b>Speed</b>	10Gbps	10Gbps	25Gbps	25Gbps / 10Gbps	25Gbps	100Gbps	100Gbps
<b>Controller</b>	Intel® X710-TM4	Intel® X710-AT2	Broadcom® BCM57414	Mellanox® ConnectX-4 Lx EN Intel® X550-AT2	Mellanox® ConnectX6 LX	Broadcom® BCM57508	Mellanox® ConnectX-6 DX
<b>PCI-E</b>	PCI-E 3.0 x8	PCI-E 3.0 x8	PCI-E 3.0 x8	PCI-E 3.0 x8 PCI-E 3.0 x4	PCI-E 4.0/3.0 x8	PCI-E 4.0 x16	PCI-E 4.0 x16
<b>Power</b>	10W	10W	7.7W	25W	15W	20W	TBD

# Ultra Networking Riser Cards



Model	AOC-UR-i4G	AOC-UR-i4XTF	AOC-UR-i4XT	AOC-UR-i2XT	AOC-URN2-i4XT	AOC-URN6-i2XT
<b>Form Factor</b>	1U Ultra Riser	1U Ultra Riser	1U Ultra Riser	1U Ultra Riser	1U Ultra Riser	1U Ultra Riser
<b>Controller Type</b>	GbE	10GBase-T	10GBase-T	10GBase-T	10GBase-T	10GBase-T
<b>Chipset</b>	Intel® i350	Intel® XL710	Intel® X540	Intel® X540	Intel® X540	Intel® X540
<b>Port #</b>	4	4	4	2	4	2
<b>Connector</b>	RJ45	RJ45	RJ45	RJ45	RJ45	RJ45
<b>PCI-E Slot</b>	1x PCI-E 3.0 x8 (internal)	1x PCI-E 3.0 x8 (internal)	1x PCI-E 3.0 x8 (internal)	1x PCI-E 3.0 x8 (internal)	1x PCI-E 3.0 x8 (internal)	N/A
<b>NVMe Ports</b>	0	0	0	0	2	6
<b>Compatible Motherboards</b>	X11DPU, X10DRU-i+, X10DRU-X	X11DPU, X10DRU-i+	X10DRU-i+, X10DRU-X	X11DPU, X10DRU-i+, X10DRU-X	X10DRU-i+, X10DRU-X	X11DPU, X10DRU-i+
<b>Compatible Systems</b>	SYS-1029U-TR4, SYS-1029U-E1CR4, SYS-6019U-TR4, SYS-1028U-TR4+, SYS-1028U-E1CR4+	SYS-1029U-TR4T, SYS-1029U-E1CR4T, SYS-1029U-TR4T, SYS-6019U-TN4R4T	SYS-1028U-TR4T+, SYS-6018U-TR4T+	SYS-1029U-TRT, SYS-1029U-E1CRT, SYS-6019U-TRT, SYS-6019U-TN4RT, SYS-1028U-TRT+, SYS-6018U-TRT+	SYS-1028U-TNR4T+	SYS-1029U-TN10RT, SYS-1029U-TN10RT+



Model	AOC-URN2-i2XT	AOC-URN2-i2XS	AOC-URN2-i4GX5	AOC-URN4-b2XT	AOC-URN4-i2TS	AOC-URN4-m2TS
<b>Form Factor</b>	1U Ultra Riser	1U Ultra Riser	1U Ultra Riser	1U Ultra Riser	1U Ultra Riser	1U Ultra Riser
<b>Controller Type</b>	10GBase-T	10G SFP+	GbE & 10G SFP+	10GBase-T	25GbE	25GbE
<b>Chipset</b>	Intel® X540	Intel® 82599ES	Intel® i350 & Intel® X710	BCM57416	Intel® XXV710	ConnectX-4 Lx EN
<b>Port #</b>	2	2	2+2	2	2	2
<b>Connector</b>	RJ45	SFP+	RJ45 & SFP+	RJ45	SFP28	SFP28
<b>PCI-E Slot</b>	1x PCI-E 3.0 x8 (internal)	1x PCI-E 3.0 x8 (internal)	1x PCI-E 3.0 x8 (internal)	1x PCI-E 3.0 x16 (internal)	1x PCI-E 3.0 x16 (internal)	1x PCI-E 3.0 x16 (internal)
<b>NVMe Ports</b>	2	2	2	4	4	4
<b>Compatible Motherboards</b>	X10DRU-i+, X10DRU-X	X11DPU, X10DRU-i+, X10DRU-X	X11DPU, X10DRU-i+	X11DPU	X11DPU	X11DPU, X10DRU-i+
<b>Compatible Systems</b>	SYS-1028U-TNRT+	SYS-1029U-TRTP, SYS-1029U-E1CRTP, SYS-6019U-TRTP, SYS-6018U-TRTP+, SYS-1028U-TNRTP+	SYS-1029U-TRTP2, SYS-1029U-E1CRTP2, SYS-6019U-TRTP2, SYS-1028U-E1CRTP+	TBA	TBA	SYS-1029UZ-TN20R25M, SYS-1029U-TR25M, SYS-1029U-E1CR25M, SYS-6019U-TR25M

# Ultra Networking Riser Cards



Model	AOC-2UR66-i4XTF	AOC-2UR68-i4G	AOC-2UR6-i4XT	AOC-2UR66-i4G	AOC-2UR68-i2XT
<b>Form Factor</b>	2U Ultra Riser	2U Ultra Riser	2U Ultra Riser	2U Ultra Riser	2U Ultra Riser
<b>Controller Type</b>	10GBase-T	GbE	10GBase-T	GbE	10GBase-T
<b>Chipset</b>	Intel® XL710	Intel® i350	Intel® X540	Intel® i350	Intel® X540
<b>Port #</b>	4	4	4	4	2
<b>Connector</b>	RJ45	RJ45	RJ45	RJ45	RJ45
<b>PCI-E Slot</b>	2x PCI-E 3.0 x16	1x PCI-E 3.0 x8 (internal) 1x PCI-E 3.0 x8 (in x16) 1x PCI-E 3.0 x16	1x PCI-E 3.0 x8 (internal) 1x PCI-E 3.0 x16	2x PCI-E 3.0 x16	1x PCI-E 3.0 x8 (internal) 1x PCI-E 3.0 x8 (in x16) 1x PCI-E 3.0 x16
<b>NVMe Ports</b>	0	0	0	0	0
<b>Compatible Motherboards</b>	X11DPU, X10DRU-i+	X11DPU, X10DRU-i+ X10DRU-X	X10DRU-i+ X10DRU-X	X11DPU, X10DRU-i+, X10DRU-X	X11DPU, X10DRU-i+, X10DRU-X
<b>Compatible Systems</b>	SYS-2029U-E1CR4T SYS-2029U-TR4T SYS-6029U-E1CR4T SYS-6029U-TR4T	SYS-2029U-TR4, SYS-2029U-E1CR4, SYS-6029U-TR4, SYS-6029U-E1CR4, SYS-2029UZ-TR4+, SYS-6028U-TR4+ SYS-2028U-TR4+ SYS-6028U-TR4+	SYS-2028U-TR4T+ SYS-6028U-TR4T+	SYS-2048U-RTR4	SYS-2029U-TRT, SYS-2029U-E1CRT, SYS-6029U-TRT, SYS-6029U-E1CRT, SYS-6028U-TRT+ SYS-2028U-TRT+ SYS-2048U-RTR4

<sup>†</sup> Available as integrated solutions with Supermicro servers.



Model	AOC-2URN4-i4XT	AOC-2UR8N4-i2XT	AOC-2UR68-i2XS	AOC-2UR6N4-i4XT	AOC-2UR68-m2TS
<b>Form Factor</b>	2U Ultra Riser	2U Ultra Riser	2U Ultra Riser	2U Ultra Riser	2U Ultra Riser
<b>Controller Type</b>	10GBase-T	10GBase-T	10G SFP+	10GBase-T	25GbE
<b>Chipset</b>	Intel® X540	Intel® X540	Intel® 82599ES	Intel® X550	ConnectX-4 Lx EN
<b>Port #</b>	4	2	2	4	2
<b>Connector</b>	RJ45	RJ45	SFP+	RJ45	SFP28
<b>PCI-E Slot</b>	1x PCI-E 3.0 x8 (internal)	1x PCI-E 3.0 x8 (internal) 1x PCI-E 3.0 x8 (in x16)	1x PCI-E 3.0 x8 (internal) 1x PCI-E 3.0 x8 (in x16) 1x PCI-E 3.0 x16	1x PCI-E 3.0 x16	1x PCI-E 3.0 x8 (internal) 1x PCI-E 3.0 x8 (in x16) 1x PCI-E 3.0 x16
<b>NVMe Ports</b>	4	4	0	4	0
<b>Compatible Motherboards</b>	X10DRU-i+, X10DRU-X	X10DRU-i+, X10DRU-X	X11DPU, X10DRU-i+, X10DRU-X	X11DPU, X10DRU-i+	X11DPU, X10DRU-i+
<b>Compatible Systems</b>	SYS-2028U-TNR4T+ SYS-6028U-TNR4T+ SYS-2028U-E1CNR4T+ SYS-6028U-E1CNR4T+	SYS-2028U-TNRT+ SYS-6028U-TNRT+ SYS-2028U-E1CNRT+ SYS-6028U-E1CNRT+	SYS-2029U-TRTP, SYS-2029U-E1CRTP, SYS-6029U-TRTP, SYS-6029U-E1CRTP, SYS-6028U-TRTP+ SYS-2028U-TRTP+ SYS-2048U-RTR4	SYS-2028U-T24RT+	SYS-2029UZ-TN20R25M SYS-2029U-TR25M SYS-2029U-E1C25M SYS-6029U-TR25M

<sup>†</sup> Available as integrated solutions with Supermicro servers.

# Network Adapters

## Faster, More Flexible Networking

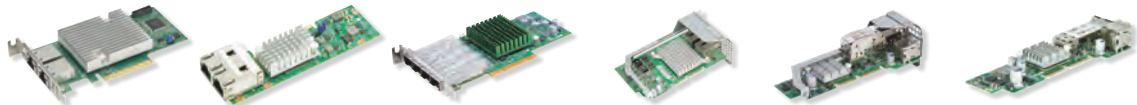
With outstanding performance, high power efficiency and excellent value, Supermicro's network adapters can help improve network throughput and application performance through features that maximize bandwidth and offload CPU resources. From 100G, 50G, 40G, 25G Ethernet to InfiniBand technologies, multi-port connectivity, in SiOM, Ultra, microLP and standard form factors, Supermicro's network adapters are optimized for the most demanding multi-core computing systems.

### 100G Controllers



Model	AOC-S100G-b1C	AOC-SHFI-i1C	AOC-S100G-m2C
Type	Standard Low-profile	Standard Low Profile	Standard Low-Profile
Description	Single-port 100GbE	Single Port 100Gbps Intel® Omni Path Host Fabric Interface Adapter	Dual-port 100GbE
Interface	PCI-E 3.0 x16	PCI-E 3.0 x16	PCI-E 3.0 x16
Port	1 QSFP28	1 QSFP28	2 QSFP28
Speed	100Gb/port	100Gb/port	100Gb/port
Controller	BCM57454	Intel® OPA HFI ASIC	ConnectX-4 EN
Dimension (LxW) (without end brackets)	6.6" x 2.713" (16.76 x 6.89cm)	6.6" x 2.713" (16.76 x 6.89cm)	6.6" x 2.713" (16.76 x 6.89cm)
Compatible Motherboards	All MBs with a PCI-E x16 slot	All MBs with a PCI-E x16 slot	All MBs with a PCI-E x16 slot
Compatible Servers	All Servers with a PCI-E x16 slot	All Servers with a PCI-E x16 slot	All Servers with a PCI-E x16 slot

### 10GbE Controllers



Model	AOC-STG-b2T	AOC-CTGS-i2T	AOC-STG-b4S	AOC-CTG-i2T	AOC-CTG-i2S	AOC-CTG-i1S
Type	Standard Low-profile	MicroLP	Standard Low-profile	MicroLP	MicroLP	MicroLP
Description	Dual-port 10GbE	MicroLP Dual-port 10GbE	Standard Low-profile 10GbE	MicroLP Dual-port 10GbE	Dual-port 10GbE	Single-port 10GbE
Interface	PCI-E 3.0 x8	PCI-E 3.0 x4	PCI-E x8	PCI-E 2.0 x8	PCI-E 2.0 x8	PCI-E 2.0 x8
Port	2 RJ45	2 RJ45	4 SFP+	2 RJ45	2 SFP+ ports / 2 USB ports	1 SFP+ port / 2 USB ports
Ethernet Speed	10Gb/port	10Gb/port	10Gb/port	10Gb/port	10Gb/port	10Gb/port
Controller	BCM57416	Intel® X550-AT2	BCM57405	Intel® X540	Intel® 82599ES	Intel® 82599EN
Dimension (LxW) (without end brackets)	5.6" x 2.713" (14.224 x 6.89cm)	4.45" x 1.54" (11.3 x 3.9cm)	5.4" x 2.73" (13.7 x 6.9cm)	4.8" x 2.75" (12.32 x 7.0cm)	4.85" x 1.54" (12.3 x 3.9cm)	4.45" x 1.54" (11.3 x 3.9cm)
Compatible Motherboards	All MBs with a PCI-E x8 slot	X11SSE-F	All MBs with a PCI-E x8 slot	X9DRT-HF+, X9DRFR, X10DRFR, X10DRFR-N(T)	X9DRT-HF+, X9SRD-F, X9DRFR, X10DRFR, X10DRFR-N(T)	X9DRT-HF+, X9SRD-F, X9DRFR, X10DRFR, X10DRFR-N(T)
Compatible Servers	All servers with a PCI-E x8 slot	MicroCloud, 2U Twin <sup>2</sup> +, 2U Twin+ and FatTwin	All servers with a PCI-E x8 slot	2U Twin+, and FatTwin w/ 4-node only	MicroCloud, 2U Twin <sup>2</sup> +, 2U Twin+, and FatTwin	MicroCloud, 2U Twin <sup>2</sup> +, 2U Twin+, and FatTwin

### 25/1GbE Controllers & SFP+ Transceiver



Model	AOC-S25G-b2S	AOC-S25G-m2S	AOC-C25G-m1S	AOC-CG-i2	AOC-CGP-i2	AOC-PG-i2+*	AOC-E10GSFSPR
Type	Standard Low-profile	Standard Low-Profile	MicroLP	MicroLP	MicroLP	Proprietary	SFP+ Transceiver
Description	Dual-port 25GbE	Dual-port 25GbE	1U MicroLP Single-port 25GbE controller with 1x SFP28 port.	Dual-port GbE	Dual-port GbE	Low-profile Dual-port GbE	1000Base-SX / 10GBase-SR plug-in module
Interface	PCI-E x8	PCI-E 3.0 x8	PCI-E 3.0 x8	PCI-E x4	PCI-E x4	PCI-E 2.0 x4	Cabling Type: MMF 62.5/50 µm
Port	2 SFP28	2 SFP28	1 SFP28 ports	2 RJ45 ports	2 RJ45 ports	2 RJ45 ports	Compatible Add-on Cards: AOC-STG-i4S, AOC-STGN-i1S, AOC-STGN-i2S, AOC-STG-b4S, AOC-CTG-i1S, AOC-CTG-i2S, AOC-PTG-i1S, AOC-MTG-i4S, AOC-MTGN-i2S
Speed	25Gb/port	25Gb/port	25Gb/port (Ethernet)	1 Gb/port	1Gb/port	1 Gb/port	
Controller	BCM57414	ConnectX-4 LX	ConnectX-4 Lx EN	Intel® 82580	Intel® i350	Intel® 82576EB	
Dimension (LxW) (without end brackets)	5.6" x 2.713" (14.224 x 6.89cm)	5.6" x 2.713" (14.224 x 6.89cm)	4.45" x 1.54" (11.3 x 3.9cm)	4.45" x 1.32" (11.3 x 3.35cm)	4.45" x 1.54" (11.3 x 3.9cm)	3.78" x 2.44" (9.6 x 6.2cm)	
Compatible Motherboards	All MBs with a PCI-E x8 slot	All MBs with a PCI-E x8 slot	X10DRFR	X9SCD-F	X9DRT-HF+, X9SRD-F, X9DRFR	X8DTU/-F (Require RSC-R1UU-E8PR)	
Compatible Servers	All servers with a PCI-E x8 slot	All servers with a PCI-E x8 slot	FatTwin MicroCloud	5037MC-H8TRF	MicroCloud, 2U Twin <sup>2</sup> +, 2U Twin+, and FatTwin	6016T-UF, 6016T-NTE, 6016T-NTRF, 1026T-URF, 1026T-UF, 6016T-URF (Require RSC-R1UU-E8PR)	

\* Standard form factor is available as integrated solution with Supermicro server and motherboards.

# SIOM Network Adapters

## SIOM Networking Adapters



Model	AOC-MGP-i2	AOC-MGP-i4	AOC-MTGN-i2S	AOC-MTG-i4S	AOC-MTG-b2T	AOC-MTG-i2T	AOC-MTG-i4T	AOC-MH25G-m2S2T
Type	SIOM	SIOM	SIOM	SIOM	SIOM	SIOM	SIOM	SIOM
Description	Dual-port GbE	Quad-port GbE	Dual-port 10GbE	Quad-port 10GbE	Dual-port 10GbE	Dual-port 10GbE	Quad-port 10GbE	Dual-port 25GbE & Dual-port 10GbE
Port	2 RJ45 ports	4 RJ45 ports	2 SFP+ ports	4 SFP+ ports	2 RJ45 ports	2 RJ45 ports	4 RJ45 ports	2 SFP28 & 2 RJ45 ports
Speed	1Gb/port	1Gb/port	10Gb/port	10Gb/port	10Gb/port	10Gb/port	10Gb/port	25Gb/port 10Gb/port
Controller	Intel® i350	Intel® i350	Intel® 82599ES	Intel® XL710	BCM57416	Intel® X550	Intel® X550	ConnectX-4 Lx EN Intel® X550
Dimension (LxW) (without end brackets)	3.622" x 3.428" (9.2 x 8.708cm)	3.622" x 3.428" (9.2 x 8.708cm)	3.622" x 3.428" (9.2 x 8.708cm)	3.622" x 3.428" (9.2 x 8.708cm)	3.622" x 3.428" (9.2 x 8.708cm)	3.622" x 3.428" (9.2 x 8.708cm)	3.622" x 3.428" (9.2 x 8.708cm)	3.622" x 3.428" (9.2 x 8.708cm)
Compatible Motherboards	Supermicro® Motherboards with SIOM slot	Supermicro® Motherboards with SIOM slot	Supermicro® Motherboards with SIOM slot	Supermicro® Motherboards with SIOM slot	Supermicro® Motherboards with SIOM slot	Supermicro® Motherboards with SIOM slot	Supermicro® Motherboards with SIOM slot	Supermicro® Motherboards with SIOM slot
Compatible Servers	Supermicro® Servers with SIOM slot	Supermicro® Servers with SIOM slot	Supermicro® Servers with SIOM slot	Supermicro® Servers with SIOM slot	Supermicro® Servers with SIOM slot	Supermicro® Servers with SIOM slot	Supermicro® Servers with SIOM slot	Supermicro® Servers with SIOM slot

## SIOM Networking Adapters



Model	AOC-M25G-m4S	AOC-M25G-i2S	AOC-MH25G-b2S2G	AOC-MHIBF-m2Q2G	AOC-MHIBF-m1Q2G	AOC-MHFI-i1C	AOC-MHIBE-m1CG
Type	SIOM	SIOM	SIOM	SIOM	SIOM	SIOM	SIOM
Description	Quad-port 25GbE	Dual-port 25GbE	Dual-port 25GbE	Dual-port IB FDR & Dual-port GbE	Single-port IB FDR & Dual-port GbE	Single-port Host Fabric Interface	Single-port InfiniBand EDR or 100GbE and Single-port GbE
Port	4 SFP28 ports	2 SFP28 ports	2 SFP28 ports 2 RJ45 ports	2 QSFP & 2 RJ45 ports	1 QSFP & 2 RJ45 ports	1 QSFP28 port	1 QSFP28 port 1 RJ45 port
Speed	25Gb/port	25Gb/port	25Gb/port or 1Gb/port	56Gb/port 1Gb/port	56Gb/port 1Gb/port	100Gb/port	100Gb/port or 1Gb/port
Controller	ConnectX-4 Lx EN	Intel® XXV710	BCM57414 Intel® i350	ConnectX-3 Pro Intel® i350	ConnectX-3 Pro Intel® i350	Intel® Omni Path HFI ASIC	ConnectX-4 VPI Intel® i210
Dimension (LxW) (without end brackets)	3.428" x 3.622" (8.71 x 9.2cm)	3.428" x 3.622" (8.71 x 9.2cm)	3.428" x 3.622" (8.71 x 9.2cm)	3.622" x 3.428" (9.2 x 8.708cm)	3.622" x 3.428" (9.2 x 8.708cm)	3.622" x 3.428" (9.2 x 8.708cm)	3.428" x 3.622" (8.71 x 9.2cm)
Compatible Motherboards	Supermicro® Motherboards with SIOM slot	Supermicro® Motherboards with SIOM slot	Supermicro® Motherboards with SIOM slot	Supermicro® Motherboards with SIOM slot	Supermicro® Motherboards with SIOM slot	Supermicro® Motherboards with SIOM slot	Supermicro® Motherboards with SIOM slot
Compatible Servers	Supermicro® Servers with SIOM slot	Supermicro® Servers with SIOM slot	Supermicro® Servers with SIOM slot	Supermicro® Servers with SIOM slot	Supermicro® Servers with SIOM slot	Supermicro® Servers with SIOM slot	Supermicro® Servers with SIOM slot

## Storage Mezzanine Cards

NEW!

NEW!

NEW!

NEW!

NEW!



Model	AOM-S3008M-L8	AOM-S3108M-H8L	AOM-S3108M-H8	AOM-B3108M-H8	AOM-S3108M-H8	AOM-S3008M-L8-SB
Compatible MBs	X10DSC+	X10DSC+	X9DRW-CF31 X9DRW-CTF31 X9DRW-CTF31	B10DRC	X10DRW-i X10DRW-IN X10DRW-IT X10DDW-i X10DDW-IN	X10DRS
Features	8 internal ports, 12Gb/s per port, 240 SATA/SAS drives, IT mode	8 internal ports, 12Gb/s per port, 240 SATA/SAS drives, RAID 0,1,5,10,6,60 2 GB cache with protection BTR-CV3108-U1	8 internal ports, 12Gb/s per port, 16 SATA/SAS drives, RAID 0,1,5,10,6,60 2 GB cache with protection BTR-TFM8G-CVM02	8 internal ports, 12Gb/s per port, 8 SATA/SAS drives, RAID 0,1,5,10,6,60 2 GB onboard cache with protection BTR-TFM8G-CVM02	8 internal ports, 12Gb/s per port, 16 SATA/SAS drives, RAID 0,1,5,10,6,60 2 GB onboard cache with protection BTR-TFM8G-CVM02	8 internal ports, 12Gb/s per port, 112 SATA/SAS drives, IR mode, RAID 0,1,1e,10

# HBA and SAS RAID Cards

Coming Soon!

