



Supermicro A+ Servers

Outstanding Performance Drives Business Agility



H12 Generation A+ Servers

Choose from the most comprehensive line of servers, GPU and blade systems in the industry

Up to 64 cores/128 threads per socket with AMD EPYC™ 7002 series processors

Up to 32 DIMMs of DDR4-3200MHz memory for up to 8TB per system

Increased I/O throughput with *PCI-E 4.0* and up to 128 lanes per socket

Hot-pluggable U.2 NVMe storage for better application responsiveness