NVMe

NVMe

NVMe

NVMe

NVMe

NVMe

NVMe

NVMe

NVMe



Model name	AOC-SLG2-2TM2	AOC-SLG2-2TM2-T	AOC-SLG3-4X4P	AOC-SHG3-4M2P	AOC-SLG3-2M2	AOC-SLG3-2E4T	AOC-SLG3-4E4T	AOC-SLG3-4E2P	AOC-SLG3-2E4	AOC-SLG3-2E4R	AOC-SLG3-4E4R
Compatible MBs	All*	All*	X11DDW-L X11DPT-B X11DPT-PS X11DPU	All*	X10DRT-H, X10SRM-TF	All*	All*	All*	All	X10DRW-i, X10DRW-iT, X10DRH, X10DRL-CT	X10DSC+, X10SRW-F
Features	PCI-E 2.0 x2 low-profile card, Adjustable stand-off supporting two SATA3 M.2 form factors: 2280, 2242, RAID1, BMC-enabled management, User-visible LEDs for each SSD's Activity and Status	PCI-E 2.0 x2 low-profile card, 2x 7pin SATA connectors for two SATA3 drives, RAID1, Supports SGPIO for backplane drive status LED control, IPMI support for RAID monitoring	X16 quad-port external PCI-E switch, Low profile standard Gen 3.0 PCI-E x16 for NVMe JBOD, 12.8 GB/s Performance	x8, quad M.2 SSD expansion switch sizes: 22x110mm; 22x80mm; 22x42mm	x8, dual M.2 SSD expansion card, supports multiple M.2 sizes: 22x110mm; 22x80mm; 22x60mm	x8, dual OCuLink port, PLX PCI-E Switch, SW hot-swap*	x16, quad OCuLink port, Re-Timer, hot-swap*	x8, quad OCuLink port, PLX PCI-E Switch, SW hot-swap*	x8, dual port, PLX hot-swap* (SW) * Requires backplane w/ U.2 connector	x8, dual port, re-driver (TI), hot-swap* * Requires backplane w/ U.2 connector	x16, quad port, re-driver (TI), hot-swap* * Requires backplane w/ U.2 connector

\* HW restrictions may apply

New! SAS3

New! SAS3

SAS3

SAS3

SAS3

SAS3

6Gbps



Model	AOC-S3616L-L16iT	AOC-S3216L-L16iT	AOC-S3108L-H8iR-16DD	AOC-S3108L-H8iR	AOC-S3008L-L8e	AOC-S3008L-L8i	AOC-S2208L-H8iR
Type	Stanadr	Stanadr	Low profile PCI-E 3.0 x8	Standard	Standard	Standard	Standard
Controller/IOP	SAS 3616	SAS 3216	SAS 3108	SAS 3108	SAS 3008	SAS 3008	SAS 2208
SAS Port	16 ports, 12Gbps per port, 16 Internal, Low Profile, 1024 SATA/SAS Drives	16 ports, 12Gbps per port, 16 Internal, Low Profile, 1024 SATA/SAS Drives	8 ports, 12Gbps per port, 8 Internal, Low Profile, 16 SATA/SAS Drives	8 ports, 12Gbps per port, 8 Internal, Low Profile, 240 SATA/SAS Drives	8 ports, 12Gbps per port, 8 Internal, Low Profile, 122 SATA/SAS Drives	8 ports, 12Gbps per port, 8 Internal, Low Profile, 63 SATA/SAS Drives	8 ports, 6Gbps per port, 8 Internal, Low Profile, 240 SATA/SAS Drives,
RAID	IT/HBA	IT/HBA	RAID 0,1,5,6,10,50,60	RAID 0,1,5,6,10,50,60	IT/HBA Mode	RAID 0,1,10	RAID 0,1,5,6,10,50,60
Onboard Cache	-	-	2GB DDR3 on-card cache Optional SuperCap: BTR-TFM8G-CVM02. Installation kit PN =MCP-240-00127-0N	2GB DDR3 on-card cache Optional SuperCap: BTR-TFM8G-CVM02. Installation kit PN =MCP-240-00127-0N	-	-	1GB DDR3 on-card cache w/ Battery Back-up or SuperCap, Optional Battery Backup Unit: BTR-0023L-00279 / MCP-450-00001-0N / Ambient Temp 45C, SuperCap option: BTR-0024LH-00297. Installation kit PN =MCP-240-00127-0N

6Gbps

6Gbps

6Gbps

6Gbps

6Gbps

6Gbps

6Gbps

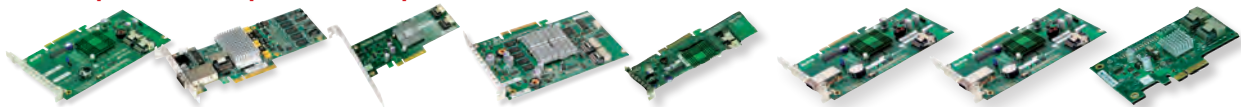


Model	AOC-S2308L-L8e	AOC-S2308L-L8i	AOC-SAS2LP-H8iR-16DD	AOC-SAS2LP-H8iR-16DD	AOC-USAS2LP-H8iR*	AOC-USAS2-L8iR	AOC-USAS2-L8i
Type	Standard	Standard	Standard	Standard	UIO	UIO	UIO
Controller/IOP	SAS 2308	SAS 2308	SAS 2108	SAS 2108	SAS 2108	SAS 2008	SAS 2008
SAS Port	8 ports, 6Gbps per port, 8 Internal, Low Profile, 122 SATA/SAS Drives	8 ports, 6Gbps per port, 8 Internal, Low Profile, 63 SATA/SAS Drives	8 ports, 6Gbps per port, 8 Internal, Low Profile, 240 SATA/SAS Drives	8 ports, 6Gbps per port, 8 Internal, Low Profile 16 SATA/SAS Drives	8 ports, 6Gbps per port 8 Internal, Low Profile	8 ports, 6Gbps per port 8 Internal	8 ports, 6Gbps per port 8 Internal
RAID	IT/HBA Mode	RAID 0,1,10	RAID 0,1,5,6,10,50,60	RAID 0,1,5,6,10,50,60	RAID 0,1,5,6,10,50,60	RAID 0,1,5,10	RAID 0,1,10,1E
Onboard Cache	-	-	512MB DDR2 on-card cache w/ Optional Battery Backup Unit: BTR-0023L-00264	512MB DDR2 on-card cache w/ Optional Battery Backup Unit: BTR-0023L-00264	512 MB DDR2 on-card cache w/ Optional Battery Backup Unit: BTR-0023L-00264	-	-

6Gbps

6Gbps

6Gbps



Model	AOC-USAS2-L8E	AOC-SAS2LP-H4iR	AOC-SAS2LP-MV8	AOC-USAS-L8i**	AOC-USASLP-L8i**	AOC-USAS-L4i**	AOC-USAS-L4iR**	AOC-SASLP-MV8**
Type	UIO	Standard	Standard	UIO	UIO	UIO	UIO	Standard
Controller/IOP	SAS 2008	SAS 2108	Marvel 9480 based	SAS 1068E	SAS 1068E	SAS 1068E	SAS 1068E	Marvell Hercules-2
SAS Port	8 ports, 6Gbps per port, 8 Internal	8 ports, 6Gbps per port, 4 external, Low Profile, 240 SATA/SAS Drives	8 ports, 6Gbps per port, 8 Internal, Low Profile	8 ports, 3Gbps per port, 8 Internal	8 ports, 3Gbps per port, 8 Internal, Low Profile	8 ports, 3Gbps per port, 4 Internal, 4 External	8 ports, 3Gbps per port, 4 Internal, 4 External	8 ports, 3Gbps per port, 8 Internal, Low Profile
RAID	IT mode / HBA	RAID 0,1,5,6,10,50,60	HBA	IT/HBA Mode	IT/HBA Mode	RAID 0,1,10	RAID 0,1,5,10	HBA only
Onboard Cache	-	512MB DDR2 on-card cache w/ battery w/ Optional Battery Backup Unit: BTR-0023L-00264	-	-	-	-	-	-

# Product Naming Guide



## Riser Card

Character	Representation	Options			
<b>1st</b>	Part Number Prefix	RSC: Riser Cards (New Naming Convention) CSE: Riser Cards (Old Naming Convention)			
<b>2nd</b>	Product Category	<b>S:</b> Standard <b>U:</b> Ultra <b>W:</b> WIO <b>G:</b> GPU <b>T:</b> Twin		<b>F:</b> FATTWIN <b>M:</b> Micro Blade <b>B:</b> Super Blade <b>C:</b> Micro Cloud	
<b>3rd</b>	Form Factor	<b>1:</b> 1U <b>2:</b> 2U <b>3:</b> 3U		<b>4:</b> 4U <b>5:</b> 5U	
<b>4th</b>	Location	<b>R:</b> Right hand side <b>F:</b> Front IO/Front of the MB <b>N6</b> = 6 NVMe ports		<b>B:</b> Rear IO/Back of the MB <b>M:</b> Middle of the MB	
<b>5th</b>	Output	<b>U:</b> UIO <b>4/8/6:</b> PCI-E x4/x8/x16 <b>X:</b> PCI-X		<b>A:</b> Active Riser Card <b>X33:</b> PCI output	
<b>6th</b>	MB Type/Spec:	<b>PR:</b> Proprietary <b>+</b> : Additional Features <b>E:</b> MB with Spec <b>H:</b> Support AMD MB Only		<b>UP:</b> Support UP MB <b>X:</b> Support X10 MB & above <b>X1:</b> Support X11 MB & above <b>X2:</b> Support X12 MB & above	










## SATA DOM Module



Character	Representation	Options			
<b>1st</b>	Storage Module Type	<b>SSD</b> = Solid State Disk			
<b>2nd</b>	Form Factor (DM)	SATA DOM			
<b>3rd</b>	Capacity (AAA)	<b>016</b> = 16GB	<b>032</b> = 32GB	<b>064</b> = 64GB	<b>128</b> = 128GB
<b>4th</b>	Controller (BB)	<b>PHI</b> = Vendor A <b>SM</b> = Vendor B			
<b>5th</b>	Temperature Rating (C)	<b>C</b> = Commercial Temperature <b>I</b> = Industrial Temperature			
<b>6th</b>	Flash Type (D)	<b>S</b> = SLC <b>M</b> = MLC <b>T</b> = TLC			
<b>7th</b>	Profile (E)	<b>V</b> = Vertical		<b>H</b> = Horizontal	
<b>8th</b>	Configuration (F)	<b>N</b> = Normal		<b>S</b> = SED	
<b>9th</b>	Reserved (G)	<b>1</b> = Initial Released Version			

# Riser Cards






## 1U GPU (Left Hand Side)

Product Image	Model Name	Category/Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Motherboards	Chassis	SuperServer	GPU Support	Gen2 Support	Gen3 Support	Auto Detection
	RSC-G-A66-X1	1U GPU LHS	1 PCI-E x168 Oculink x8	2 PCI-E x16	Active	No	X11DGQ,	118GQPTS-R2K05P,	1029GQ-TVRT, 1029GQ-TXRT,	Yes	Yes	Yes	Yes
	RSC-GN2-66	1U GPU LHS	1 PCI-E x162 Oculink x8	2 PCI-E x16, 1 NVMe (Oculink x8)	Passive	No	No	X11DGQ,	118GQPTS-R2K05P,	1029GQ-TVRT, 1029GQ-TX-RT,	Yes	Yes	Yes
	RSC-G-A6	1U GPU LHS	1 PCI-E x16	1 PCI-E x16	Active	No	X11DGQ,	118GQ-ETS-R2K05P,	1029GQ-TNRT, 1029GQ-TRT,	Yes	Yes	Yes	Yes
	RSC-G-A66	1U GPU LHS	1 PCI-E x32	2 PCI-E x16	Active	No	X11DGQ, X11D-PG-HGX2,	118GQ-ETS-R2K05P, 1018G-R12KP,	1029GQ-TRT, 9029GP-TNVRT,	Yes	Yes	Yes	Yes
	RSC-GN2-A68	1U GPU LHS	1 PCI-E x32	2 PCI-E x16, 1 NVMe (Oculink x8)	Active	No	X11DGQ,	118GQ-ETS-R2K05P,	1029GQ-TNRT, SYS-1029GQ-TXNRT	Yes	Yes	Yes	Yes
	RSC-G-A66-X	1U GPU LHS	1 Universal Slot (GPU)	2 PCI-E x16	Active	No	X10DRG-H, X10DRG-HT	N/A	N/A	Yes	Yes	Yes	Yes
	RSC-R1UG-2E8G	1U GPU LHS	Universal Slot (GPU)	2 PCI-E x8	Passive	No	X8DTG-DF	818G-1400, 818G-1400B, 818G-1K43B, 818G-R1400, 118G-1400B, 118G-1800B, 118G-1K43B	1026GT-TF-FM107, 1026GT-TF-FM109, 6016GT-TF-FM107, 6016GT-TF-FM109, 6016GT-TF-FM175, 1026GT-TF-FM105, 1026GT-TF-FM175	No	Yes	No	No


## 1U GPU (Left Hand Side)

Product Image	Model Name	Category/Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Motherboards	Chassis	SuperServer	GPU Support	Gen2 Support	Gen3 Support	Auto Detection
	RSC-G-6	1U GPU LHS	1 PCI-E x16	1 PCI-E x16	Passive	Yes	X10DGQ	SC118GQE-R2K03P	1028GQ-TRT, 1028GQ-TR	Yes	Yes	Yes	Yes
	RSC-R1UG-E16-X9	1U GPU LHS	PCI-E x16	1 PCI-E x16	Passive	Yes	X9DRG-HF+	118GQ	1027GR-TRF+	Yes	Yes	No	No


## 1U GPU (Right Hand Side)

Product Image	Model Name	Category/Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Motherboards	Chassis	SuperServer	GPU Support	Gen2 Support	Gen3 Support	Auto Detection
	RSC-GR-A88	1U GPU RHS	SMC Proprietary	2 PCI-E x8	Active	No	X10DGQ	SC118GQE-R2K03P	1028GQ-TRT, 1028GQ-TR	No	Yes	Yes	Yes
	RSC-GR-6	1U GPU RHS	1 PCI-E x16	1 PCI-E x16	Passive	No	X10DGQ	SC118GQE-R2K03P	1028GQ-TRT, 1028GQ-TR	Yes	Yes	Yes	Yes
	RSC-R1UG-E16R-UP	1U GPU RHS	Universal Slot (GPU)	1 PCI-E x16	Passive	Yes	X9SRG-F	118G-1400B 118G-1800B 118G-1K43B	1017GR-TF, 1017GR-TF-FM109, 1017GR-TF-FM175, 1017GR-TF-FM209, 1017GR-TF-FM275, 5017GR-TF, 5017GR-TF-FM109, 5017GR-TF-FM209, 5017GR-TF-FM275	No	Yes	Yes	Yes
	RSC-R1UG-E16R+II	1U GPU RHS	Universal Slot (GPU)	1 PCI-E x16	Passive	Yes	X9DRG-HF+II, X9DRG-HTF+II, X10DRG-H (T)	SC118GH	1027GR	Yes	Yes	Yes	Yes
	RSC-R1UG-E16AR+II	1U GPU RHS	Universal Slot (GPU)	1 PCI-E x16	Passive	Yes	X9DRG-HF+II, X9DRG-HTF+II, X10DRG-H (T)	SC118GH	1027GR-TR2, 1027GR-TRT2+	Yes	Yes	Yes	Yes

## 1U GPU (Right Hand Side)

Product Image	Model Name	Category/Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Motherboards	Chassis	SuperServer	GPU Support	Gen2 Support	Gen3 Support	Auto Detection
	RSC-MLP-E8R	1U MLP RHS	PCI-E x8	1 PCI-E x8	Passive	Yes	X9SCE, X9SCE-F	SC 939H-R1K63B	AOM-CGP42M, AOM-CIBF-M1M, AOM-CTG-115M	No	Yes	Yes	No

## 1U DCO (Left Hand Side)

Product Image	Model Name	Category/Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Motherboards	Chassis	SuperServer	GPU Support	Gen2 Support	Gen3 Support	Auto Detection
	RSC-D-6G4	1U DCO LHS	1 PCI-E x16	1 PCI-E x16	Passive	No	X12DDW-A6,	N/A	(Unpublished) 120C-TN10R, (Unpublished) 120C-TR, (Unpublished) 610C-TR,	No	No	Yes	Yes

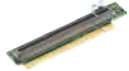











# Riser Cards



## 1U Twin (Right Hand Side)

Product Image	Model Name	Category/ Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Mother- boards	Chassis	SuperServer	GPU Support	Gen2 Sup- port	Gen3 Sup- port	Auto Detection
	RSC-PR-6-X2	1U TwinPro RHS	1 PCI-E x16	1 PCI-E x16	Passive	No	H12D5T-B,	N/A	N/A	No	No	Yes	Yes
	RSC-R1U-E16R	1U Twin RHS	PCI-E x16	1 PCI-E x16	Passive	No	H8DGG-QF, H8DCT- IBQF, H8DCT-F, H8DCT-HLN4F, H8DGT-HLIBQF, H8DGT-HLE, H8DGT-HIBQF, H8DGT-HIBQF- H8DGT-HF, X75BT, X85IT, X95RG-F, X9DRT-series	5C818T	1022GG-TF, 1122GG-TF, 2022TC-HTRF4, 2022TG-H6IBQRF, 2022TG-H6RF, 2022TG- HIBQRF, 2022TG-HIBQRF, 2022TG-HLTRF, 2022TG-HTRF, 2122TC-H6RF4, 2122TG- H6IBQRF, 2122TG-H6RF, 2122TG-HIBQRF, 2122TG-HTRF, 2022TC-HIBQRF, 2022TC-BTRF, 1021TM-INF-8, 1021TM-T-8, 2021TM-BIBX- RF, 2021TM-BTRF, 1017GR-TF, 1017GR-TF- FM109, 1017GR-TF-FM175, 1017GR-TF- FM209, 1017GR-TF-FM275, 1025TC-10GB, 1025TC-3FB, 1025TC-TB, 1026GT-TF, 1026GT-TF-FM109, 1026GT-TF-FM107, 1026GT-TF-FM109, 1026GT-TF-FM175, 1026GT-TF-FM205, 1026GT-TF-FM207, 1026GT-TF-FM209, 1026GT-TF-FM275, 1026TT-IBQF, 1026TT-IBXF, 1026TT-INFF, 1026TT-TF, 1027TR-TF, 1027TR-TFF, 1027TR-TQF, 2016TT-HTRF, 2026TT-H6IBQRF, 2026TT-H6IBXRF, 2026TT-H6RF, 2026TT- HIBQRF, 2026TT-HIBXRF, 2026TT-HTRF, 2027TR-H7QRF, 2027TR-H7QRF, 2027TR- H7QRF, 2027TR-H71FRF, 2027TR-H71QRF, 2027TR-H71RF, 2027TR-H72FR, 2027TR- H72QRF, 2027TR-H72RF, 2027TR-HTRF, 2027TR-HTRF, 2027TR-HTRF, 5015TR-10GB, 5015TR-TB, 5016TR-TF, 5017GR-TF, 5017GR-TF-FM109, 5017GR-TF-FM175, 5017GR-TF-FM209, 5017GR-TF-FM275, 5026TT-BTRF, 5026TT-HTRF, 6015TC-10GB, 6015TC-LF-TB, 6015TC-TB, 6015TW-INFV8, 6015TW-TV8, 6016GT-TF, 6016GT-TF-FM107, 6016GT-TF-FM109, 6016GT-TF-FM175, 6016GT-TF-FM205, 6016GT-TF-FM207, 6016GT-TF-FM209, 6016GT-TF-FM275, 6016TT-IBQF, 6016TT-IBXF, 6016TT-INFF, 6016TT-TF, 6017TR-TF, 6017TR-TFF, 6017TR-TQF, 6026TT-BIBQF, 6026TT-BIBQRF, 6026TT-BIBXF, 6026TT-BIBXRF, 6026TT-BINFF, 6026TT-BINRF, 6026TT-ETF, 6026TT-BTRF, 6026TT-H6IBQRF, 6026TT-H6IBXRF, 6026TT- H6RF, 6026TT-HTRF, 6026TT-HTRF, 6026TT- HTRF, 6026TT-HTRF, 6026TT-IBXF, 6026TT-IBXF, 6026TT-H7QRF, 6026TT-H7QRF, 6026TT-H7QRF, 6026TT-H71FRF, 6026TT- H71QRF, 6026TT-H71RF, 6026TT-HTRF, 6026TT-HTRF, 6026TT-HTRF, 1022TC-IBQF, 1022TC-TF	No	Yes, de- pend- ing on slots	No	N/A
	RSC-R1UFF-E8R	1U Twin RHS	PCI-E x8	1 PCI-E x8	Passive	Yes	X95CFF-F, X9DRFR, X10DRFF-CG	F418BLR1K628P	F627R3-FT, F627R3-F3, F517H6-FT, F617H6-FT+, F617H6-FTL+, F617H6-FPT+, F617H6-FPTL+, F617R2-FT+, F617R3-FP+, 5017R-IHD, F517H6-FT	No	Yes	Yes	Yes

## 1U Storage (Left Hand Side)



Product Image	Model Name	Category/ Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Mother- boards	Chassis	SuperServer	GPU Support	Gen2 Sup- port	Gen3 Sup- port	Auto Detection
	<b>RSC-X-6G4</b>												
	RSC-X-6	1U Storage LHS	1 PCI-E x16	1 PCI-E x16	Passive	No	X11D5F-E,	121EF-R1K62P, 121NF- R1K62P,	1029P-NES32R, 1029P-NMR36L,	No	Yes	Yes	Yes
	RSC-X-66	1U Storage LHS	1 PCI-E x32	2 PCI-E x16	Passive	No	X11D5F-E,	121NF-R1K62P, 121EF- R1K62P,	1029P-NES32R, 1029P-NMR36L,	No	Yes	Yes	Yes
	RSC-X-66-C	1U Storage LHS	1 SXB1 (WIO- Left)	2 PCI-E x16	Passive	No	X11D5N-TS, X11D5N-TSq,	227TS-R2K05P, 227TS-R2K05P2, 227TS- R2K05P3,	2029P-DN2R24L, 2029P-DN2R48L, 2029P-DN2R32L,	No	No	Yes	Yes

## 1U UIO (Left Hand Side)




Product Image	Model Name	Category/ Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Mother- boards	Chassis	SuperServer	GPU Support	Gen2 Sup- port	Gen3 Sup- port	Auto Detection
	RSC-R1UU-2U	1U UIO LHS	Universal SXB2 Slot (UIO)	2 UIO	Passive	No	X8DTU, X8DTU-F, X8DTU-LN4F+, X8SIU-F, H8DMU+, H8SMU, H8DGU, H8DGU-F, H8D- GU-LN4F+, X7DBU, X7DGU, X7DWU, X7DCU, X8DTU-6F, X8DTU-6T, X7SBU, PDSMU, X8SIU	113TQ-560UB,,, 113TQ- R650UB, 815TQ-560UB,,, 812L-280U, 812L-280UB, 812L-520U, 812L-600UB, 111T-560UB, 111TQ- 563UB, 111TQ-600UB, 111LT-330UB, 111LT- 360UB, 119TQ-R700UB, 819TQ-R700UB, 515-280UB	N/A	No	Yes, de- pend- ing on MB	No	No
	RSC-R1UU-E8E16	1U UIO LHS	Universal SXB2 Slot (UIO)	1 PCI-E x8; PCI-E x16	Passive	No	X8DTU, X8DTU-F, X8DTU-LN4F+, X8SIU-F, X8DBU-F, X9DBU-3F, H8DGU, H8DGU-F, H8D- GU-LN4F+, X8SIU-F, X8SIU	113TQ-560UB,,, 113TQ- R650UB, 815TQ-560UB,,, 812L-280U, 812L-280UB, 812L-520U, 812L-600UB, 111T-560UB, 111TQ- 563UB, 111TQ-600UB, 111LT-330UB, 111LT- 360UB, 119TQ-R700UB, 819TQ-R700UB, 515-280UB	6017B-NTF	Yes	Yes, de- pend- ing on MB	Yes, de- pend- ing on MB	Yes dependg on MB

# Riser Cards


## 1U UIO (Right Hand Side)

Product Image	Model Name	Category/Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Motherboards	Chassis	SuperServer	GPU Support	Gen2 Support	Gen3 Support	Auto Detection
	RSC-R1UU-E8PR	1U UIO RHS	PCI-E x8	1 PCI-E x8	Passive	No	X8DTU, X8DTU-F, X8DTU-LN4F+, X7DWU, X7DCU, X8DTU-6F, X8DTU-6TF	113TQ-560UB, 113TQ-R650UB, 815TQ-560UB, 812L-280U, 812L-280UB, 812L-520U, 812L-600UB, 111T-560UB, 111TQ-563UB, 111TQ-600UB, 111LT-330UB, 111LT-360UB, 119TQ-R700UB, 819TQ-R700UB, 515-280UB	N/A	No	Yes, depending on slots	No	No
	RSC-R1UU-E8R+	1U UIO RHS	PCI-E x8	1 PCI-E x8	Passive	No	X85IU-F, X9SPU-F, H85MU, X8DTU-LN4F+, X8DTU-6F+, X85IU-F	113TQ-560UB, 113TQ-R650UB, 815TQ-560UB, 812L-280U, 812L-280UB, 812L-520U, 812L-600UB, 111T-560UB, 111TQ-563UB, 111TQ-600UB, 111LT-330UB, 111LT-360UB, 119TQ-R700UB, 819TQ-R700UB, 515-280UB	N/A	No	No	No	No




## 1U WIO (Left Hand Side)

Product Image	Model Name	Category/Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Motherboards	Chassis	SuperServer	GPU Support	Gen2 Support	Gen3 Support	Auto Detection
	RSC-W-66G4	1U WIO LHS	1 PCI-E x32	2 PCI-E x16	Passive	No	H125SW-NT,	N/A	N/A	No	No	Yes	Yes
	RSC-W-68	1U WIO LHS	WIO Slot	1 PCI-E x8 1 PCI-E x16	Passive	Yes	X115W-F	WIO Chassis	50195-WR	No	Yes	Yes	No
	RSC-W-88	1U WIO LHS	WIO Slot	2 PCI-E x8	Passive	No	X10DRW-i	WIO Chassis	6028R-WTR, 1028R-WTR, 1028R-WC1R	No	Yes	Yes	Yes




## 1U WIO (Left Hand Side)

	RSC-R1UW-2E16	1U WIO LHS	WIO Slot	2 PCI-E x16	Passive	Yes	X9SRW-3F, X9SRW-F, X9DRW-F, X9DRW-3F, X9DRW-3LN4F+, X9DRW-3TF+, X10DRW-series, X10DRFT-I, X10DDW-I	WIO Chassis	1027R-72BRFTP, 1027R-72RFTP, 1027R-N3RF, 1027R-WRF, 1027R-WRF4+, 1027R-WRF4+, 5017R-WRF, 6017R-72RFTP, 6017R-N3RF4+, 6017R-N3RFT+, 6017R-NTF, 6017R-WRF	Yes	Yes	Yes	Yes
--	---------------	------------	----------	-------------	---------	-----	--	-------------	---	-----	-----	-----	-----

## 1U WIO (Right Hand Side)



Product Image	Model Name	Category/Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Motherboards	Chassis	SuperServer	GPU Support	Gen2 Support	Gen3 Support	Auto Detection
	RSC-WR-6	1U WIO RHS	1 PCI-E x16	1 PCI-E x16	Passive	No	H115SW-NT, H125SW-NT, H1105U-IN, X110DW-NT,	N/A	A5-11135-WTRT, 11135-WN10RT, 2123US-TN24R25M, 6019P-ACR12L+, 10145-WTRT, 11145-WTRT,	No	No	Yes	Yes
	RSC-WR-6	1U WIO RHS	1 PCI-E x16	1 PCI-E x16	Passive	No	N/A	N/A	N/A	No	No	Yes	Yes
	RSC-R1UW-E8R	1U WIO RHS	WIO Slot	1 PCI-E x8	Passive	Yes	X9SRW-3F, X9SRW-F, X9DRW-F, X9DRW-3F, X9DRW-3LN4F+, X9DRW-3TF+, X10SRW-F, X10DDW-I	WIO Chassis	5017R-WRF, 1027R-72BRFTP, 1027R-72RFTP, 1027R-WRF4+, 1027R-WRF4+, 6017R-N3RF4+, 6017R-N3RFT+, 6017R-N3RFT+	No	Yes	Yes	No

## 2U GPU (Left Hand Side)


Product Image	Model Name	Category/Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Motherboards	Chassis	SuperServer	GPU Support	Gen2 Support	Gen3 Support	Auto Detection
	RSC-G2B-A66-X1	2U GPU LHS	2 PCI-E x16	2 PCI-E x16	Active	No	X11DPG-SN,	N/A	2029GP-TR,	Yes	Yes	Yes	Yes
	RSC-G2F-A66-X1	2U GPU LHS	1 PCI-E x16	2 PCI-E x16	Active	No	X11DPG-SN	218GHTS-R2K03BP3	2029GP-TR,	Yes	Yes	Yes	Yes
	RSC-G2F-A66	2U GPU LHS	1 PCI-E x16	2 PCI-E x16	Active	No	X10DDG-H, X10DRG-HT	5C218GH-R2K03B	2028GR-TR, 2028GR-TRH, 2028GR-TRHT, 2028GR-TRT	Yes	Yes	Yes	Yes

# Riser Cards

## 2U GPU (Right Hand Side)

Product Image	Model Name	Category/ Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Mother- boards	Chassis	SuperServer	GPU Support	Gen2 Support	Gen3 Support	Auto Detection
	RSC-G2FR-A66	2U GPU RHS	1 PCI-E x16	2 PCI-E x16	Active	Yes	X10DRG-H, X10DRG-HT	SC218GH-R2K03B	2028GR-TR, 2028GR-TRH, 2028GR-TRHT, 2028GR-TRT	Yes	Yes	Yes	Yes
	RSC-R2UG-E16R-X9	2U GPU RHS	PCI-E x16	1 PCI-E x16	Passive	Yes	X8DTG-QF+	218G-R1800B	2026GT-TE, 2026GT-TRF, 2026GT-TRF-FM407, 2026GT-TRF-FM409, 2026GT-TRF-FM475, 2027GR-TRFH-FM609, 2027GR-TRFH-FM675, 2027GR-TRFT, 2027GR-TSF	Yes	Yes	Yes	N/A


## 2U Standard (Left Hand Side)

Product Image	Model Name	Category/ Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Mother- boards	Chassis	SuperServer	GPU Support	Gen2 Support	Gen3 Support	Auto Detection
	RSC-S2-88	2U Standard LHS	1 PCI-E x8	2 PCI-E x8	Passive	No	X10QRH+	CSE-218U-R1K02P	2048U-RTR4	No	Yes	Yes	Yes



## 2U Standard (Left Hand Side)

Product Image	Model Name	Category/ Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Mother- boards	Chassis	SuperServer	GPU Support	Gen2 Support	Gen3 Support	Auto Detection
	RSC-S2-66	2U Standard LHS	2 PCI-E x16	2 PCI-E x16	Passive	No	X11QPH+	CSE-218UTS-R1K62P	2049U-TR4	No	Yes	Yes	Yes



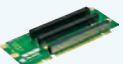


## 2U Ultra (Left Hand Side)

Product Image	Model Name	Category/ Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Mother- boards	Chassis	SuperServer	GPU Support	Gen2 Support	Gen3 Support	Auto Detection
	RSC-U2N4-6	2U Ultra LHS	1 WIO Slot	2 PCI-E x8	Passive	No	X10DRU++	CSE-219UAC-R1K02	2028U-TN24RT+	Yes	Yes	Yes	Yes

## 2U Twin (Left Hand Side)


Product Image	Model Name	Category/ Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Mother- boards	Chassis	SuperServer	GPU Support	Gen2 Support	Gen3 Support	Auto Detection
	RSC-F2B-88G4	2U FatTwin LHS	1 PCI-E x16	2 PCI-E x8	Passive	No	X12DP- FR-AN6, H12S5- FR-AN6,	N/A	N/A	No	No	Yes	Yes
	RSC-P2-88	2U TwinPro LHS	1 PCI-E x16	2 PCI-E x8	Passive	No	X11DPT-B, X10DRT-B+,	N/A	N/A	No	Yes	Yes	Yes

## 2U Twin (Right Hand Side)



Product Image	Model Name	Category/ Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Mother- boards	Chassis	SuperServer	GPU Support	Gen2 Support	Gen3 Support	Auto Detection
	RSC-P2R-88G4	2U TwinPro RHS	1 PCI-E x16	2 PCI-E x8	Passive	No	N/A	N/A	N/A	No	No	Yes	Yes
	RSC-T2R-884	2U Twin RHS	1 PCI-E x16	2 PCI-E x16, 1 PCI-E x8	Passive	No	X11DPT-L,	827HD- R1K23BP3 ,	6029TR-DTR,	No	Yes	Yes	Yes
	RSC-R2UT-3E8R	2U Twin RHS	PCI-E x8PCI-E x16	3 PCI-E x8	Passive	Yes	X9DRT-F, X9DRT-HF, X9DRT-HIBFF, X9DRT-HIBQF, X9DRT-IBFF, X9DRT-IBQF	SC827T-R1400B, SC827T-R1200	2027TR-D70FRF, 2027TR- D70QRF, 2027TR-D70RF, 6027TR-D70FRF, 6027TR- D70QRF, 6027TR-D70RF, 6027TR-D71FRF, 6027TR- D71QRF, 6027TR-D71RF, 6027TR-D7FRF, 6027TR- DTQRF, 6027TR-DTRF	No	Yes	Yes	Yes
	RSC-R2UT-E8E16R	2U Twin RHS	PCI-E x8PCI-E x16	1 PCI-E x8; 1 PCI-E x16	Passive	Yes	X9DRT-F, X9DRT-HF, X9DRT-HIBFF, X9DRT-IBFF, X9DRT-IBQF	SC827T-R1400B, SC827T-R1200	6027TR-GTRF	Yes	Yes	Yes	Yes
	RSC-R2UT-2E8R	2U Twin RHS	PCI-E x16	2 PCI-E x8	Passive	No	X8DTT, X8DTT-F, X8DTT-IBX, X8DTT-IBXF, X8DTT-IBQ, X8DTT-IBQF, X8DTT-HX- 8DTT-HF, X8DTT-HF+, X8DTT-HF+, X8DTT-HIBXF, X8DTT-HIBXF+, X8DTT-HIBQF, X8DTT-HIBQF+, H8DCT-HLN4F	827H-R1400B, 827T-R1200	2026TT-DLIBORF, 2026TT-DLIBXRF, 2026TT-DL- RF, 6026TT-D6IBQRF, 6026TT- D6IBXF, 026TT-HDIBQRF, 6026TT-HDIBXRF, 6026TT- HDTRF, 2122TC-DL6RF4	No	Yes	No	Yes

# Riser Cards

## 2U UIO (Left Hand Side)

Product Image	Model Name	Category/Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Motherboards	Chassis	SuperServer	GPU Support	Gen2 Support	Gen3 Support	Auto Detection
	RSC-R2UU-A4E8+	2U UIO LHS	SXB-E Universal Slot (UIO)	4 PCI-E x8	Active	No	X8DTU, X8DTU-F, X8DTU-LN4F+, H8DGL, H8DGLJ-F, H8DGL-LN4F+	UIO Chassis	N/A	No	Yes	No	No






## 2U UIO (Left Hand Side)

	RSC-R2UU-UA3E8+	2U UIO LHS	SXB-E Universal Slot (UIO)	3 PCI-E x8; 1 UIO	Active	No	X8DTU, X8DTU-F, X8DTU-LN4F+, H8DGL, H8DGLJ-F, H8DGL-LN4F+	UIO Chassis	2022G-URF, 2022G-URF4+, 6026T-UR, 6026T-URF	No	Yes	No	No
	RSC-R2UU-2E8	2U UIO LHS	Universal SXB2 Slot (UIO)	2 PCI-E x8	Passive	No	H8DMU+, H8SMU, X75BU, X7DCU, X7DBU, X7DWU, X7DGL, X8DTU-6F, X8DTU-6TF	UIO Chassis	N/A	No	Yes, depending on MB	No	No





## 2U UIO (Right Hand Side)

Product Image	Model Name	Category/Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Motherboards	Chassis	SuperServer	GPU Support	Gen2 Support	Gen3 Support	Auto Detection
---------------	------------	----------------------	-------------	------------------------	-------------	------------	--------------	---------	-------------	-------------	--------------	--------------	----------------

## 2U WIO (Left Hand Side)





Product Image	Model Name	Category/Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Motherboards	Chassis	SuperServer	GPU Support	Gen2 Support	Gen3 Support	Auto Detection
	RSC-W2-8888G4	2U WIO LHS	1 PCI-E x32	4 PCI-E x8	Passive	No	H1255W-NT,	N/A	N/A	No	No	Yes	Yes
	RSC-W2-66G4	2U WIO LHS	1 SXB1 (WIO-Left)	2 PCI-E x16	Passive	No	H12DSU-IN, X12DPU, H1255W-NT, (Unpublished) H1255W-NTR,	N/A	N/A	Yes	No	Yes	Yes
	RSC-R2UW-2E8E16+	2U WIO LHS	WIO Slot	2 PCI-E x16; 1 PCI-E x8	Passive	Yes	X9DRW-IF, X9DRW-3F, X9DRW-IT+, X10DRW-series and X10QRH+, X10DRW-series and X10QRU-series	WIO CHASSIS	N/A	Yes	Yes	Yes	Yes
	RSC-R2UW-2E8E16	2U WIO LHS	WIO Slot	2 PCI-E x8; 1 PCI-E x16	Passive	Yes	X9SRW-F, X9SRW-3F, X9DRW-IF, X9DRW-3F, X9DRW-3TF+, X9DRW-3LM4F+	WIO CHASSIS	6027R-72RFTP+, 2027R-72RFTP+	Yes	Yes	Yes	Yes
	RSC-R2UW-4E8	2U WIO LHS	WIO Slot	4 PCI-E x8	Passive	Yes	X9SRW-F, X9SRW-3F, X9DRW-IF, X9DRW-3F, X9DRW-3TF+, X9DRW-3LM4F+, X10DRW-series	WIO CHASSIS	5027R-WRF, 2027R-N3RF4+, 2027R-N3RFT+, 6027R-N3RF4+, 6027R-N3RFT+	No	Yes	Yes	Yes

## 2U WIO (Right Hand Side)

Product Image	Model Name	Category/Form Factor	MB Fit Type	Riser Card Output Type	Design Type	X9 Support	Motherboards	Chassis	SuperServer	GPU Support	Gen2 Support	Gen3 Support	Auto Detection
	RSC-W2R-88G4	2U WIO RHS	1 PCI-E x16	2 PCI-E x8	Passive	No	H1255W-NT, H1255W-IN, (Unpublished) H1255W-NR, (Unpublished) H1255W-NTR,	N/A	AS-21145-WN24RT	No	No	Yes	Yes
	RSC-R2UW-2E4R	2U WIO RHS	1 PCI-E x16	2 PCI-E x4	Passive	Yes	X9SRW-F, X9SRW-3F, X9DRW-F-S5022, X10SRW-F	2U WIO chassis	N/A	No	Yes	Yes	Yes
	RSC-R2UW-E8R-UP	2U WIO RHS	WIO Slot	1 PCI-E x8	Passive	Yes	X9SRW-3F, X9SRW-F, X10DDW-I and X10SRW-F	WIO Chassis	5027R-WRF	No	Yes	Yes	Yes
	RSC-R2UW-2E8R	2U WIO RHS	WIO Slot	2 PCI-E x8	Passive	Yes	X9DRW-IFX, 9DRW-3FX, 9DRW-3TF+, X-9DRW-3LM4F+	WIO Chassis	2027R-72RFTP+, 6027R-72RFTP+	No	Yes	Yes	Yes

# Trusted Platform Module (TPM)

## Provisioned TPM

TPM	Types	Differentiators	FormFactors	Pictures	Model Numbers
Provisioned TPM+ TXT	Server (S)	96-Byte index Memory Support: Intel® Xeon® Processor E5, Intel® Xeon® Processor E7	Vertical (V)		AOM-TPM-9655V-S AOM-TPM-9665V-S
			Horizontal (H)		AOM-TPM-9655H-S AOM-TPM-9665H-S
	Client (C)	48-Byte index Memory Support: Intel® Xeon® Processor E3 Intel® Core™ i7 Processor, Intel® Core™ i5 Processor	Vertical (V)		AOM-TPM-9655V-C AOM-TPM-9665V-C
			Horizontal (H)		AOM-TPM-9655H-C AOM-TPM-9665H-C

## TPM Products

TCG	Model #	Form Factor	TXT*	MB Platform	Supported CPUs
TPM 1.2	AOM-TPM-9655V	Vertical	N/A	Intel® & AMD	Any MB's Supported CPU
	AOM-TPM-9655V-S	Vertical	Server	Intel®	Intel® Xeon® Processor E5, Intel® Xeon® Processor E7
	AOM-TPM-9655V-C	Vertical	Client	Intel®	Intel® Core™ i5 Intel® Core™ i7 Processor, Intel® Core™ i5 Processor & Intel® Xeon® Processor E3
	AOM-TPM-9655H	Horizontal	N/A	Intel® & AMD	Any MB's Supported CPU
	AOM-TPM-9655H-S	Horizontal	Server	Intel®	Intel® Xeon® Processor E5, Intel® Xeon® Processor E7
	AOM-TPM-9655H-C	Horizontal	Client	Intel®	Intel® Core™ i5 Processor Intel® Core™ i7 Processor, Intel® Xeon® Processor E3
TPM 2.0	AOM-TPM-9665V	Vertical	N/A	Intel	Any MB's Supported CPU
	AOM-TPM-9665V-S	Vertical	Server	Intel®	Intel® Xeon® Processor E5, Intel® Xeon® Processor E7
	AOM-TPM-9665V-C	Vertical	Client	Intel®	Intel® Core™ i3 Processor, Intel® Core™ i5 Processor, Intel® Core™ i7 Processor, Intel® Xeon® Processor E3
	AOM-TPM-9665H	Horizontal	N/A	Intel	Any MB's Supported CPU
	AOM-TPM-9665H-S	Horizontal	Server	Intel®	Intel® Core™ i5 Processor, Intel® Core™ i7 Processor
	AOM-TPM-9665H-C	Horizontal	Client	Intel®	Intel® Core™ i5 Processor, Intel® Core™ i7 Processor, Intel® Xeon® Processor E3

\* TPM Provisioning is required for TXT function, selecting server or client provisioning depends on the CPU and MB that is going to be used

# Mobile Racks & Drive Kits

**High Performance,  
Scalability & Flexibility for  
Next Generation Enterprise  
Server/Storage Solutions**



SAS 3.0 (12Gbps)

SAS 3.0 (12Gbps)



SAS 3.0/SATA 3.0

SAS 3.0/SATA 3.0

SAS 2.0/SATA 3.0

Model Part#	CSE-M14TQC	CSE-M28SACB / CSE-M28SACB-OEM	CSE-M28SAB / CSE-M28SAB-OEM
Occupancy	1 x 5.25" drive bays	2x 5.25" drive bays	2x 5.25" drive bays
Capacity	4 x 2.5" hot-swap SAS 3.0/SATA 3.0 hard drives	8x 2.5" hot-swap SAS 3.0/SATA 3.0 hard drives	8x 2.5" hot-swap SAS2.0/SATA 3.0 hard drives
Expander Card	N/A	N/A	N/A
Cooling Subsystem	40mm exhaust fan	40mm exhaust fan (CSE-M28SACB only)	40mm exhaust fan (CSE-M28SAB only)
System Monitoring	<ul style="list-style-type: none"> <li>Overheat LED &amp; alarm</li> <li>Drive activity LED</li> <li>Fan failure LED</li> <li>4x 7-pin SATA connectors (support 12Gbps)</li> </ul>	<ul style="list-style-type: none"> <li>Overheat LED &amp; alarm</li> <li>Drive activity LED &amp; failure LED</li> <li>Fan failure LED &amp; Alarm (CSE-M28SACB only)</li> <li>2x MiniSAS HD connectors</li> </ul>	<ul style="list-style-type: none"> <li>Fan fail detection LED &amp; alarm (CSE-M28SAB only)</li> <li>Overheat LED indication alarm</li> <li>Drive activity/failure LED</li> <li>2x iPASS connectors</li> </ul>
Dimensions	5.8"W x 1.6"H x 7.9"H (147mm x 40mm x 200mm)	CSE-M28SACB: 5.8"W x 3.4"H x 7.4"D (146 x 85 x 187mm) CSE-M28SACB-OEM: 5.8"W x 3.4"H x 6.2"D (146 x 85 x 157mm)	CSE-M28SAB: 5.8"W x 3.4"H x 7.4"D (146 x 85 x 187mm) CSE-M28SAB-OEM: 5.8"W x 3.4"H x 6.2"D (146 x 85 x 157mm)
Gross Weight	4 lbs	5 lbs	5 lbs

**New!** SAS 3.0 (12Gbps)

**New!** SAS 3.0 (12Gbps)



SAS/SATA

SAS 3.0/SATA 3.0

SAS 3.0/SATA 3.0

Model Part#	CSE-M35T-1/M35TQ	MCP-220-82616-0N MCP-220-83608-0N MCP-220-84610-0N	MCP-220-81506-0N MCP-220-81504-0N
Occupancy	3x 5.25" drive bays	1x rear drive bay	1x slim DVD or slim floppy size drive bay
Capacity	5x 3.5" hot-swap SAS/SATA hard drives	2x 2.5" hot-swap SAS3/SATA3 hard drives	1x 2.5" hot-swap SAS3/SATA3 hard drive
Expander Card	N/A	N/A	N/A
Cooling Subsystem	90mm exhaust fan	N/A	N/A
System Monitoring	<ul style="list-style-type: none"> <li>Fan fail detection LED &amp; alarm</li> <li>Overheat LED indication</li> <li>Drive activity LED</li> <li>SCM35TQ has "Drive Failure LED"</li> </ul>	<ul style="list-style-type: none"> <li>Monitoring drive activity, rebuild or failure</li> <li>Jumper settings for various configurations</li> <li>12G support with optional CBL-SAST-0699</li> </ul>	<ul style="list-style-type: none"> <li>Monitoring drive activity, rebuild or failure</li> <li>Support SGPIO if connected to logical port #0</li> <li>12G support with optional CBL-SAST-0699</li> <li>Slim drive tray (up to 9.5mm)</li> </ul>
Dimensions	5.8"W x 5"H x 9.7"D (146 x 129 x 245mm)	82616: 3.26" x 1.36" x 6.26" (83x35x159mm) 83608: 3.2" x 1.6" x 6.1" (81x41x155mm) 84610: 6.0" x 0.76" x 6.7" (152x20x170mm)	Slim DVD size: 5.05" W x 0.5" H x 6.3" D (128x13x160mm) Slim floppy size: 3.8" W x 0.5" H x 6.3" D (97x13x160mm)
Gross Weight	7.5 lbs	1.5 lbs	1 lbs

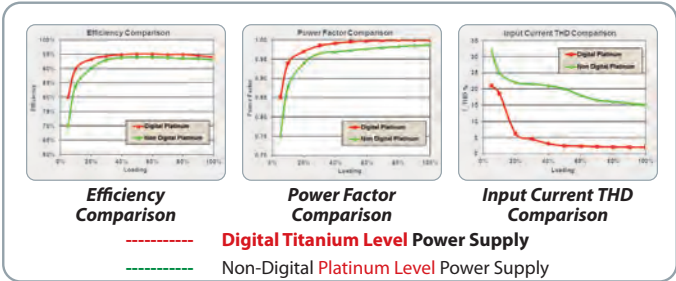


# Power Supplies

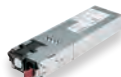
## Digital Switching Power Supplies

### 96% Titanium Level Power Efficiency!

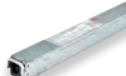
- New generation Digital Switching Power Supplies
- Improved power efficiency (5~10%) in light loading
- Improved power factory correction (5~10%) in light loading
- Reduce current THD (15%) power transmission loss
- Real-time monitoring & enhanced system reliability



Model	PWS-1K02A-1R	PWS-1K03A-1R	PWS-1K04A-1R	PWS-1K62A-1R	PWS-1K22A-1R
Total Output Power	800W / 1000W	800W / 1000W	800W/1000W	1000W / 1600W	800W / 1200W
Input	100-127Vac/200-240Vac/ 50-60Hz	100-127Vac/ 200-240Vac/ 50-60Hz	100-127Vac / 200-240Vac / 50-60Hz	100-127Vac/200-240Vac/ 50-60Hz	100-127Vac / 200-240Vac/ 50-60Hz
Form Factor	1U	1U	1U	1U	1U
Dimension (LxWxH) cm	20.3 x 7.35 x 4	33.6 x 7.6 x 4	18.5 x 7.35 x 4	20.3 x 7.35 x 4	20.3 x 7.35 x 4
Output Type*	25Pair Gold Finger	Backplanes Available	BackPlanes (gold finger)	25Pair Gold Finger	25Pair Gold Finger
Redundant	Yes	Yes	Yes	Yes	Yes
PC Remote Monitoring	FRU Data and PMBus	FRU Data and PMBus	FRU data and PMBus	FRU Data and PMBus	FRU Data and PMBus
+5V	-	-	-	-	-
+12V	66.7A (100Vac-127Vac), 83A (200Vac-240Vac)	66.7A (100Vac-127Vac) 83A (200Vac-240Vac)	66.7A (100-127Vac) / 83A (200-240Vac)	83.3A (100Vac-127Vac), 133A (200Vac-240Vac)	66.7A (100Vac-127Vac) / 100A (200Vac-240Vac)
+3.3V	-	-	-	-	-
5VSB	12Vsb 2.1A	4A	12Vsb 2.1A	12Vsb 2.1A	12Vsb 2.1A
-12V	-	-	-	-	-
Efficiency					



Model	PWS-2K05A-1R	PWS-2K04A-1R PWS-2K04F-1R	PWS-2K20A-1R	PWS-2K60A-1R	PWS-1K68A-1R	PWS-1K23A-1R
Total Output Power	1000W/1800/1980/2000	1000W / 1800W / 1980W / 2000W	1200W/1800W/1980W/ 2090W/2200W	2600W	800W / 1600W	1000W / 1200W
Input	100-120/200-220/220-230/ 230-240Vac/ 50-60Hz	100-127/200-220Vac/ 220-230/230-240Vac/ 50-60Hz	100-127Vac/ 200-220Vac/ 220-230Vac/ 230-240Vac/ 220-240Vac (UL, cUL only)/ 50-60Hz	208-240Vac 220-240Vac (for CQC only)	100-140Vac/ 180-240Vac/ 50-60Hz	100-127Vac / 180-240Vac/ 50-60Hz
Form Factor	1U	1U	1U	1U	1U	1U
Dimension (LxWxH) cm	26.5 x 7.35 x 4	33.6 x 7.6 x 4	33.6 x 7.6 x 4	48x 4.5 x 4	33.6 x 7.6 x 4	33.6 x 7.6 x 4
Output Type*	Backplanes Available	Backplanes Available	BackPlanes (gold finger)	Backplanes (connector)	Backplanes available	Backplanes Available
Redundant	Yes	Yes	Yes	Yes	Yes	Yes
PC Remote Monitoring	FRU Data and PMBus	FRU Data and PMBus	FRU data and PMBus	FRU Data	FRU Data and PMBus	FRU Data and PMBus
+5V	-	-	-	-	-	-
+12V	83.3A (100-120Vac), 150A (200-220Vac), 165A (220-230Vac), 166.7A (230-240Vac); UL/cUL use: 166.7A (200-240Vac)	83.3A (100-127Vac) 150A (200-220Vac) 165A (220-230Vac) 166.7A (230-240Vac)	100A (100-127Vac)/ 150A (200-220Vac)/ 165A (220-230Vac)/ 174.17A (230-240Vac)/ 183.3A (220-240Vac, UL/cUL only)	216.6A	66A (100Vac-127Vac), 133A 180Vac-240Vac)	83A (100Vac-140Vac), 100A (200Vac-240Vac)
+3.3V	-	-	-	-	-	-
5VSB	12Vsb 2.1A	1A	1A	4.5A	1A	4A
-12V	-	-	-	-	-	-
Efficiency						

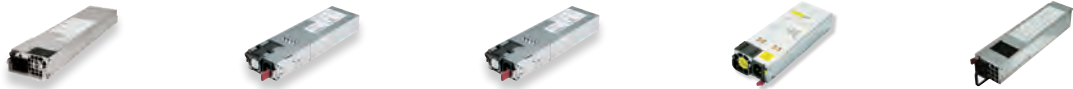


Model	PWS-2K21A-2R	PWS-802A-1R	PWS-1K05A-1R	PWS-2K22A-1R	PWS-2K21A-BR
Total Output Power	1200W/1800W/1980W/ 2090W/2200W	800W	800W / 1000W	1200W / 1800W / 1980W / 2090W / 2200W	1200W/1800W/1980W/ 2090W/2200W
Input	100-127Vac/ 200-220Vac/220-230Vac/ 230-240Vac/ 180-220Vac (UL, cUL only)/ 230-240Vdc (CCC only)/ 50-60Hz	100-240Vac / 200-240Vdc / 50-60Hz	100-127Vac/200-240Vac/ 50-60Hz	100-127 / 200-220 / 220-230 / 230-240 / 220-240 Vac / 50-60Hz / 230-240Vdc	100-127Vac/ 200-220Vac/ 220- 230Vac/ 230-240Vac/ 220-240Vac (UL, cUL only)/ 180-220Vac (UL, cUL only)/ 230- 240Vdc (CCC only)/ 50-60Hz Microblade/ superblade
Form Factor	4U	1U	1U	1U	Microblade/ superblade
Dimension (LxWxH) cm	10.65 x 20.35 x 8.24	33.6 x 7.6 x 4	36 x 3.8 x 4	48 x 4.5 x 4	24.53 x 10.65 x 8.4
Output Type*	BackPlanes (gold finger)	BackPlanes (gold finger)	Backplanes Available	Backplanes Available	BackPlanes (gold finger)
Redundant	Yes	Yes	Yes	Yes	Yes
PC Remote Monitoring	FRU data and PMBus	FRU data and PMBus	FRU Data and PMBus	FRU Data and PMBus	FRU data and PMBus
+5V	-	-	-	-	-
+12V	100A (100-127Vac) / 150A (200-220Vac) / 165A (220- 230Vac) / 174.17A (230-240Vac) / 183.3A (220-240Vac, UL, cUL only) / 174.17A (180-220Vac, UL, cUL only) / 174.17A (230-240Vdc, CCC only)	66A	66.7A (100Vac-127Vac), 83A (200Vac-240Vac)	100A (100-127Vac) / 150A (200-220Vac) 165A (220-230Vac) / 174.17A (230-240Vac) (180-220Vac, UL/cUL) / (230-240Vdc, CCC) 183.33A (220-240Vac, UL/cUL)	100A (100-127Vac) / 150A (200-220Vac) / 165A (220- 230Vac) / 174.17A (230-240Vac) / 183.3A (220-240Vac, UL, cUL only) / 174.17A (180-220Vac, UL, cUL only) / 174.17A (230-240Vdc, CCC only)
+3.3V	-	-	-	-	-
5VSB	-	4A	4A	12Vsb 2.1A	-
-12V	12Vsb 2.1A	-	-	-	12Vsb 2.1A
Efficiency					

# Power Supplies



Model	PWS-2K02P-1R PWS-2K02F-1R	PWS-1K41P-1R	PWS-1K28P-SQ	PWS-1K21P-1R	PWS-920P-SQ	PWS-741P-1R
Total Output Power	1100W / 1400W / 1800W / 1980W / 2000W	1100W / 1400W	1000W / 1280W	1000W / 1200W	920W	740W
Input	100-240Vac / 50-60Hz	100-240Vac / 50-60Hz	100-240Vac / 50-60Hz	100-240Vac / 50-60Hz	100-240Vac / 50-60Hz	100-240Vac / 50-60Hz
Form Factor	1U	1U	1U	1U	1U	1U
Dimension (LxWxH) cm	33.6 x 7.6 x 4	33.6 x 7.6 x 4	33.6 x 7.6 x 4	33.6 x 7.6 x 4	33.6 x 7.6 x 4	33.6 x 7.6 x 4
Output Type*	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available
Redundant	Yes	Yes	Yes	Yes	Yes	Yes
iC Remote Monitoring	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMBus
+5V	-	-	-	-	-	-
+12V	91.7A (100-120Vac) 116.7A (120-140Vac) 150A (200-220Vac) 165A (220-230Vac) 166.7A (230-240Vac) UL/cUL: 166.7A (200-240Vac)	92A (100-140Vac) 116A (180-240Vac)	83A (100-140Vac) 106.7A (180-240Vac)	83A (100-140Vac) 100A (180-240Vac)	75A	61.7A
+3.3V	-	-	-	-	-	-
5VSB	4A	4A	4A	4A	4A	4A
-12V	-	-	-	-	-	-
Efficiency						



Model	PWS-721P-1R	PWS-2K03P-1R	PWS-1K66P-1R	PWS-751P-1R	PWS-606P-1R
Total Output Power	720W	1000/1800/1980/2000W	1000W / 1600W	750W	600W
Input	100-240Vac / 50-60Hz	100-120/ 200-220/ 220-230/230-240Vac / 50-60Hz	100-127Vac, 200-240Vac / 50-60Hz	100-127, 200-240Vac / 50-60Hz	100-240Vac / 50-60Hz
Form Factor	1U	1U	1U	1U	1U
Dimension (LxWxH) cm	33.6 x 7.6 x 4	26.5 x 7.35 x 4	26.5 x 7.35 x 4	20.3 x 7.35 x 4	22 x 5.45 x 4
Output Type*	Backplanes Available	Backplanes available	Backplanes Available	25Pair Gold Finger	Backplanes Available
Redundant	Yes	Yes	Yes	Yes	Yes
iC Remote Monitoring	PMBus	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMBus
+5V	-	-	-	-	-
+12V	59A	83.3A (100-120Vac), 150A (200-220Vac), 165A (220-230Vac), 166.7A (230-240Vac); UL/cUL use: 166.7A (200-240Vac)	82A (100-127Vac) 132A (200-240Vac)	62.5A	50A
+3.3V	-	-	-	-	-
5VSB	3A	12Vsb 3.5A	12Vsb 2A	12Vsb 2.1A	3A
-12V	-	-	-	-	-
Efficiency					



Model	PWS-407P-1R	PWS-982P-1R	PWS-706P-1R	PWS-707P-1R	PWS-504P-1R
Total Output Power	400W	850W / 980W	700W / 750W	700W / 750W	500W
Input	100-240Vac / 200-240Vdc / 50-60Hz	100-240Vac / 50-60Hz	200-240Vdc/100-140Vac / 200-240Vac/50-60Hz	200-240Vdc/100-140Vac / 200-240Vac/50-60Hz	100-240Vac / 50-60Hz
Form Factor	1U	1U	1U	1U	1U
Dimension (LxWxH) cm	22 x 5.45 x 4	32 x 5.45 x 4	32 x 5.45 x 4.025	32 x 5 x 4.025	32 x 5.45 x 4.025
Output Type*	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available
Redundant	Yes	Yes	Yes	Yes	Yes
iC Remote Monitoring	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMBus
+5V	-	-	-	-	-
+12V	33A	70A (100-140Vac) 81A (180-240Vac)	58A (100-140Vac) 62A (200-240Vac) 62A (200-240Vdc)	58A (100-140Vac) 62A (200-240Vac) 62A (200-240Vdc)	42A
+3.3V	-	-	-	-	-
5VSB	3A	4A	3A	4A	4A
-12V	-	-	-	-	-
Efficiency					

# Power Supplies



Model	PWS-1K43F-1R	PWS-1K41F-1R	PWS-1K67P-1R	PWS-605P-1H	PWS-341P-1H
Total Output Power	1200W / 1400W	1200W / 1400W	1200W / 1400W / 1600W	600W	340W
Input	100-240Vac / 50-60Hz	100-240Vac / 50-60Hz	100-120 / 120-140 / 200-240Vac / 50-60Hz	100-240Vac / 50-60Hz	100-240Vac / 50-60Hz
Form Factor	1U	1U	Micro-Blade	1U	1U
Dimension (LxWxH) cm	29.8 x 10.5 x 4	29.8 x 10.5 x 4	24.13 x 10.65 x 8.4	28 x 7.6 x 4	28 x 7.6 x 4
Output Type*	Backplanes Available	Backplanes Available	Micro-Blade Midplane	24pin ATX Cable	24pin ATX Cable
Redundant	Yes	Yes	Yes	N/A	N/A
PC Remote Monitoring	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMBus
+5V	-	-	-	18A	16A
+12V	100A (100-140Vac) 117A (180-240Vac)	100A (100-140Vac) 116A (180-240Vac)	100A (100-120Vac) / 116.7 (120-140Vac) / 133A (200-240Vac)	49A	28A
+3.3V	-	-	-	15A	15A
5VSB	6A	6A	12Vsb 2A	3A	3A
-12V	-	-	-	.5A	.5A
Efficiency					



Model	PWS-203-1H	PWS-601-1H	PWS-505P-1H	PWS-441P-1H	PWS-350-1H
Total Output Power	200W	600W/680W	500W	440W/480W	350W
Input	100-240Vac / 50-60Hz	100-240Vac / 50-60Hz	100-240Vac / 50-60Hz	100-240Vac / 50-60Hz	100-240Vac / 50-60Hz
Form Factor	1U	1U	1U	1U	1U
Dimension (LxWxH) cm	19.3 x 7.6 x 4	22 x 10 x 4	18 x 10 x 4	22 x 10 x 4	18 x 10 x 4
Output Type*	20pin ATX Cable	24pin ATX Cable	24pin ATX Cable	24pin ATX Cable	24Pin ATX cable
Redundant	N/A	N/A	N/A	N/A	N/A
PC Remote Monitoring	N/A	N/A	FRU Data and PMBus	FRU Data and PMBus	FRU Data and PMBus
+5V	8A	20A	15A	18A	15A
+12V	16A	49A (100-140Vac) 56A (180-240Vac)	41A	35.8A (100-140Vac) 39.1A (180-240Vac)	29A
+3.3V	8A	16A	12A	15A	12A
5VSB	2A	3A	3A	3A	3A
-12V	.5A	.5A	.2A	.5A	0.2A
Efficiency					



Model	PWS-351-1H	PWS-1K25P-PQ	PWS-903-PQ	PWS-668-PQ	PWS-502-PQ
Total Output Power	350W	1000/1200W	900W	668W	500W
Input	100-240Vac / 50-60Hz	100-240Vac / 50-60Hz	100-240Vac / 50-60Hz	100-240Vac / 50-60Hz	100-240Vac / 50-60Hz
Form Factor	1U	Tower	Mid-Tower	Mid-Tower	Standard ATX
Dimension (LxWxH) cm	22 x 10 x 4	18.5 x 15 x 8.6	19 x 15 x 8.6	18.5 x 15 x 8.6	14 x 15 x 8.6
Output Type*	24pin ATX Cable	24pin ATX Cable	24 pin ATX Cable	24 pin ATX Cable	24pin ATX Cable
Redundant	N/A	N/A	N/A	N/A	N/A
PC Remote Monitoring	N/A	FRU Data and PMBus	N/A	N/A	N/A
+5V	18A	20A	25A	11.8A	20A
+12V	29A	83A (100-114Vac) 99A (115-240Vac)	12V1 25A; 12V2 25A; 12V3 25A; 12V4 25A	54A	12V1 16A; 12V2 18A; 12V3 18A; 12V4 18A
+3.3V	15A	20A	25A	12A	15A
5VSB	3A	3A	4A	2A	3A
-12V	.5A	.3A	.5A	.1A	.5A
Efficiency					

# Power Supplies

## DC Power Solutions



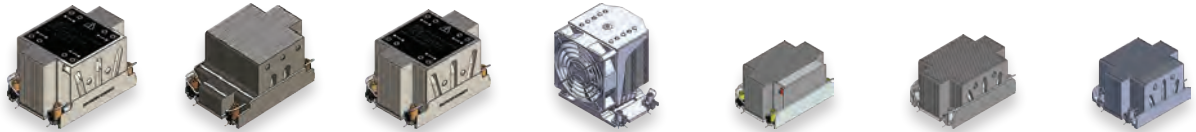
Model	PWS-654-1R	PWS-601D-1R	PWS-1K11P-1R	PWS-711-1R	PWS-1K30D-1R	PWS-1K60D-1R
<b>Total Output Power</b>	650W	600W	850W / 1010W	710W	1300W	1600W
<b>Input</b>	-44Vdc to -72Vdc	-44Vdc to -65Vdc	-36Vdc to -76Vdc	-36Vdc to -76Vdc	-48Vdc to -65Vdc	-48Vdc to -60Vdc
<b>Form Factor</b>	1U	1U	1U	1U	1U	1U
<b>Dimension (LxWxH) cm</b>	32.2 x 5.45 x 4	22 x 5.45 x 4	33.6 x 7.6 x 4	33.6 x 7.6 x 4	20.3 x 7.35 x 4	26.5 x 7.35 x 4
<b>Output Type*</b>	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available	25pairs Gold Finger Connector	25pairs Gold Finger Connector
<b>Redundant</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>PC Remote Monitoring</b>	FRU Data	FRU Data	FRU Data and PMBus	FRU Data and PMBus	FRU Data	FRU Data and PMBus
<b>+5V</b>	-	-	-	-	-	-
<b>+12V</b>	53.28A	50A	70A (-36 to -42Vdc) 83A (-43 to -76Vdc)	59A	108.3A	133A
<b>+3.3V</b>	-	-	-	-	-	-
<b>5VSB</b>	3A	3A	4A	4A	12Vsb 2.1A	12Vsb 3.5A
<b>-12V</b>	-	-	-	-	-	-
<b>Efficiency</b>	Typical 90%+	Typical 90%+	Typical 90%+	Typical 88%+	-	Typical 90%+



Model	PWS-2K03D-1R	PWS-2K04A-240	PWS-706P-1R	PWS-707P-1R	PWS-407P-1R
<b>Total Output Power</b>	1600W / 2000W	2000W / 1980W / 1800W	700W/750W	700W/750W	400W
<b>Input</b>	-36Vdc to -44Vdc -45Vdc to -66Vdc	230-240Vdc/ 200-220/220-230/230-240Vac/ 50-60Hz	100-140Vac/200-240Vac/ 200-240Vdc 50-60Hz	100-140Vac/200-240Vac/ 200-240Vdc 50-60Hz	100-240Vac/ 200-240Vdc/ 50-60Hz
<b>Form Factor</b>	1U	1U	1U	1U	1U
<b>Dimension (LxWxH) cm</b>	33.6 x 7.6 x 4	33.6 x 7.6 x 4	32 x 5.45 x 4.025	32 x 5 x 4.025	22 x 5.45 x 4
<b>Output Type*</b>	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available	Backplanes Available
<b>Redundant</b>	Yes	Yes	Yes	Yes	Yes
<b>PC Remote Monitoring</b>	PMBus 1.2	FRU Data and PMbus	FRU Data and PMbus	FRU Data and PMbus	FRU Data and PMbus
<b>+5V</b>	-	-	-	-	-
<b>+12V</b>	133.3A (-36Vdc to -44Vdc) 166.7A (-45Vdc to -66Vdc)	150A (200-220Vac), 165A (220-230Vac), 166.7A (230-240Vac), 166.7A(230-240Vdc)	58A (100-140Vac) / 62A (200-240Vac) / 62A (200-240Vdc)	58A (100-140Vac) / 62A (200-240Vac) / 62A (200-240Vdc)	33A
<b>+3.3V</b>	-	-	-	-	-
<b>5VSB</b>	6A	1A	3A	3A	3A
<b>-12V</b>	-	-	-	-	-
<b>Efficiency</b>	Typical 90%	Typical 96%	Typical 94%	Typical 94%	Typical 94%

# Heatsinks

## X12 Heatsinks support 3rd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors



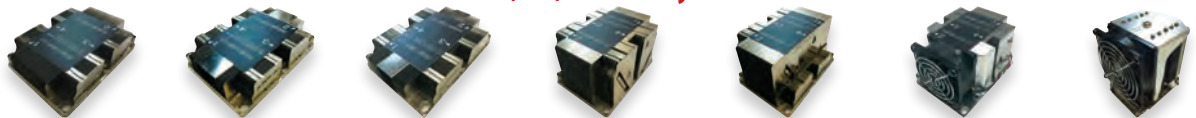
Part Number	SNK-P0078PC	SNK-P0078PR	SNK-P0078P	SNK-P0081AP4	SNK-P0079PC	SNK-P0079P	SNK-P0078PW
<b>Form Factor</b>	2U UP DP	2U UP DP	2U UP DP	4U UP	2U UP DP	2U UP DP	2U UP DP
<b>CPU Type</b>	3rd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors						

## X12 Heatsinks



Part Number	SNK-P0078AP4	SNK-P0080AP4	SNK-P0077VM	SNK-P0077P	SNK-P0077PW	SNK-P0077PM	SNK-P0077V
<b>Form Factor</b>	2U UP DP	4U UP DP	1U UP DP	1U UP DP	1U UP DP	1U UP DP	1U UP DP
<b>CPU Type</b>	3rd Gen Intel® Xeon® Scalable Processors and Intel® Xeon® Scalable Processors						

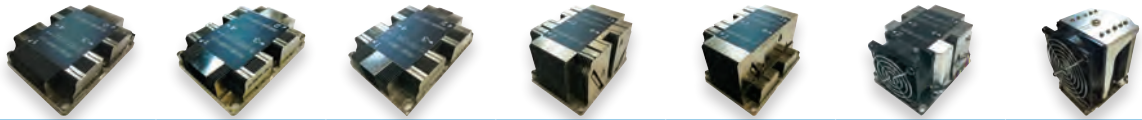
## X11 Heatsinks 1U/2U/4U Passive/Active CPU Heatsinks for UP, DP, and MP Systems



Part Number	SNK-P0067PS	SNK-P0067PSM	SNK-P0067PSMB	SNK-P0068PS	SNK-P0068PSC	SNK-P0068APS4	SNK-P0070APS4
<b>Form Factor</b>	1U Passive Narrow Retention Mechanism UP/DP	1U Passive Proprietary (Middle Air Channel) Narrow Retention Mechanism DP	1U Passive Proprietary (Middle Air Channel) Narrow Retention Mechanism DP	2U Passive Narrow Retention Mechanism UP/DP	2U Passive Proprietary (Side Air Channel) Narrow Retention Mechanism DP	2U Active Narrow Retention Mechanism UP/DP	4U Active Narrow Retention Mechanism UP/DP
<b>CPU Type</b>	Intel® Xeon® Scalable Processors	Intel® Xeon® Scalable Processors	Intel® Xeon® Scalable Processors	Intel® Xeon® Scalable Processors	Intel® Xeon® Scalable Processors	Intel® Xeon® Scalable Processors	Intel® Xeon® Scalable Processors
<b>Socket Type</b>	LGA 3647-0	LGA 3647-0	LGA 3647-0	LGA 3647-0	LGA 3647-0	LGA 3647-0	LGA 3647-0
<b>Major Integrated Part</b>	Copper Fins Copper + Aluminium Base Heat Pipes	Copper Fins Copper + Aluminium Base Heat Pipes	Copper Fins Copper + Aluminium Base Heat Pipes	Copper Fins Copper + Aluminium Base Heat Pipes	Copper Fins Copper + Aluminium Base Heat Pipes	Aluminium Fins Copper + Aluminium Base Heat Pipes Cooling Fan (Front Side)	Aluminium Fins Copper + Aluminium Base Heat Pipes Cooling Fan (Front Side)
<b>Dimension (mm)</b>	108L x 78W x 25.5H	108L x 78W x 25.5H	108L x 78W x 25.5H	108L x 78W x 64H	108L x 78W x 64H	108L x 78W x 64H	108L x 92.5W x 126H
<b>Mounting Method</b>	Springs + Screws	Springs + Screws	Springs + Screws	Springs + Screws	Springs + Screws	Springs + Screws	Springs + Screws

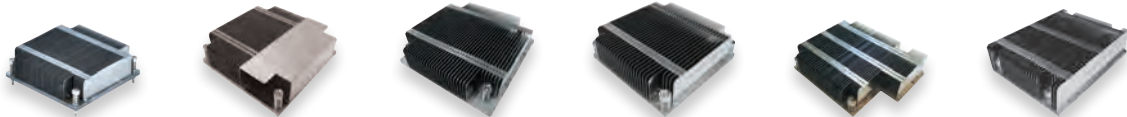
# Heatsinks

## X11 Heatsinks 1U/2U/4U Passive/Active CPU Heatsinks for UP, DP, and MP Systems



Part Number	SNK-P0067PS	SNK-P0067PSM	SNK-P0067PSMB	SNK-P0068PS	SNK-P0068PSC	SNK-P0068APS4	SNK-P0070APS4
<b>Form Factor</b>	1U Passive Narrow Retention Mechanism UP/DP	1U Passive Proprietary (Middle Air Channel) Narrow Retention Mechanism DP	1U Passive Proprietary (Middle Air Channel) Narrow Retention Mechanism DP	2U Passive Narrow Retention Mechanism UP/DP	2U Passive Proprietary (Side Air Channel) Narrow Retention Mechanism DP	2U Active Narrow Retention Mechanism UP/DP	4U Active Narrow Retention Mechanism UP/DP
<b>CPU Type</b>	Intel® Xeon® Scalable processors	Intel® Xeon® Scalable processors	Intel® Xeon® Scalable processors	Intel® Xeon® Scalable processors	Intel® Xeon® Scalable processors	Intel® Xeon® Scalable processors	Intel® Xeon® Scalable processors
<b>Socket Type</b>	LGA 3647-0	LGA 3647-0	LGA 3647-0	LGA 3647-0	LGA 3647-0	LGA 3647-0	LGA 3647-0
<b>Major Integrated Part</b>	Copper Fins Copper + Aluminium Base Heat Pipes	Copper Fins Copper + Aluminium Base Heat Pipes	Copper Fins Copper + Aluminium Base Heat Pipes	Copper Fins Copper + Aluminium Base Heat Pipes	Copper Fins Copper + Aluminium Base Heat Pipes	Aluminium Fins Copper + Aluminium Base Heat Pipes Cooling Fan (Front Side)	Aluminium Fins Copper + Aluminium Base Heat Pipes Cooling Fan (Front Side)
<b>Dimension (mm)</b>	108L x 78W x 25.5H	108L x 78W x 25.5H	108L x 78W x 25.5H	108L x 78W x 64H	108L x 78W x 64H	108L x 78W x 64H	108L x 92.5W x 126H
<b>Mounting Method</b>	Springs + Screws	Springs + Screws	Springs + Screws	Springs + Screws	Springs + Screws	Springs + Screws	Springs + Screws

## X11/X10, 1U Passive CPU Heatsinks for UP, DP, and MP Systems



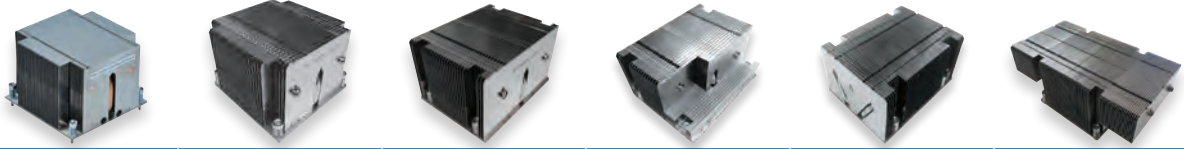
Part Number	SNK-P0037P	SNK-P0041	SNK-P0046P	SNK-P0047P	SNK-P0047PD	SNK-P0047PS
<b>Form Factor</b>	1U Passive, DP	Proprietary 1U Passive, DP (X9DBL Front CPU)	1U Passive, UP (X11/X10/X9)	1U Passive, UP, DP	1U Passive, Proprietary, DP	1U Passive, UP, DP, MP
<b>CPU Type</b>	Intel® Xeon® Processor E5-2400 & Intel® Xeon® Processor E5-2400 v2 product families	Intel® Xeon® Processor E5-2400 & Intel® Xeon® Processor E5-2400 v2 product families	Intel® Xeon® Processor E3-1200 product family; Intel® Core™ i3 Processor; Intel® Pentium® Processor & Intel® Celeron® Processor	Intel® Xeon® Processor E5-2600 v4/v3/v2 product families	Intel® Xeon® Processor E5-2600 v4/v3/v2 product families	Intel® Xeon® Processor E5-2600 v4/v3/v2, and Intel® Xeon® Processor E5-4600 product families
<b>Socket Type</b>	LGA 1356	LGA 1356	LGA 1155/1151/1150	LGA 2011 (Square ILM)	LGA 2011 (Square ILM)	LGA 2011 (Narrow ILM)
<b>Major Integrated Part</b>	Copper + Aluminum Base Aluminum Fins Heat Pipes	Copper Base Aluminum Fins	Copper + Aluminum Base Aluminum Fins Heat Pipes	Aluminum Base Aluminum Fins Heat Pipes	Aluminum Base Aluminum Fins Heat Pipes	Aluminum Base Aluminum Fins Heat Pipes
<b>Dimension (mm)</b>	90L x 90W x 27H mm	90L x 90W x 27H mm	95L x 95W x 27H mm	90L x 90W x 26H mm	90L x 110W x 27H mm	104L x 80W x 26H mm
<b>Mounting Method</b>	Screws + Springs	Screws + Springs	Screws + Springs Mounting Bracket (BKT-0028L Included)	Screws + Springs	Screws + Springs	Screws + Springs



Part Number	SNK-P0047PSC	SNK-P0047PSM	SNK-P0047PSR	SNK-P0047PS+	SNK-P0047PW	SNK-P0057P	SNK-P0057PS
<b>Form Factor</b>	Proprietary 1U Passive, DP (1U 3/4 GPUs Front CPU)	Proprietary 1U Passive, DP (2U Twin2+ Front CPU), Twin Pro2	Low Profile Passive, Proprietary, UP (X10/ X9), 12-node MicroCloud Servers	Proprietary 1U Passive, UP (X10/X9) (Micro Cloud Server)	Proprietary 1U Passive, DP (2U Twin2 Rear CPU)	1U Passive, UP, DP	1U Passive, UP, DP, MP
<b>CPU Type</b>	Intel® Xeon® Processor E5-2600 v4/v3/v2 product families	Intel® Xeon® Processor E5-2600 v4/v3/v2 product families	Intel® Xeon® Processor E3-1200 v4/v3/v2 product families; Intel® Core™ i3 Processor; Intel® Pentium® Processor & Intel® Celeron® Processor	Intel® Xeon® Processor E3-1200 v4/v3/v2 product families; Intel® Core™ i3 Processor; Intel® Pentium® Processor & Intel® Celeron® Processor	Intel® Xeon® Processor E5-2600 v4/v3/v2 product families	Intel® Xeon® Processor E5-2600 v4/v3/v2 product families	Intel® Xeon® Processor E5-2600 v4/v3/v2, and Intel® Xeon® Processor E5-4600 product families
<b>Socket Type</b>	LGA 2011 (Narrow ILM)	LGA 2011 (Narrow ILM)	LGA 1150 & LGA 1155	LGA 1155 & LGA1150, LGA2011 (Narrow ILM).	LGA 2011 (Square ILM)	LGA 2011 (Square ILM)	LGA 2011 (Narrow ILM)
<b>Major Integrated Part</b>	Aluminum Base Aluminum Fins Heat Pipes	Aluminum Base Aluminum Fins Heat Pipes	Copper + Aluminium Base Copper Fins Heat Pipes	Copper + Aluminium Base Aluminum Fins Heat Pipes	Aluminum Base Copper + Aluminium Fins Heat Pipes	Copper + Aluminium Base Copper Fins Heat Pipes	Copper + Aluminium Base Copper Fins Heat Pipes
<b>Dimension</b>	104L x 80W x 26H mm	104L x 80W x 26H mm	104L x 80W x 15H mm	104L x 80W x 30H mm	90L x 116W x 26H mm	90L x 90W x 26H mm	104L x 80W x 26H mm
<b>Mounting Method</b>	Screws + Springs	Screws + Springs	Springs + Screws	Screws + Springs	Screws + Springs	Screws + Springs	Screws + Springs

# Heatsinks

## X10 and X9 2U Passive CPU Heatsinks for UP, DP, and MP Systems



Part Number	SNK-P0038P	SNK-P0048P	SNK-P0048PS	SNK-P0048PSC	SNK-P0048PW	SNK-P2048P
Form Factor	2U(+) Passive, DP	2U(+) Passive, UP, DP	2U(+) Passive, UP, DP, MP	Proprietary 2U Passive, DP (2U WIO+ Server)	Proprietary 2U Passive, DP (2U Twin Rear CPU)	Proprietary 2U Passive, DP (HFT Series Servers)
CPU Type	Intel® Xeon® Processor E5-2400 product family & E5-2400 v2 product families	Intel® Xeon® Processor E5-2600 v4/v3/v2 product families	Intel® Xeon® Processor E5-2600 product family and Intel® Xeon® Processor E5-4600 product families	Intel® Xeon® Processor E5-2600 v4/v3/v2 product families	Intel® Xeon® Processor E5-2600 v4/v3/v2 product families	Intel® Xeon® Processor E5-2600 v4/v3/v2 product families
Socket Type	LGA 1356	LGA2011 (Square ILM)	LGA2011 (Narrow ILM)	LGA2011 (Narrow ILM)	LGA 2011 (Square ILM)	LGA2011 (Square ILM)
Major Integrated Part	Copper + Aluminum Base Aluminum Fins Heat Pipes	Aluminum Base Aluminum Fins Heat Pipes	Aluminum Base Aluminum Fins Heat Pipes	Aluminum Base Aluminum Fins Heat Pipes	Aluminum Base Copper + Aluminum Fins Heat Pipes	Aluminum Base Aluminum Fins Heat Pipes
Dimension	90L x 90W x 64H mm	90L x 90W x 64H mm	104L x 80W x 64H mm	104L x 80W x 64H mm	90L x 116W x 64H mm	90L x 170W x 64H mm
Mounting Method	Screws + Springs	Screws + Springs	Screws + Springs	Screws + Springs	Screws + Springs	Screws + Springs

## X11/X10/X9 Active CPU Heatsinks for UP and DP Systems



Part Number	SNK-P0035AP4	SNK-P0040AP4	SNK-P0046A4	SNK-P0048AP4	SNK-P0050AP4	SNK-P2050AP4	SNK-P0051AP4
Form Factor	4U Active, DP	4U Active, DP	2U(+) Active, UP (X11/X10/X9)	2U(+) Active, UP, DP	4U Active, UP, DP	Proprietary 4U Active, DP (HFT Series Servers)	4U Active, UP (X11/X10/X9)
CPU Type	Intel® Xeon® Processor E5-2400 & Intel® Xeon® Processor E5-2400 v2 product families	Intel® Xeon® Processor E5-2400 & Intel® Xeon® Processor E5-2400 v2 product families	Intel® Xeon® Processor E3-1200 v6/v5/v4/v3/v2 product families; Intel® Core™ i3 Processor; Intel® Pentium® Processor & Intel® Celeron® Processor	Intel® Xeon® Processor E5-2600 v4/v3/v2 product families	Intel® Xeon® Processor E5-2600 v4/v3/v2 product families	Intel® Xeon® Processor E5-2600 v4/v3/v2 product families	Intel® Xeon® Processor E3-1200 v6/v5/v4/v3/v2 product families; Intel® Core™ Processors; Intel® Pentium® Processor & Intel® Celeron® Processor
Socket Type	LGA 1356	LGA 1356	LGA1155/1151/ 1150	LGA 2011 (Square and Narrow ILMs)	LGA 2011 (Square and Narrow ILMs)	LGA 2011 (Square ILM)	LGA1155/1151/ 1150
Material	Copper Base Aluminum Fins Heat Pipes Cooling Fan (Front Side)	Copper Base Aluminum Fins Heat Pipes Cooling Fan (Rear Side)	Copper Base Aluminum Fins Cooling Fan (Top)	Aluminum Base Aluminum Fins Heat Pipes Cooling Fan (Front Side)	Copper Base Aluminum Fins Heat Pipes Cooling Fan (Front Side)	Copper Base Aluminum Fins Heat Pipes Cooling Fan (Middle Side)	Copper Base Aluminum Fins Heat Pipes Cooling Fan (Front Side)
Dimension	105L x 100W x 126H mm	105L x 100W x 126H mm	90D x 65H mm	85L x 80W x 65L mm	105L x 93W x 126H mm	96L x 130W x 125H mm	105L x 93W x 128H mm
Mounting Method	Screws + Springs Mounting Bracket (BKT-0023L Included)	Screws + Springs	Push-in Pins	Screws + Springs; Mounting Brackets (BKT-0048L-RS and BKT-0048L-RN Included)	Screws + Springs; Mounting Brackets (for Square and Narrow ILMs Included)	Screws + Springs	Back Plate + Springs + Screws BKT-0028L Included

# IPMI (Server Remote Management)

## Onboard IPMI 2.0 for (-F) Motherboards/Servers

Onboard IPMI 2.0 for (-F) Motherboards/Servers  
 Many Supermicro (-F) motherboards now offer IPMI 2.0 capabilities onboard through a dedicated LAN port to support remote management. This convenient remote management capability is provided through an onboard BMC (Baseboard Management Controller) that improves reliability and maintainability while reducing costs. X10 DP motherboards support IPMI 2.0 as a standard feature.

### Monitoring Features:

- Monitor CPU and system temperature
- Monitor on-board voltage (12V, 5V, 5Vst\_by, Vbat, Vcore, memory voltage)
- Monitor and control fan speed
- Chassis intrusion
- Power status (including PMbus support)
- Memory errors
- CPU errors

### Management Features:

- Remote system power control (including ACPI power off)
- Virtual Media and Java based KVM HTML5 (included with price of motherboard)
- SOL (included with price of motherboard)
- E-mail alerts and SNMP traps
- Support for Node Manager
- Mount ISO images

### Security Features:

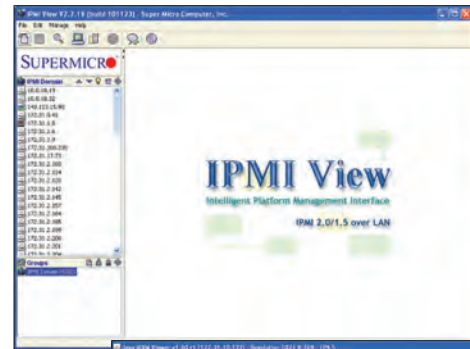
- Firmware firewall
- Restricted access using pre-defined IP address
- Added security with SSL
- Protection from shell injection
- Select/Deselect Services

### Easy Maintenance:

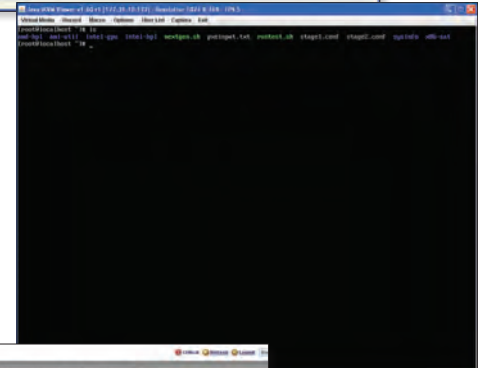
- Configuration utility for DOS, Windows, Linux
- Firmware flash utilities for DOS, Windows, Linux (easy to script)
- Firmware flash using web-browser
- Fail-over access to IPMI over network
- CLI, WEBUI, API and GUI tools to maintain large deployments
- Support OOB BIOS management (for selected HW)

### Added-value Features:

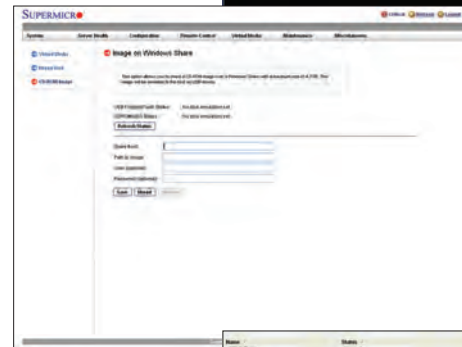
- SMASH
- DCMi
- Active directory and LDAP
- RADIUS



GUI



Remote Console



Virtual Media

Name	Status	Reading
CPU Temp	Normal	No Reading
System Temp	Normal	38 degrees C
CPU1 Voltage	Normal	1.20V volts
CPU2 Voltage	Normal	No Reading
+5V	Normal	4.92V volts
+3.3V	Normal	3.29V volts
CPU1 Current	Normal	1.53A amps
CPU2 Current	Normal	No Reading
+12V	Normal	11.92V volts
+5Vsb	Normal	5.00V volts
MEM	Normal	3.33V volts
Fan1	Normal	3258 RPM
Fan2	Normal	3412 RPM
Fan3	Not Available	No Reading
Fan4	Not Available	No Reading
P1 Status	Normal	OK
P1-Channel1 Temp	Normal	38 degrees C
P1-Channel2 Temp	Normal	37 degrees C
P1-Channel3 Temp	Normal	38 degrees C
P1-Channel4 Temp	Normal	38 degrees C
P1-Channel5 Temp	Normal	38 degrees C
P1-Channel6 Temp	Normal	No Reading
P1-Channel7 Temp	Not Available	No Reading
P1-Channel8 Temp	Not Available	No Reading
P1-Channel9 Temp	Not Available	No Reading
P1-Channel10 Temp	Not Available	No Reading
P1-Channel11 Temp	Not Available	No Reading
P1-Channel12 Temp	Not Available	No Reading

Sensor Readings

## SuperDoctor® Server Management

Health Info



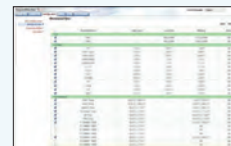
System Info



Configuration - Alerts



Configuration - Monitor Items

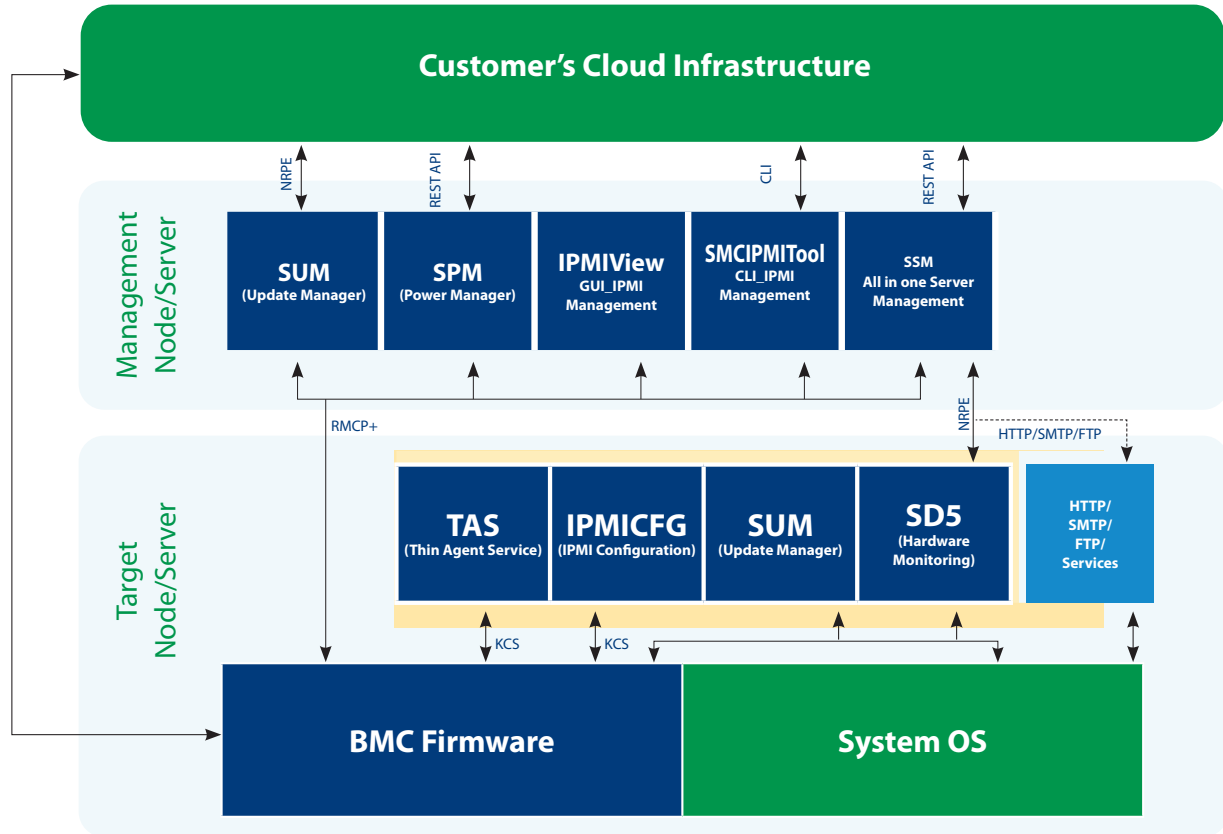


Configuration - Flash BIOS





# Server Management Utilities



## Supermicro Server Management Utilities

Server management utilities assist data center system administrators to manage hardware issues such as server availability and firmware upgrades to reduce server

downtime. Supermicro has developed a multifunction suite of tools that can perform health monitoring, power management and firmware maintenance to help deploy and maintain servers in data centers.

Our solutions are designed for easy automation with existing management infrastructure using CLI and REST APIs. In data centers, Supermicro Server Management Utilities provides you all the necessary functions like:

### Remotely managing the health of hardware and operating system services:

Helps IT operators to monitor the health of system components through Agent and Agent-less based solutions

### Managing power consumption of nodes in cluster:

Optimize the power consumption of your server rack. Monitor and apply policies to maximize compute density per rack and avoid unexpected server shutdowns.

### Managing BIOS provisioning through BMC/IPMI:

Allows you to manage system BIOS upgrades and configurations uniformly across multi-environment deployments through baseboard management controller.

### Execute commands on multiple target systems in parallel:

Perform parallel firmware upgrades, system memory and power commands, and many more through SSL and RMCP+.

### Execute commands on multiple target systems through Redfish API:







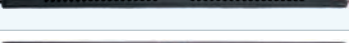


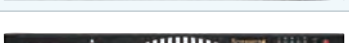

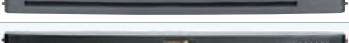

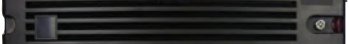




Perform API execution for server health, system inventory, power info, event notification and many more through secure socket layer (SSL).

### Software SKUs:

<b>SFT-DCMS-Single:</b>	Per node license for System Management Suite (all packages)
<b>SFT-OOB-LIC:</b>	Per node license for OOB firmware maintenance mechanisms
<b>SFT-SPM-LIC:</b>	Per node license for Power Management Utility

\*AMD platform not supported.

# Front Bezels/LCD

1U Rackmount Chassis		
OLCD Kit & Accessories Standard 3.5" drive with 0.95 OLED, fit 1x 2.5" HDD, digital color	MCP-220-00119-0B	
LCD Kit & Accessories 5.25" USB LCD Kit	MCP-220-00095-0B	
SC813, SC813M, SC815, SC819 (Redundant Power) series Please contact tech support for LCD programming instruction package	MCP-210-00007-01 (Black)	
SC813, SC813M, SC815, SC818, SC819(U)* (Redundant Power) series Does not support SC818G series	CSE-PTFB-813LB (Black) CSE-PTFB-813L (Beige)	
SC113, SC113M, SC116, SC119(U)*, SC514 series No front LED indicator support	MCP-210-11601-0B (Black)	
SC813, SC813M, SC815, SC818, SC819(U)* (Redundant Power) series Does not support SC818G series	CSE-PTFB-813-02B (Black) CSE-PTFB-813-02 (Beige)	
SC812 series Does not support SC812L series	CSE-PTFB-812 (Beige) CSE-PTFB-812B (Black)	
SC512, SC512L, SC512F-260 series Does not support SC512F-280/350/441/520/600 series	MCP-210-00028-01 (Black) MCP-210-00028-02 (Beige)	
SC512, SC512L, SC512F-260 series Does not support SC512F-280/350/441/520/600 series	MCP-210-00005-01 (Black) MCP-210-00005-02 (Beige)	
SC512, SC512L, SC512F-260 series Does not support SC512F-280/350/441/520/600 series Please contact tech support for LCD programming instruction package	MCP-210-00033-01(OEM) (Black)	
2U Rackmount Chassis		
SC822, SC823 series	CSE-PTFB-820B (Black) CSE-PTFB-820 (Beige)	
SC825, SC828 series	MCP-210-82503-0B (Black)	
SC825M series	MCP-210-82502-0B (Black)	
SC213, SC216, SC217, SC219(U)*, SC226S, SC227(S), SC826(S) SC827, SC829(U)* series	MCP-210-82601-0B (Black)	
3U Rackmount Chassis		
SC835 series	MCP-210-83501-0B (Black)	
SC836, SC837 series	MCP-210-83601-0B (Black)	
4U Rackmount Chassis		
SC842 series	MCP-210-84201-0B (Black)	
SC846, SC847, SC848, SC417, SC418 series	MCP-210-84601-0B (Black)	

\* Exception: Do not support auto-latch design handles

# SuperRack® Total Solutions



Supermicro's SuperRack® systems were designed for ease of integration, implementation, and deployment. Their easy rear access and modularized Building Block design makes them ideal for hot-swap-capable servers, such as Supermicro's Twin and Double-Sided Storage® families. For a rack system that is convenient, reliable, and customizable, the Supermicro SuperRack® is the ideal choice.

### Key Features:

- Per-U Design** - Ground-breaking Per-U design concept simplifies cable management and minimizes integration time
- Accessible** - Versatile Front and Rear access hot-plug optimizations provide an improved service experience
- Optimized Air Flow** - Reduced cabling optimizes air flow and improves cooling
- Building Block Design** - Building-block design and intuitive installation process reduce overall deployment schedules
- Expandable** - With unique add-on expansion units the SuperRack® easily accommodates many different server configurations
- Customizable** - Fully customizable options offer a well-rounded total Rack solution and service
- SuperRack® Total Solution** - Supermicro provides rack configuration, integration, testing, burn-in, and shipping services delivering an integrated rack system to the end-user. Please contact your Supermicro sales representative for details.



• Versatile Front and Rear access hot-plug optimizations



• Per-U Design simplifies cable management and minimizes integration time

## SuperRack® Solutions: Pre-Configured, Fully Tested and Application Optimized

- Hadoop Clusters for Big Data Analytics
- Rack Solutions for Virtualization and Cloud Computing
- Rack Solutions for Search Engine, Web 2.0
- HPC Clusters with GPU Accelerator
- Scale-Out Storage with Extreme Drive Density
- Rack Integration Service from Design to Delivery

For detailed information, please contact your Supermicro sales representative; visit: <http://www.supermicro.com/products/rack>



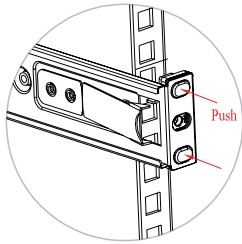
42U SuperRack® Front View

(Rear View)

# Quick-Release Slide Rails

## The Supermicro Tool-less, Quick-release Slide Rails

Designed for quick and easy installation and access to Supermicro's server equipment. Several different sizes are provided to accommodate a variety of Supermicro server systems.



Model Part#	MCP-290-00054-0N	MCP-290-00062-0N
<b>Product</b>	Optional rail set	Optional rail set
<b>Content</b>	Quick-release inner rail + quick-release outer rail	Quick-release inner rail + quick-release outer rail
<b>Chassis Type</b>	1U, 17.2" width	1U, 17.2" width
<b>Mechanism</b>	Linear	Linear
<b>Outer Rail Extendable Length</b>	25.6"~33.05"	25.6"~33.05"
<b>Compatible Chassis</b>	Optional for SC813, 815	Optional for SC118, 119, 808, 809, 816, 818, 819

### For Short-depth Chassis Rack



Model Part#	MCP-290-00052-0N-BULK	MCP-290-00056-0N
<b>Product</b>	Optional outer rail bulk pack	Optional short-depth outer rail
<b>Content</b>	Quick-release outer rail (10 set/pack)	Short quick-release outer rail
<b>Chassis Type</b>	1U, 17.2" width	1U, 17.2" width in short-depth rack
<b>Mechanism</b>	Linear	Linear
<b>Outer Rail Extendable Length</b>	25.6"~33.05"	19"~26.4"
<b>Compatible Chassis</b>	Optional for SC113, 113M, 118, 119, 512F-280/350/410/441/520/600, 515, 514, 808, 809, 813, 813M, 815, 816, 818, 819	Optional for SC113, 113M, 118, 119, 512F-280/350/410/441/520/600, 514, 515, 808, 809, 813, 813M, 815, 816, 818, 819

### For Short-depth Chassis Rack



Model Part#	MCP-290-00053-0N	MCP-290-00057-0N	MCP-290-00058-0N
<b>Product</b>	Default rail set	Default rail set	Optional short-depth rail set
<b>Content</b>	Quick-release inner rail + quick-release outer rail	Quick-release inner rail + quick-release outer rail	Quick-release inner rail + quick-release outer rail
<b>Chassis Type</b>	2~3U, 17.2" width	4U, 17.2" width	2~4U, 17.2" width in short-depth rack
<b>Mechanism</b>	Ball-bearing, support round hole racks with adapter MCP-290-00060-0N	Ball-bearing, support round hole racks with adapter MCP-290-00060-0N	Ball-bearing, support round hole racks with adapter MCP-290-00060-0N
<b>Outer Rail Extendable Length</b>	26.5"~36.4"	26.5"~36.4"	19"~26.6"
<b>Compatible Chassis</b>	Default for SC213, 216, 217, 218, 219, 823M, 825, 825M, 826, 827, 828, 829, 835, 836, 837, 936, 937, 938, 939	Default for SC417, 418, 758, 846, 847, 848, optional for SC842	Optional for SC213, 216, 217, 218, 219, 417, 418, 747, 748, 758, 823M, 825, 825M, 826, 827, 828, 835, 836, 837, 842, 846, 847, 848, 936, 937, 938, 939

# Cables

## External Copper 25 Gb/s

SMCI P/N	Descriptions	Length (m)	Connector	Cable type	Media	Date Rate
CBL-NTWK-0944-SS28C10M	ETHERNET, SFP28, 28GbE, PASSIVE, 30 AWG, 1M	1	SFP28	Passive	Copper	25 Gb/s
CBL-NTWK-0944-SS28C20M	ETHERNET, SFP28, 28GbE, PASSIVE, 30 AWG, 2M	2				
CBL-NTWK-0944-SS28C30M	ETHERNET, SFP28, 28GbE, PASSIVE, 30 AWG, 3M	3				
CBL-NTWK-0944-SS28C50M	ETHERNET, SFP28, 28GbE, PASSIVE, 26 AWG, 5M	5				

## External Copper 100 Gb/s

SMCI P/N	Descriptions	Length (m)	Connector	Cable type	Media	Date Rate
CBL-NTWK-0943-SQ28C10M	ETHERNET, QSFP28, 100GbE, PASSIVE, 32 AWG, 1M	1	QSFP28	Passive	Copper	100 Gb/s
CBL-NTWK-0943-SQ28C50M	ETHERNET, QSFP28, 100GbE, PASSIVE, 26 AWG, 5M	5				
CBL-NTWK-0942-MQ28C10M	ETHERNET, QSFP28, 100GbE, PASSIVE, 1m	1	QSFP28	Passive	Copper	100 Gb/s
CBL-NTWK-0942-MQ28C20M	ETHERNET, QSFP28, 100GbE, PASSIVE, 2m	2				
CBL-NTWK-0942-MQ28C30M	ETHERNET, QSFP28, 100GbE, PASSIVE, LSZH, 3m	3				
CBL-NTWK-0942-MQ28E10M	InfiniBand, EDR, QSFP28, 100GbE, PASSIVE, LSZH, 1m	1				
CBL-NTWK-0942-MQ28E20M	InfiniBand, EDR, QSFP28, 100GbE, PASSIVE, LSZH, 2m	2				
CBL-NTWK-0942-MQ28E30M	InfiniBand, EDR, QSFP28, 100GbE, PASSIVE, LSZH, 3m	3				

## External Copper 10 Gb/s

SMCI P/N	Descriptions	Length (m)	Connector	Cable type	Media	Date Rate
CBL-NTWK-0347	ETHERNET, SFP+, 10GbE, PASSIVE, PUSH, 1M, 30AWG	1	SFP+	Passive	Copper	10 Gb/s
CBL-NTWK-0456	ETHERNET, SFP+, 10GbE, PASSIVE, PUSH, 2M, 30AWG	2				
CBL-NTWK-0912	ETHERNET, SFP+, 10GbE, PASSIVE, PUSH, 3M, 30AWG	3				
CBL-NTWK-1009	ETHERNET, SFP+, 10GbE, PASSIVE, PUSH, 5M, 24AWG	5				
CBL-NTWK-0592	ETHERNET, SFP+, 10GbE, PASSIVE, PULL, 1M, 30AWG	1				
CBL-NTWK-0525	ETHERNET, SFP+, 10GbE, PASSIVE, PULL, 3M, 30AWG	3				
CBL-NTWK-0552	ETHERNET, SFP+, 10GbE, PASSIVE, PULL, 5M, 30AWG	5				

## External Fiber 10 Gb/s

SMCI P/N	Descriptions	Length (m)	Connector	Cable type	Media	Date Rate
CBL-SFP+AOC-1M-1	ETHERNET, SFP+, 10GbE, FIBER, ACTIVE, PULL, 1M	1	SFP+	Active	Fiber	10 Gb/s
CBL-SFP+AOC-3M-1-ORG	ETHERNET, SFP+, 10GbE, FIBER, ACTIVE, PULL, 3M, Orange	3				
CBL-SFP+AOC-5M-1-ORG	ETHERNET, SFP+, 10GbE, FIBER, ACTIVE, PULL, 5M, Orange	5				
CBL-SFP+AOC-10M	ETHERNET, SFP+, 10GbE, FIBER, ACTIVE, PULL, 10M	10				

## External Copper 40 Gb/s

SMCI P/N	Descriptions	Length (m)	Connector	Cable type	Media	Date Rate
CBL-NTWK-0417-01	ETHERNET, QSFP, 40GbE, PASSIVE, 1M, 30AWG	1	QSFP+	Passive	Copper	40 Gb/s
CBL-NTWK-0325-02	ETHERNET, QSFP, 40GbE, PASSIVE, 2M, 26AWG	2				
CBL-NTWK-0446-01	ETHERNET, QSFP, 40GbE, PASSIVE, 3M, 28AWG	3				
CBL-NTWK-0422-01	ETHERNET, QSFP, 40GbE, PASSIVE, 5M, 26AWG	5				

# Cables

External Copper 40 Gb/s to 4x 10 Gb/s						
SMCI P/N	Descriptions	Length (m)	Connector	Cable type	Media	Date Rate
CBL-NTWK-0719	ETHERNET, 40GbE/QSFP+ to 4x 10GbE/SFP+, PASSIVE, 1M, 30AWG	1	QSFP+ to 4X SFP+	Passive	Copper	40G to 4x 10G
CBL-NTWK-0720	ETHERNET, 40GbE/QSFP+ to 4x 10GbE/SFP+, PASSIVE, 3M, 30AWG	3				
CBL-NTWK-0721	ETHERNET, 40GbE/QSFP+ to 4x 10GbE/SFP+, PASSIVE, 5M, 25AWG	5				

External Fiber 40 Gb/s						
SMCI P/N	Descriptions	Length (m)	Connector	Cable type	Media	Date Rate
CBL-QSFP+AOC-1M	IB/ETHERNET, QSFP, QDR, 40GbE, FIBER, ACTIVE, PULL, 1M	1	QSFP+	Active	Fiber	40 Gb/s
CBL-QSFP+AOC-5M-1	ETHERNET, QSFP, QDR, 40GbE, FIBER, ACTIVE, PULL, 5M	5				
CBL-QSFP+AOC-10M-1	ETHERNET, QSFP, QDR, 40GbE, FIBER, ACTIVE, PULL, 10M	10				

External Copper 12 Gb/s						
SMCI P/N	Descriptions	Length (m)	Connector	Cable type	Media	Date Rate
CBL-SAST-0573	MINI SAS HD, 12G, EXT, 1M, 28AWG	1	miniSAS HD x4	Passive	Copper	12 Gb/s
CBL-SAST-0690-1	MINI SAS HD, 12G, EXT, 2M, 30AWG	2				
CBL-SAST-0677	MINI SAS HD, 12G, EXT, 3M, 28AWG	3				
CBL-SAST-1035-1	MINI SAS HD, x8, 12G, EXT, PASSIVE, PULL, 1M, 30AWG	1	miniSAS HD x8	Passive	Copper	12 Gb/s
CBL-SAST-1036-1	MINI SAS HD, x8, 12G, EXT, PASSIVE, PULL, 2M, 30AWG	2				
CBL-SAST-1037-1	MINI SAS HD, x8, 12G, EXT, PASSIVE, PULL, 3M, 28AWG	3				

Internal Copper 12 Gb/s – Oculink 1.0						
SMCI P/N	Descriptions	Length (cm)	Connector	Cable type	Media	Date Rate
CBL-SAST-0929	OcuLink v 1.0 source to MiniSAS HD, INT, PCI-E, 57CM,34AWG	57	Oculink 1.0	Passive	Copper	
CBL-SAST-0972	OcuLink v 1.0 source to MiniSAS HD, INT, PCI-E, 70CM,34AWG	70				
CBL-SAST-0847	OcuLink v 1.0, INT, PCI-E NVMe SSD, 76CM,34AWG	76				
CBL-SAST-0818	OcuLink v 1.0, INT, PCI-E NVMe SSD, 55CM,34AWG	55				
CBL-SAST-0819	OcuLink v 1.0, INT, PCI-E NVMe SSD, 65CM,34AWG	65				
CBL-SAST-0974-1	OcuLink v 1.0, INT, PCI-E NVMe SSD, 37CM,34AWG	37				
CBL-SAST-0973-1	OcuLink v 1.0, INT, PCI-E NVMe SSD, 25CM,34AWG	25				

Internal Copper 6 Gb/s						
SMCI P/N	Descriptions	Length (cm)	Connector	Cable type	Media	Date Rate
CBL-0473L	SATA, INT, ROUND, ST-ST, 21CM, 30AWG	21	7-Pin SATA	Passive	Copper	6 Gb/s
CBL-0483L	SATA, INT, ROUND, ST-ST, 29CM, 30AWG	29				
CBL-0484L	SATA, INT, ROUND, ST-ST, 55CM, 30AWG	55				
CBL-0481L	SATA, INT, ROUND, ST-ST, 81CM, 30AWG	81				
CBL-0109L-02	MINI SAS, INT, 22CM, 26AWG	22	miniSAS	Passive	Copper	6 Gb/s
CBL-0421L	MINI SAS, INT, 55CM, 26AWG	55				
CBL-0281L-01	MINI SAS, INT, 75CM, 30AWG	75				

Internal Copper 12 Gb/s						
SMCI P/N	Descriptions	Length (cm)	Connector	Cable type	Media	Date Rate
CBL-SAST-0550	MINI SAS HD, INT, 25CM, 30AWG	25	miniSAS HD	Passive	Copper	12 Gb/s
CBL-SAST-0532	MINI SAS HD, INT, 50CM, 30AWG	50				
CBL-SAST-0531	MINI SAS HD, INT, 80CM, 30AWG	80				
CBL-SAST-0623	MINI SAS HD, INT, 45CM, 85 OHM, 30AWG	45	miniSAS HD	Passive	Copper	12 Gb/s
CBL-SAST-0590	MINI SAS HD, INT, 70CM, 30, 85 OHM, AWG	70				
CBL-SAST-0957	Mini SAS HD to PCI-E SFF-8639 w/ Power, 55CM, 45CM 34 AWG	55	miniSAS HD to SFF-8639	Passive	Copper	12 Gb/s
CBL-SAST-0956	OcuLink v1.0 to PCI-E SFF-8639 w/ Power, 55CM, 34 AWG	55	Oculink to SFF-8639	Passive	Copper	12 Gb/s
CBL-SAST-1011	OcuLink v1.0 to PCI-E SFF-8639 w/ Power, 75CM, 34 AWG	75				

# Intel® Omni Path Architecture Switch

## 100G 48-port Intel® Omni Path Top-of-Rack Switch SSH-C48Q

High Performance, High Density, Low latency, 100-Gigabit Intel® Omni Path Architecture, Meets the Most Demanding Applications for HPC.

### Supermicro SuperSwitch Solution Benefit Highlights

- 1U TOR 100 Gb/s 48-Port
- 9.6 Tb/s Switching Capacity
- Optimized for High Message Rates and Low End-to-End Latency
- Out-of-Band Fabric Management Card (Optional)
  - Ethernet (10/100/1000 Base-T) and USB Serial Console
- Redundant Hot-Pluggable 750W **Platinum Level** Power Supplies
- Redundant Cooling



SSH-C48Q



Rear View

The Supermicro SSH-C48Q 1U 48-port top-of-rack network SuperSwitch supports the 100Gb/s Intel® Omni Path Architecture (OPA) providing a unique HPC cluster solution offering excellent bandwidth, latency and message rates that is highly scalable and easily serviceable.

The SSH-C48Q leverages the Intel Scalable System Framework (SSF) to address evolving demands across high performance data analytics, machine learning, visualization, traditional modeling and simulation workloads. Designed specifically for HPC, the 48-port SSH-C48Q offers 9.6 Tb/s total fabric bandwidth and high scalability with the capability of 27,648 nodes in a 2-tier configuration. The Supermicro SSH-C48Q is designed to overcome the scaling challenges of large-sized clusters.

### High Message Rate Throughput

The SSH-C48Q is designed to support high message rate traffic from each node through the fabric. That means the fabric can support the high bandwidth as well as high message rate throughput associated with the ever-increasing processing power and core counts of Intel® Xeon® Processor and Coprocessors.

### 48-port Switch ASIC

With a 48-port design the SSH-C48Q provides improved fabric scalability, reduced latency, increased density, reduced cost, and lower power demand. It is the basis of the SSH-C48Q capacity of 9.6 Tb/s fabric bandwidth and high scalability to 27,648 nodes in 2-tier configurations.

### Deterministic Latency

Features in the Intel OPA optimize the performance impacts of large Maximum Transmission Units (MTUs) on small messages. They help maintain consistent latency for inter-process communication (IPC) messages, such as Message Passing Interface (MPI) messages, when large messages—typically storage—are being simultaneously transmitted in the fabric. Intel® OPA can bypass lower priority large packets, giving higher priority to small packets, creating a lower and more predictable latency through the fabric.

### Enhanced End-to-End Reliability

The Supermicro SSH-C48Q also delivers its own unique error detection and correction which is more efficient than the forward error correction (FEC) defined in the InfiniBand standard. Enhancements include zero load for detection - if a correction is required, packets only need to be retransmitted from the last link—not all the way from the sending node. This gives near-zero additional latency.

Ports	<ul style="list-style-type: none"> <li>• 48 x 100 Gb/s ports – QSFP28</li> <li>• RJ45 1G optional management port</li> <li>• USB serial console port</li> </ul>	
Switching	<ul style="list-style-type: none"> <li>• Switching capacity 9.6 Tb/s total fabric bandwidth</li> <li>• Optimized high message rate</li> <li>• Optimized error detection/correction and low latency</li> <li>• Capability of 27,648 nodes in 2-tier configuration</li> <li>• Virtual lanes: Configurable from one to eight VLs plus one management VL</li> </ul>	<ul style="list-style-type: none"> <li>• Configurable MTU size of 2KB, 4KB, 8KB, or 10KB</li> <li>• Maximum multicast table size: 8192 entries</li> <li>• Maximum unicast table size: 49151 entries</li> <li>• Passive copper or active fiber cables</li> </ul>
Management	<ul style="list-style-type: none"> <li>• Out-of-band management card (optional)</li> <li>• Enables Command Line Interface and Chassis Management GUI through 10/100/1000 Base-T Ethernet</li> </ul>	<ul style="list-style-type: none"> <li>• Enables Serial Console through USB Serial Port</li> <li>• Fabric Management GUI</li> </ul>
Physical/Environmental	<ul style="list-style-type: none"> <li>• Dimensions 17.2" W x 16.6" D x 1.72" H</li> <li>• Weight 16 lbs / 7.26 kg</li> </ul>	<ul style="list-style-type: none"> <li>• Operating Temperature: 0°C to 40°C (32°F to 104°F)</li> <li>• Forward Direction Air Flow</li> </ul>
Power	<ul style="list-style-type: none"> <li>• Redundant Hot-Pluggable 750W <b>Platinum Level</b> Power Supplies</li> <li>• AC Input: 100-127V/200-240 V, 50-60 Hz</li> </ul>	<ul style="list-style-type: none"> <li>• Power consumption:                             <ul style="list-style-type: none"> <li>- 210 W (Copper)</li> <li>- 380 W (All max 3W Optical)</li> </ul> </li> </ul>

# Layer 2/3 Ethernet Switches

**Enterprise-class performance with advanced switching capabilities in a 1U form factor.  
Highly cost-effective 1/10-Gigabit Ethernet Networking – Standalone or Top-of-Rack.**



Rear View

Model	SSE-X3348S/SR	SSE-X3348T/TR
Port Attributes	<ul style="list-style-type: none"> <li>48 Ten-Gigabit Ethernet ports                             <ul style="list-style-type: none"> <li>- SFP+ Connectors</li> </ul> </li> <li>4 Forty-Gigabit Ethernet ports                             <ul style="list-style-type: none"> <li>- QSFP Connectors</li> </ul> </li> <li>2 One-Gigabit Ethernet ports                             <ul style="list-style-type: none"> <li>- RJ45 Connectors</li> </ul> </li> <li>Out-of-band RS-232 Management port</li> </ul>	<ul style="list-style-type: none"> <li>48 Ten-Gigabit Ethernet ports                             <ul style="list-style-type: none"> <li>- 10GBase-T RJ45 connectors</li> </ul> </li> <li>4 Forty-Gigabit Ethernet ports                             <ul style="list-style-type: none"> <li>- QSFP Connectors</li> </ul> </li> <li>2 One-Gigabit Ethernet ports                             <ul style="list-style-type: none"> <li>- RJ45 Connectors</li> </ul> </li> <li>Out-of-band RS-232 Management port</li> <li>Energy Efficient Ethernet- IEEE 802.3az</li> </ul>
Switching Capacity	<ul style="list-style-type: none"> <li>1284 Gb/s</li> </ul>	<ul style="list-style-type: none"> <li>1284 Gb/s</li> </ul>
Stacking Performance		
Power Consumption	<ul style="list-style-type: none"> <li>326W (Redundant Power Supplies)</li> <li>Reverse airflow model available</li> </ul>	<ul style="list-style-type: none"> <li>357W (Redundant Power Supplies)</li> <li>Reverse airflow model available</li> </ul>
Weight	<ul style="list-style-type: none"> <li>18.1 lbs / 8.2 kg</li> </ul>	<ul style="list-style-type: none"> <li>20.3 lbs / 9.22 kg</li> </ul>
Dimensions (WxDxH)	<ul style="list-style-type: none"> <li>438 x 473 x 43mm (17.3" x 18.6" x 1.7")</li> </ul>	<ul style="list-style-type: none"> <li>438 x 473 x 43mm (17.3" x 18.6" x 1.7")</li> </ul>
Availability	<ul style="list-style-type: none"> <li>Spanning Tree (802.1D)</li> <li>Rapid Spanning Tree (802.1w)</li> </ul>	<ul style="list-style-type: none"> <li>Multiple Spanning Trees (802.1s)</li> <li>Virtual Redundant Routing Protocol (VRRP)</li> </ul>
VLAN	<ul style="list-style-type: none"> <li>802.1Q tagging, port and protocol based</li> <li>Dynamic VLAN Support (GVRP)</li> <li>4K Static VLANs</li> </ul>	<ul style="list-style-type: none"> <li>802.1Q tagging, port and protocol based</li> <li>Dynamic VLAN Support (GVRP)</li> <li>4K Static VLANs</li> </ul>
Quality of Service and DiffServ	<ul style="list-style-type: none"> <li>8 priority queues per port</li> <li>Adjusted WRR and Strict Priority Scheduling</li> <li>Layer 2, 3, 4 Prioritization</li> </ul>	<ul style="list-style-type: none"> <li>Marking</li> <li>Metering / Rate limiting</li> </ul>
Switching Features	<ul style="list-style-type: none"> <li>Link Aggregation - 24 groups with 8 members per group</li> <li>MLAG support</li> <li>LACP Support</li> </ul>	<ul style="list-style-type: none"> <li>Link Layer Discovery Protocol (802.1AB)</li> <li>Jumbo Frames up to 9KB</li> <li>Port Mirroring – N to 1. Tx &amp; Rx Configurable</li> </ul>
Routing Features	<ul style="list-style-type: none"> <li>Static Routing, RIP v1/v2, RIPng, OSPF v1/v2/v3 and BGP</li> <li>IPv4 and IPv6 Routing</li> </ul>	<ul style="list-style-type: none"> <li>VRRP (Virtual Router Redundancy Protocol)</li> <li>DVMRP (Distance Vector Multicast Routing Protocol)</li> </ul>
Multicast	<ul style="list-style-type: none"> <li>IGMP Snooping v1, v2, v3</li> <li>IGMP v1, v2, v3</li> </ul>	<ul style="list-style-type: none"> <li>PIM SM, PIM DM</li> <li>PIM SMv6</li> </ul>
Security Features	<ul style="list-style-type: none"> <li>802.3x Port Based Authentication</li> <li>Switch access password protection</li> <li>Layer 2, 3, 4 Access Control Lists (256 rules)</li> </ul>	<ul style="list-style-type: none"> <li>RADIUS and TACACS+ Authentication</li> <li>SSH, SSL Encryption</li> </ul>
Management Features	<ul style="list-style-type: none"> <li>Web-based management interface – HTTP/HTTPS                             <ul style="list-style-type: none"> <li>- Telnet</li> <li>- SNMP</li> </ul> </li> <li>Industry standard CLI with telnet, SSH, or local management port                             <ul style="list-style-type: none"> <li>- Scripting capability</li> <li>- Command completion</li> <li>- Context-sensitive "Help"</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Multiple levels of user privilege (CLI and Web UI)</li> <li>SNMP v1, v2, v3</li> <li>Four RMON Groups - (1, 2, 3 and 9)</li> <li>Logging – syslog</li> <li>Dual firmware images</li> <li>Configuration file - upload / download</li> </ul>
Operating Temperature	<ul style="list-style-type: none"> <li>0 ~ 40°C</li> </ul>	<ul style="list-style-type: none"> <li>0 ~ 47°C</li> </ul>



# Layer 2/3 Ethernet Switches

**Non-blocking connectivity, 1U form factor for flexible installation**

**New!**

**Convenient, Cost-effective way to ease the transition from 10G to 25G Ethernet**

Rear View



Model	SSE-F3548SR (54 Ports)	SSE-F3548S (54 Ports)
Port Attributes	<ul style="list-style-type: none"> <li>• 48 Twenty-Five Gigabit Ethernet Ports - SFP28 Connectors</li> <li>• 6 100G Ethernet Ports - QSFP28 Connectors</li> <li>• 1 One-Gigabit Ethernet ports - RJ45 Connector</li> <li>• 1 RJ45 Console port</li> <li>• 1 USB port</li> <li>• <b>Reverse Airflow</b></li> </ul>	<ul style="list-style-type: none"> <li>• 48 Twenty-Five Gigabit Ethernet Ports - SFP28 Connectors</li> <li>• 6 100G Ethernet Ports - QSFP28 Connectors</li> <li>• 1 One-Gigabit Ethernet ports - RJ45 Connector</li> <li>• 1 RJ45 Console port</li> <li>• 1 USB port</li> </ul>
Switching Capacity	<ul style="list-style-type: none"> <li>• 3.6Tb</li> </ul>	
Power Consumption	<ul style="list-style-type: none"> <li>• &lt;400W (Redundant Power Supplies)</li> </ul>	
Weight	<ul style="list-style-type: none"> <li>• 18.1 lbs / 8.2 kg</li> </ul>	
Dimensions (WxDxH)	<ul style="list-style-type: none"> <li>• 445 x 515 x 43.5mm (17.5" x 20.2" x 1.7")</li> </ul>	
Availability	<ul style="list-style-type: none"> <li>• Multiple Spanning Tree (802.1D)</li> </ul>	
VLAN	<ul style="list-style-type: none"> <li>• 4K Static VLANs</li> <li>• 802.1Q tagging, port and protocol based</li> </ul>	
Quality of Service and DiffServ	<ul style="list-style-type: none"> <li>• 8 priority queues per port</li> <li>• Metering / Rate limiting</li> <li>• COS</li> <li>• QoS (with DiffServ)</li> <li>• Storm Control</li> <li>• Flow Control</li> <li>• Marking</li> </ul>	
Switching Features	<ul style="list-style-type: none"> <li>• 64K MAC address entries</li> <li>• Jumbo frames up to 9KB</li> <li>• Spanning tree</li> <li>• Link Aggregation</li> <li>• LACP Support</li> <li>• MLAG</li> <li>• Storm protection</li> <li>• Loop Protection</li> <li>• Port Mirroring - N to 1. Tx &amp; RX</li> </ul>	
Routing Features	<ul style="list-style-type: none"> <li>• Future Release</li> </ul>	
Multicast	<ul style="list-style-type: none"> <li>• IGMP Snooping v1, v2, v3</li> </ul>	
Security Features	<ul style="list-style-type: none"> <li>• RADIUS and TACACS+ Authentication</li> <li>• SSH/SSL Encryption</li> <li>• Switch acces password protection</li> <li>• ACL</li> </ul>	
Management Features	<ul style="list-style-type: none"> <li>• Multiple levels of user privilege (CLI and Web UI)</li> <li>• DHCP Client</li> <li>• Logging - syslog</li> <li>• Configuration file - upload / download</li> <li>• Multiple configuration file upload / download by TFTP and HTTP</li> <li>• NTP</li> <li>• Software upgrade/download</li> <li>• SNMP v1, v2, v3</li> <li>• Uplink Failure Detection</li> <li>• Web-based management interface HTTP/HTTPS</li> <li>• OpenConf</li> <li>• RESTCONF</li> </ul>	
Operating Temperature	<ul style="list-style-type: none"> <li>• 0°C ~ 45°C (32°F - 113°F)</li> </ul>	

# Open Networking Ethernet Switches

The SSE-G3648B/SSE-G3648BR, SSE-X3648S/SSE-X3648SR, and SSE-C3632S/SSE-C3632SR switches are ideal for deployment in Data Center, Cloud and Enterprise environments with the capability of handling access for the most demanding applications. All are available as a reverse-airflow model for use in large data centers with alternating hot and cold equipment aisles. And all are equipped with a second, redundant power supplies (optional on SSE-G3648B/SSE-G3648BR). Pre-loaded with the Open Network Install Environment (ONIE), all three are ready for your networking operating system of choice. Supermicro recommends the use of Cumulus Linux – these switches are all listed on the Hardware Compatibility List (HCL) of Cumulus Networks. Cumulus Linux is an OS for open networking incorporating a true Linux distribution with extensive networking features plus hardware acceleration of routing and switching functions. By using many of the same tools employed for servers, Cumulus Linux enables affordable scalability with clear CapEx savings and even greater OpEx savings; it unleashes rapid innovation via custom, open source or commercial Linux tools and applications. The embedded X86 Linux-based controller is particularly well suited for running the provisioning tools which are typically used for servers. Contact Cumulus Networks ([www.cumulusnetworks.com](http://www.cumulusnetworks.com)) for more details and ordering information.

With these bare metal switches Supermicro customers have the opportunity to choose the hardware/software combination that best suits their own individual networking environment. And with Supermicro product reliability and support, customers can rest assured that their investment is truly protected.

**New! Layer 2/3**

**New! Layer 2/3**

**New! Layer 2/3**



Rear View



Model	SSE-G3648B/BR	SSE-X3648S/SR	SSE-C3632S/SR
<b>Port Specifications</b>	<ul style="list-style-type: none"> <li>48 x 1Gbps Ethernet RJ45 ports</li> <li>4 x 10Gbps Ethernet SFP+ ports</li> <li>RJ-45 Ethernet management port</li> <li>RJ45 (for console cable)</li> </ul>	<ul style="list-style-type: none"> <li>48x Ten-Gigabit Ethernet ports – SFP+</li> <li>6x Forty-Gigabit Ethernet ports – QSFP+</li> <li>RJ-45 (for console cable)</li> <li>RJ-45 1G Ethernet Management Port</li> <li>USB</li> </ul>	<ul style="list-style-type: none"> <li>32 x 40Gbps Ethernet QSFP28 ports</li> <li>32 x 100Gbps Ethernet QSFP28 ports</li> <li>1 x 10Gbps Ethernet SFP+ ports</li> <li>RJ-45 Gigabit Ethernet management port</li> <li>RJ-45 serial console</li> <li>Type A USB 2.0 port</li> </ul>
<b>Data Forwarding</b>	<ul style="list-style-type: none"> <li>Switching Capacity – 176 Gbps</li> <li>Helix4 Switch Chip</li> <li>Wire-speed Layer 3 Routing</li> <li>1:1 Non-blocking connectivity</li> </ul>	<ul style="list-style-type: none"> <li>Switching Capacity - 1440 Gbps</li> <li>Trident II Switch Chip</li> <li>Wire-speed Layer 3 Routing</li> <li>1:1 Non-blocking connectivity</li> </ul>	<ul style="list-style-type: none"> <li>Switching Capacity - 6.4Tbps</li> <li>Tomahawk Switch Chip</li> <li>Wire-speed Layer 3 Routing</li> <li>1:1 Non-blocking connectivity</li> </ul>
<b>Control Plane</b>	<ul style="list-style-type: none"> <li>Intel® CPU</li> <li>2GB DRAM</li> <li>8GB SSD</li> <li>ONIE</li> <li>Cumulus Linux Ready</li> </ul>	<ul style="list-style-type: none"> <li>Intel® CPU</li> <li>4GB DRAM</li> <li>16GB SSD</li> <li>ONIE</li> <li>Cumulus Linux Ready</li> </ul>	<ul style="list-style-type: none"> <li>Intel® CPU</li> <li>4GB DRAM</li> <li>16GB SSD</li> <li>ONIE</li> <li>Cumulus Linux Ready</li> </ul>
<b>Power</b>	<ul style="list-style-type: none"> <li>Hot-pluggable 200W power supply</li> <li>Optional second redundant power supplies</li> <li>AC Input: 100-127/200-240 V, 50/60 Hz</li> <li>Power Consumption: &lt; 85.2 Watts</li> </ul>	<ul style="list-style-type: none"> <li>Redundant, hot-pluggable, 460W power supplies</li> <li>AC Input: 100-127/200-240 V, 50/60 Hz</li> <li>Power Consumption: 305 Watts</li> </ul>	<ul style="list-style-type: none"> <li>Redundant, hot-pluggable, 800W power supplies</li> <li>AC Input: 100-127/200-240 V, 50/60 Hz</li> <li>Power Consumption: 650 Watts</li> </ul>
<b>Physical/ Environmental</b>	<ul style="list-style-type: none"> <li>Weight: Net weight: 8.18kg (with 2 PSUs)</li> <li>Regular and Reverse Airflow Models</li> <li>Size (W x D x H): 434 x 320 x 44 mm (17.1 x 11.2 x 1.73 in.)</li> <li>Temperature: Operating 0°C to 45 °C (32°F to 113°F)</li> <li>Humidity - Operating: 5% to 95% (non-condensing)</li> </ul>	<ul style="list-style-type: none"> <li>Weight: Net weight: 10.13kg (22.29 lb with 2 PSUs)</li> <li>Regular and Reverse Airflow Models</li> <li>Size (W x D x H): 434 x 550 x 44 mm (17.1 x 21.6 x 1.73 inches)</li> <li>Temperature: Operating 0°C to 40 °C (32°F to 104°F)</li> <li>Humidity - Operating: 5% to 95% (non-condensing)</li> </ul>	<ul style="list-style-type: none"> <li>Weight: Net weight: 10.18kg (22.29 lb with 2 PSUs)</li> <li>Regular and Reverse Airflow Models</li> <li>Size (W x D x H): 434x 520 x 44 mm (17.1 x 20.47 x 1.73 inches)</li> <li>Temperature: Operating 0°C to 40 °C (32°F to 104°F)</li> <li>Humidity - Operating: 5% to 95% (non-condensing)</li> </ul>
<b>General</b>	<ul style="list-style-type: none"> <li>Bare metal - ONIE Installed</li> <li>1U form factor for flexible installation</li> <li>Mounting Flanges (included)</li> </ul>	<ul style="list-style-type: none"> <li>Bare metal - ONIE Installed</li> <li>1U form factor for flexible installation</li> <li>Mounting Rails (included)</li> </ul>	<ul style="list-style-type: none"> <li>Bare metal - ONIE Installed</li> <li>1U form factor for flexible installation</li> <li>Mounting Rails (included)</li> </ul>
<b>Optional Power Supply</b>	<ul style="list-style-type: none"> <li>PWS-FRU-G3648-1F Second (for redundancy) power supply for SSE-G3648B Ethernet Switch. Forward Airflow</li> <li>PWS-FRU-G3648-1R Second (for redundancy) power supply for SSE-G3648BR Ethernet Switch. Reverse Airflow</li> </ul>		

# Naming Guide

**SYS-2029BT-HNC0R**

1<sup>st</sup> 2<sup>nd</sup> 3<sup>rd</sup> 4<sup>th</sup> 5<sup>th</sup> 6<sup>th</sup> 7<sup>th</sup> 9<sup>th</sup>

## 2.5" Hard Drives

Character	Representation	Options
1st	Form Factor	<ul style="list-style-type: none"> <li>• 1 = 1U</li> <li>• 2 = 2U</li> </ul>
2nd	Reserved	<ul style="list-style-type: none"> <li>• 0 = Reserved</li> </ul>
3rd	Generation	<ul style="list-style-type: none"> <li>• 2 = Dual processor</li> </ul>
4th	System Generation	<ul style="list-style-type: none"> <li>• 9 = X11 Series</li> <li>• 8 = X10 Series</li> <li>• 7 = X9 Series</li> </ul>
5th	Chipset	<ul style="list-style-type: none"> <li>• BT = BigTwin</li> <li>• TP = TwinPro (X10, X11)</li> <li>• PR = TwinPro (X9)</li> <li>• TK = TwinPro (Xeon® Phi)</li> <li>• TR = Twin</li> </ul>
6th	HDD Interface	<ul style="list-style-type: none"> <li>• 70 = 2008</li> <li>• 71 = 2108</li> <li>• 72 = 2208</li> <li>• 73 = 2308</li> <li>• C0 = SAS3 IT Mode, 3008</li> <li>• C1 = SAS3 HW RAID, 3108</li> <li>• N = NVMe</li> <li>• T = SATA</li> </ul>
7th	Power Redundancy	<ul style="list-style-type: none"> <li>• F: IB FDR / 40G Ethernet</li> <li>• Q: QDR</li> <li>• T: 10GBase-T</li> </ul>
8th	Connectivity	<ul style="list-style-type: none"> <li>• R = Redundant Power Supplies</li> <li>• + = 24 DIMM (X10) / 16 DIMM (older X9)</li> <li>• F = Onboard BMC (older X9)</li> <li>• -SIOM = SIOM slot (X10)</li> </ul>
9th	Power Type	
10th	Others	

**SYS-6029TP-HC1R**

1<sup>st</sup> 2<sup>nd</sup> 3<sup>rd</sup> 4<sup>th</sup> 5<sup>th</sup> 6<sup>th</sup> 7<sup>th</sup> 9<sup>th</sup>

## 3.5" Hard Drives

Character	Representation	Options
1st	CPU	<ul style="list-style-type: none"> <li>• 6 = Dual processor</li> <li>• 0 = Reserved</li> </ul>
2nd	Reserved	
3rd	Form Factor	<ul style="list-style-type: none"> <li>• 1 = 1U</li> <li>• 2 = 2U</li> </ul>
4th	Generation	<ul style="list-style-type: none"> <li>• 9 = X11 Series</li> <li>• 8 = X10 Series</li> <li>• 7 = X9 Series</li> </ul>
5th	Chipset / System Platform	<ul style="list-style-type: none"> <li>• BT = BigTwin</li> <li>• TP = TwinPro (X10, X11)</li> <li>• PR = TwinPro (X9)</li> <li>• TK = TwinPro (Xeon® Phi)</li> <li>• TR = Twin</li> </ul>
6th	# of Nodes	<ul style="list-style-type: none"> <li>• D: 2 nodes</li> <li>• H: 4 nodes</li> </ul>
7th	Interface / Other	<ul style="list-style-type: none"> <li>• 70 = 2008</li> <li>• 71 = 2108</li> <li>• 72 = 2208</li> <li>• 73 = 2308</li> <li>• C0 = SAS3 IT Mode, 3008</li> <li>• C1 = SAS3 HW RAID, 3108</li> <li>• N = NVMe</li> <li>• T = SATA</li> </ul>
8th	Connectivity	<ul style="list-style-type: none"> <li>• F: IB FDR / 40G Ethernet</li> <li>• Q: QDR</li> <li>• T: 10GBase-T</li> </ul>
9th	Power Type	<ul style="list-style-type: none"> <li>• R = Redundant Power Supplies</li> <li>• + = 24 DIMM (X10) / 16 DIMM (older X9)</li> <li>• F = Onboard BMC (older X9)</li> <li>• -SIOM = SIOM slot (X10)</li> </ul>
10th	Others	

## FatTwin Naming Guide

**SYS-F618R2-RC0+**

1<sup>st</sup> 2<sup>nd</sup> 3<sup>rd</sup> 4<sup>th</sup> 5<sup>th</sup> 6<sup>th</sup> 7<sup>th</sup> 8<sup>th</sup> 9<sup>th</sup>

### FatTwin Servers with 2.5" Hard Drives

Character	Representation	Options
1st	Product Series	<ul style="list-style-type: none"> <li>• F = FatTwin</li> </ul>
2nd	Number of processor(s)	<ul style="list-style-type: none"> <li>• 5 = UP</li> <li>• 6 = DP</li> <li>• 8 = QP</li> </ul>
3rd	Tray Height / Form Factor	<ul style="list-style-type: none"> <li>• 1 = 1U</li> <li>• 2 = 2U</li> <li>• 4 = 4U</li> </ul>
4th	System Generation	<ul style="list-style-type: none"> <li>• 9 = X11 Series</li> <li>• 8 = X10 Series</li> <li>• 7 = X9 Series</li> </ul>
5th	Chipset / Socket / Platform	<ul style="list-style-type: none"> <li>• P = Socket P</li> <li>• R = Socket R</li> <li>• B = Socket B2</li> <li>• G = GPU node</li> <li>• H = Hadoop node</li> </ul>
6th	HDD/Tray Form Factor	<ul style="list-style-type: none"> <li>• 2: Half width tray with 2.5" drives</li> <li>• 4: Full width tray with 2.5" drives</li> </ul>
7th	I/O Direction	<ul style="list-style-type: none"> <li>• F = Front I/O</li> <li>• R = Rear I/O</li> </ul>
8th	Controller Interface	<ul style="list-style-type: none"> <li>• 72: 2208 controller</li> <li>• 73: 2308 controller</li> <li>• T: Intel® SATA</li> <li>• C0: 3008 controller</li> <li>• C1: 3108 controller</li> </ul>
9th and 10th	Additional	<ul style="list-style-type: none"> <li>• B = Rear HDDs</li> <li>• PT = 10G LAN</li> <li>• + = 16 DIMMs (X9, X10)</li> <li>• L = Cost effective</li> <li>• N = NVMe drives</li> <li>• F = Infiniband 56Gbps</li> </ul>

**SYS-F629P3-RC0B**

1<sup>st</sup> 2<sup>nd</sup> 3<sup>rd</sup> 4<sup>th</sup> 5<sup>th</sup> 6<sup>th</sup> 7<sup>th</sup> 8<sup>th</sup> 9<sup>th</sup>

### FatTwin Servers with 3.5" Hard Drives

Character	Representation	Options
1st	Product Series	<ul style="list-style-type: none"> <li>• F = FatTwin</li> </ul>
2nd	Number of processor(s)	<ul style="list-style-type: none"> <li>• 5 = UP</li> <li>• 6 = DP</li> <li>• 8 = QP</li> </ul>
3rd	Tray Height / Form Factor	<ul style="list-style-type: none"> <li>• 1 = 1U</li> <li>• 2 = 2U</li> <li>• 4 = 4U</li> </ul>
4th	System Generation	<ul style="list-style-type: none"> <li>• 9 = X11 Series</li> <li>• 8 = X10 Series</li> <li>• 7 = X9 Series</li> </ul>
5th	Chipset / Socket / Platform	<ul style="list-style-type: none"> <li>• P = Socket P</li> <li>• R = Socket R</li> <li>• B = Socket B2</li> <li>• G = GPU node</li> <li>• H = Hadoop node</li> </ul>
6th	HDD/Tray Form Factor	<ul style="list-style-type: none"> <li>• 3: Half width tray with 3.5" drives</li> <li>• 6: Full width tray with 3.5" drives</li> </ul>
7th	I/O Direction	<ul style="list-style-type: none"> <li>• F = Front I/O</li> <li>• R = Rear I/O</li> </ul>
8th	Controller Interface	<ul style="list-style-type: none"> <li>• 72: 2208 controller</li> <li>• 73: 2308 controller</li> <li>• T: Intel® SATA</li> <li>• C0: 3008 controller</li> <li>• C1: 3108 controller</li> </ul>
9th and 10th	Additional	<ul style="list-style-type: none"> <li>• B = Rear HDDs</li> <li>• PT = 10G LAN</li> <li>• + = 16 DIMMs (X9, X10)</li> <li>• L = Cost effective</li> <li>• N = NVMe drives</li> <li>• F = Infiniband 56Gbps</li> </ul>

# Naming Guide

**SYS - 1 0 2 9 WT - WTR**

1<sup>st</sup> 2<sup>nd</sup> 3<sup>rd</sup> 4<sup>th</sup> 5<sup>th</sup> 6<sup>th</sup> 7<sup>th</sup> 8<sup>th</sup>

**SYS - 6 0 2 8 R - C1 R 4+**

1<sup>st</sup> 2<sup>nd</sup> 3<sup>rd</sup> 4<sup>th</sup> 5<sup>th</sup> 6<sup>th</sup> 7<sup>th</sup> 8<sup>th</sup>

## Ultra Servers with 2.5" Hard Drives

Character	Representation	Options
1st	Form Factor	1 = 1U 2 = 2U 3 = 3U 4 = 4U 5 = 5U
2nd	Reserved Digit	0 = Reserved
3rd	Number of processor slots	1 = Single processor slot 2 = Dual processor slots 4 = <b>Quad</b> processor slots 8 = Oct processor slots (8 way server)
4th	System Generation	5 = X7 Series 6 = X8 Series 7 = X9 Series 8 = X10 Series 9 = X11 Series
5th	Chipset	P = Socket P (X11) / Panther Point (X7) K = Xeon Phi / Socket P GQ = Quad GPGPU GR = GPGPU A = Workstation B = Bigby / Socket B2 C = Cougar Point D = Denlow platform I = Foxhollow M = Mukilteo R = Socket R S = Skylake T = Tylersburg U = Ultra UT = EX DP 32 DIMM (X9) UX = Ultra Hyper-Speed AX = Overclocking
6th	HDD Interface	3 = SAS (SCU) (X8) 6 = SAS2 (X8) 70 = LSI 2008 71 = LSI 2108 72 = LSI 2208 73 = LSI 2308 B = Brickland C = SAS3 C0 = SAS3 IT Mode C1 = SAS3 HW RAID D = Data Center Optimized (X10) / Desktop (X8) E = Extension Slot with Riser E1C = Single SAS3 Expander H = Hot Swap (X8) / Support x16 device (GPGPU) LL# = Low Latency Model# M = Mini-Chassis N = NVMe (X10) N# = # of NVMe drives (X10, X11) N3 = SAS without UIO (X8) NT = SATA without UIO (X8) P = Internal slot / Passive T = SATA U = UIO (X8) W = WIO X = MaxIO (Socket R) / NVLink (GPGPU)
7th	Power Redundancy	R = Redundant power supplies E = Expansion Slot
8th	Additional	+ = 18(X8)/24(X9)/32(X9 Quad) DIMM memory F = On board BMC (IPMI) T = 10 Gigabit Ethernet 2 = 2nd Gen GPU 4 = 4 Independent LAN ports

## Ultra Servers with 3.5" Hard Drives

Character	Representation	Options
1st	Number of processor slots	5 = Single processor slot 6 = Dual processor slots 7 = Dual processor slots (Tower) 8 = Quad processor slots (4 way Server)
2nd	Reserved Digit	0 = Reserved
3rd	Form Factor	1 = 1U 2 = 2U 3 = 3U 4 = 4U
4th	System Generation	5 = X7 Series 6 = X8 Series 7 = X9 Series 8 = X10 Series 9 = X11 Series
5th	Chipset	P = Socket P (X11) / Panther Point (X7) K = Xeon Phi / Socket P GP = GPU (X11) GQ = Quad GPGPU GR = GPGPU A = Workstation B = Bigby / Socket B2 C = Cougar Point D = Denlow platform I = Foxhollow M = Mukilteo R = Socket R S = Skylake T = Tylersburg U = Ultra UX = Ultra Hyper-Speed AX = Overclocking
6th	HDD Interface	3 = SAS (SCU) (X8) 6 = SAS2 (X8) 70 = LSI 2008 71 = LSI 2108 72 = LSI 2208 73 = LSI 2308 C0 = SAS3 IT Mode C1 = SAS3 HW RAID D = Data Center Optimized (X10) / Desktop (X8) E = Extension Slot with Riser E1C = Single SAS3 Expander H = Hot Swap (X8) / Support x16 device (GPGPU) I = Internal Drives M = Mini-Chassis N = NVMe (X10, X11) N# = # of NVMe drives (X10, X11) N3 = SAS without UIO (X8) NT = SATA without UIO (X8) P = Internal slot / Passive T = SATA U = UIO (X8) W = WIO X = MaxIO (Socket R) / NVLink (GPGPU)
7th	Power Redundancy	R = Redundant power supplies E = Expansion Slot
8th	Additional	+ = 18 DIMM (X8) / 24 DIMM (X9,X10) / FPGA (X11) 25M = 25GbE Mellanox 2 = 2 LAN ports 4 = 4 LAN ports 8 = 8 Internal Drives F = IPMI (onboard BMC) (X7, X8) -NF# = Xeon Phi 72## Processor P = SFP+ T = 10GbE

# Naming Guide

**SSG-2029P-E1CR24L**

1<sup>st</sup> 2<sup>nd</sup> 3<sup>rd</sup> 4<sup>th</sup> 5<sup>th</sup> 6<sup>th</sup> 7<sup>th</sup> 8<sup>th</sup>

## SuperStorage with 2.5" Hard Drives

Character	Representation	Options
1st	Form Factor	<ul style="list-style-type: none"> <li>• 1 = 1U</li> <li>• 2 = 2U</li> <li>• 3 = 3U</li> <li>• 4 = 4U</li> </ul>
2nd	Reserved	<ul style="list-style-type: none"> <li>• 0 = Reserved</li> <li>• 1 = MegaDC</li> </ul>
3rd	CPU	<ul style="list-style-type: none"> <li>• 1 = UP</li> <li>• 2 = DP</li> </ul>
4th	System Generation	<ul style="list-style-type: none"> <li>• 9 = X11 Series</li> <li>• 8 = X10 Series</li> <li>• 7 = X9 Series</li> </ul>
5th	Socket / Family	<ul style="list-style-type: none"> <li>• P = Socket P</li> <li>• R = Socket R</li> <li>• D2 = Socket F / 2-Core</li> <li>• D4 = Socket F / 4-Core</li> <li>• D8 = Socket F / 8-Core</li> <li>• T = Tylersberg</li> <li>• A = Atom SoC</li> </ul>
6th	Interface Type	<ul style="list-style-type: none"> <li>• A: Direct Attached</li> <li>• AC: Direct Attached <b>SAS3</b></li> <li>• D: Dual Motherboard</li> <li>• DC: Dual Motherboard <b>SAS3</b></li> <li>• E1: Single Expander</li> <li>• E1C: Single <b>SAS3</b> Expander</li> <li>• E2: Dual Expander</li> <li>• E2C: Dual <b>SAS3</b> Expander</li> <li>• N: <b>NVMe</b></li> </ul>
7th	Power Redundancy	<ul style="list-style-type: none"> <li>• R = Redundant Power Supplies</li> </ul>
8th	Additional	<ul style="list-style-type: none"> <li>• ##: Number of drive bays</li> <li>• 4: <b>Quad LAN</b> ports</li> <li>• L: IT Mode</li> <li>• H: Hardware RAID</li> <li>• N: Hardware RAID &amp; 24 DIMMs (X9/X10) / <b>NVMe</b> (X10 Simply Double)</li> <li>• NV: NVDIMM</li> <li>• T: HW RAID up to 16 drives</li> </ul>

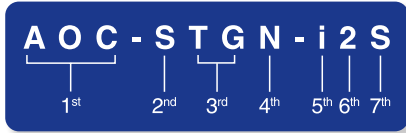
**SSG-6029P-E1CR12L**

1<sup>st</sup> 2<sup>nd</sup> 3<sup>rd</sup> 4<sup>th</sup> 5<sup>th</sup> 6<sup>th</sup> 7<sup>th</sup> 8<sup>th</sup>

## SuperStorage with 3.5" Hard Drives

Character	Representation	Options
1st	CPU	<ul style="list-style-type: none"> <li>• 5 = UP</li> <li>• 6 = DP</li> <li>• 7 = DP (Tower)</li> </ul>
2nd	Reserved	<ul style="list-style-type: none"> <li>• 0 = Reserved</li> <li>• 1 = MegaDC</li> </ul>
3rd	Form Factor	<ul style="list-style-type: none"> <li>• 1 = 1U</li> <li>• 2 = 2U</li> <li>• 3 = 3U</li> <li>• 4 = 4U</li> </ul>
4th	System Generation	<ul style="list-style-type: none"> <li>• 9 = X11 Series</li> <li>• 8 = X10 Series</li> <li>• 7 = X9 Series</li> </ul>
5th	Socket / Family	<ul style="list-style-type: none"> <li>• P = Socket P</li> <li>• R = Socket R</li> <li>• D2 = Socket F / 2-Core</li> <li>• D4 = Socket F / 4-Core</li> <li>• D8 = Socket F / 8-Core</li> <li>• T = Tylersberg</li> <li>• A = Atom SoC</li> </ul>
6th	Interface Type	<ul style="list-style-type: none"> <li>• A: Direct Attached</li> <li>• AC: Direct Attached <b>SAS3</b></li> <li>• D: Dual Motherboard</li> <li>• DC: Dual Motherboard <b>SAS3</b></li> <li>• E1: Single Expander</li> <li>• E1C: Single <b>SAS3</b> Expander</li> <li>• E2: Dual Expander</li> <li>• E2C: Dual <b>SAS3</b> Expander</li> <li>• N: <b>NVMe</b></li> </ul>
7th	Power Redundancy	<ul style="list-style-type: none"> <li>• R = Redundant Power Supplies</li> </ul>
8th	Additional	<ul style="list-style-type: none"> <li>• ##: Number of drive bays</li> <li>• 4: <b>Quad LAN</b> ports</li> <li>• L: IT Mode</li> <li>• H: Hardware RAID</li> <li>• N: Hardware RAID &amp; 24 DIMMs (X9/X10) / <b>NVMe</b> (X10 Simply Double)</li> <li>• NV: NVDIMM</li> <li>• T: HW RAID up to 16 drives</li> </ul>

# Naming Guide



## Network Adapter

Character	Representation	Options	
1 <sup>st</sup>	Product Family	AOC = Add On Card	
2 <sup>nd</sup>	Form Factor	U = UIO S = Standard P = Proprietary C = MicroLP	M = Supermicro IO Module (SIOM) MH = SIOM Hybrid
3 <sup>rd</sup>	Product Type/Speed	G = GbE (1Gb/s) TG = 10GbE (10Gb/s) IBF = IB FDR (56Gb/s) IBQ = IB QDR (40Gb/s) INF = IB DDR (20Gb/s)	25G = 25GbE (25Gb/s) 40G = 40GbE (40Gb/s) 100G = 100GbE (100Gb/s) HFI = Host Fabric Interface (100Gb/s)
4 <sup>th</sup>	Chipset Model (optional)	N = Niantec (82599) F = Fortville (XL710/X710)	P = Powerville (i350) S = Sageville (X550)
5 <sup>th</sup>	Chipset Manufacturer (optional)	i = Intel	b =
6 <sup>th</sup>	Number of Ports	1 = 1 port 2 = 2 ports	4 = 4 ports
7 <sup>th</sup>	Connector Type (optional)	S = SFP+/SFP28 Q = QSFP+	T = 10GBase-T C = QSFP28



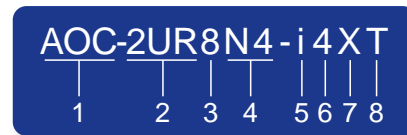
## SIOM Network Adapter

Character	Representation	Options	
1 <sup>st</sup>	Product Family	AOC = Add On Card	
2 <sup>nd</sup>	Form Factor	S = Standard P = Proprietary C = MicroLP	M = Super IO Module (SIOM) MH = SIOM Hybrid
3 <sup>rd</sup>	Product Type/Speed	G = GbE (1Gb/s) TG = 10GbE (10Gb/s) 25G = 25GbE (25Gb/s) 40G = 40GbE (40Gb/s) 50G = 50GbE (50Gb/s) 100G = 100GbE (100Gb/s)	IBE = IB EDR (100Gb/s) IBF = IB FDR (56Gb/s) IBQ = IB QDR (40Gb/s) HFI = Host Fabric Interface
4 <sup>th</sup>	Chipset Model (optional)	N = Niantec (82599) F = Fortville (XL710/X710)	P = Powerville (i350) S = Sageville (X550)
5 <sup>th</sup>	Chipset Manufacturer	i = Intel	b =
6 <sup>th</sup>	Number of Ports	1 = 1 port 2 = 2 ports	4 = 4 ports
7 <sup>th</sup>	Connector Type (optional)	S = SFP+/SFP28 Q = QSFP+	T = 10GBase-T C = QSFP28
8 <sup>th</sup>	2nd Controller/Connector Type (optional)	G = GbE RJ45 S = 10G SFP+ 2G = GbE 2x RJ45	T = 10GBase-T 2T = 2x 10GBase-T



## NVMe Add On Card

Character	Representation	Options	
1 <sup>st</sup>	Product Family	AOC = Add On Card	
2 <sup>nd</sup>	Expansion slot interface	S = Standard PCI	
3 <sup>rd</sup>	Card height	L = Low Profile M = Smaller Profile	
4 <sup>th</sup>	Expansion slot interface version	G3 = PCI-E Gen3	
5 <sup>th</sup>	Ports	12 = 12 ports 8 = 8 ports 4 = 4 ports 2 = 2 ports	
6 <sup>th</sup>	Protocol	E = NVMe H = Hybrid	
7 <sup>th</sup>	Total # of PCI-E lanes per port (dedicated or distributed) or PCI-E expansion slot length	2 = 2 lanes per port 4 = 4 lanes per port 8 = x8 slot F = x16 slot	
8 <sup>th</sup>	AOC type	R = MiniSAS HD Re-driver T = OcuLink Re-timer P = OcuLink PLX switch (no "P" means MiniSAS HD PLX) M2 = M.2 Carrier	
9 <sup>th</sup>	Additional	F = Unique form factor	



## Ultra Networking Riser Card

Character	Representation	Options	
1 <sup>st</sup>	Product Family	AOC: Add On Card	
2 <sup>nd</sup>	Form Factor	UR : Ultra Riser for 1U 2UR : Ultra Riser for 2U	
3 <sup>rd</sup>	PCI-E Expansion Slots	8 : PCI-E x8 6 : PCI-E x16	
4 <sup>th</sup>	NVMe Ports (Optional)	N2 : Two NVMe ports N4 : Four NVMe ports N6 : Six NVMe ports	
5 <sup>th</sup>	LAN Chipset Manufacturer	i : Intel M : B :	
6 <sup>th</sup>	Number of Ports	1 : One port 2 : Two ports 4 : Four ports	
7 <sup>th</sup>	Controller Type	G : GbE X : 10GbE T : 25GbE	Q : 40GbE F : 50GbE C : 100GbE
8 <sup>th</sup>	Connector Type (Optional)	S : SFP+ T : 10GBase-T	
9 <sup>th</sup>	Chipset Model (Optional)	F : Fortville (XL710/X710)	



# Global Expansion

Providing Greater Economies of Scale and Accelerated Support to Data Center, Cloud Computing, AI, Enterprise IT, Hadoop/Big Data, HPC, 5G, Hyperscale, and Embedded Solutions Customers Worldwide

## Worldwide Headquarters San Jose, California, USA



### America

- Supermicro's Headquarters expansion: Over 1.5 million square foot **Green Computing Park** in San Jose, California signals the company's increasing leadership in the IT industry
- One of the largest high-tech R&D, manufacturing, and business hubs in Silicon Valley
- East coast sales and service office



### APAC

- Supermicro's Asia Science and Technology Park is a key milestone in the company's growth as a true global leader in the development of advanced, power saving computing technologies



### EMEA

- Supermicro's system integration facility and services in The Netherlands serves the dynamic, rapidly growing EMEA market with localized supply and time-to-market advantages

## Supermicro Worldwide

### Worldwide Headquarters

Super Micro Computer, Inc.  
980 Rock Avenue, San Jose, CA 95131 USA  
Tel: +1-408-503-8000  
Fax: +1-408-503-8008  
General Info: [marketing@supermicro.com](mailto:marketing@supermicro.com)  
Tech Support: [support@supermicro.com](mailto:support@supermicro.com)  
Webmaster: [webmaster@supermicro.com](mailto:webmaster@supermicro.com)

### European Branch

Super Micro Computer, B.V.  
Het Sterrenbeeld 28, 5215 ML,  
's-Hertogenbosch, The Netherlands  
Tel: +31-73-640-0390  
Fax: +31-73-641-6525  
General Info: [sales\\_europe@supermicro.com](mailto:sales_europe@supermicro.com)  
Support: [support\\_europe@supermicro.com](mailto:support_europe@supermicro.com)

### Taiwan Office

Super Micro Computer, Inc.  
3F., No.150, Jian 1st Rd., Zhonghe Dist.,  
New Taipei City 235, Taiwan (R.O.C.)  
Tel: +886-2-8226-3990  
Fax: +886-2-8226-3992  
Support: [support@supermicro.com.tw](mailto:support@supermicro.com.tw)

### Beijing, China Office

Super Micro Computer, Inc.  
Suite 1208 JiaHua Building D  
Shangdi, Haidian District,  
Beijing, China 100085  
Tel: +86-10-62969165  
E-mail: [sales-cn@supermicro.com](mailto:sales-cn@supermicro.com)

### Japan Office

Supermicro Japan  
21F Shibuya Infoss Tower, 20-1,  
Sakuragaoka-cho, Shibuya-Ku, Tokyo,  
150-0031 Japan  
Tel: +81-3-5728-5196  
FAX: +81-3-5728-5197  
Support: [japanservice@supermicro.com](mailto:japanservice@supermicro.com)

### U.S. East Coast Office

Super Micro Computer, Inc.  
525 Washington Blvd, 20th Floor  
Jersey City, NJ 07310 USA  
General Info: [marketing@supermicro.com](mailto:marketing@supermicro.com)

### U.K. Sales Office

Super Micro Computer, B.V.  
66-67 Newman Street  
London, W1T 3EQ, UK  
Tel: +31-73-640-0390 Ext. 2800  
General Info: [sales\\_europe@supermicro.com](mailto:sales_europe@supermicro.com)  
Support: [support\\_europe@supermicro.com](mailto:support_europe@supermicro.com)

### Supermicro Science & Technology Park

Super Micro Computer, Inc.  
No.1899, Xingfeng Rd., Bade Dist.,  
Taoyuan City 334, Taiwan (R.O.C.)  
Tel: +886-2-8226-3990  
Fax: +886-3-362-8266  
Support: [Support@supermicro.com.tw](mailto:Support@supermicro.com.tw)

### Shanghai, China Office

Super Micro Computer, Inc.  
Room 1604, No 398, North Caoxi Road,  
HuiZhi Building, Xuhui District,  
Shanghai, China 200030  
Tel: +86-21-61152558  
Tech Support: +86-21-61152556  
E-mail: [sales-cn@supermicro.com](mailto:sales-cn@supermicro.com)  
Support: [support-cn@supermicro.com](mailto:support-cn@supermicro.com)

# Better

Better Performance  
Per Watt and Per Dollar



# Faster

First-to-Market Innovation with the  
Highest Performance Server Designs



# Greener

Reduced Environmental  
Impact and Lower TCO



## Worldwide Headquarters

Super Micro Computer, Inc.  
980 Rock Ave.  
San Jose, CA 95131, USA  
Tel: +1-408-503-8000  
Fax: +1-408-503-8008  
E-mail: [Marketing@Supermicro.com](mailto:Marketing@Supermicro.com)

## EMEA Headquarters

Super Micro Computer, B.V.  
Het Sterrenbeeld 28, 5215 ML,  
's-Hertogenbosch, The Netherlands  
Tel: +31-73-640-0390  
Fax: +31-73-641-6525  
E-mail: [Sales\\_Europe@supermicro.com](mailto:Sales_Europe@supermicro.com)

## APAC Headquarters

Super Micro Computer, Taiwan Inc.  
3F, No. 150, Jian 1st Rd., Zhonghe Dist.,  
New Taipei City 235, Taiwan  
Tel: +886-2-8226-3990  
Fax: +886-2-8226-3991  
E-mail: [Marketing@Supermicro.com.tw](mailto:Marketing@Supermicro.com.tw)

[www.supermicro.com](http://www.supermicro.com)

©Super Micro Computer, Inc. Specifications subject to change without notice. All other brands and names are the property of their respective owners. All logos, brand names, campaign statements and product images contained herein are copyrighted and may not be reprinted and/or reproduced, in whole or in part, without express written permission by Supermicro Corporate Marketing.



Please Recycle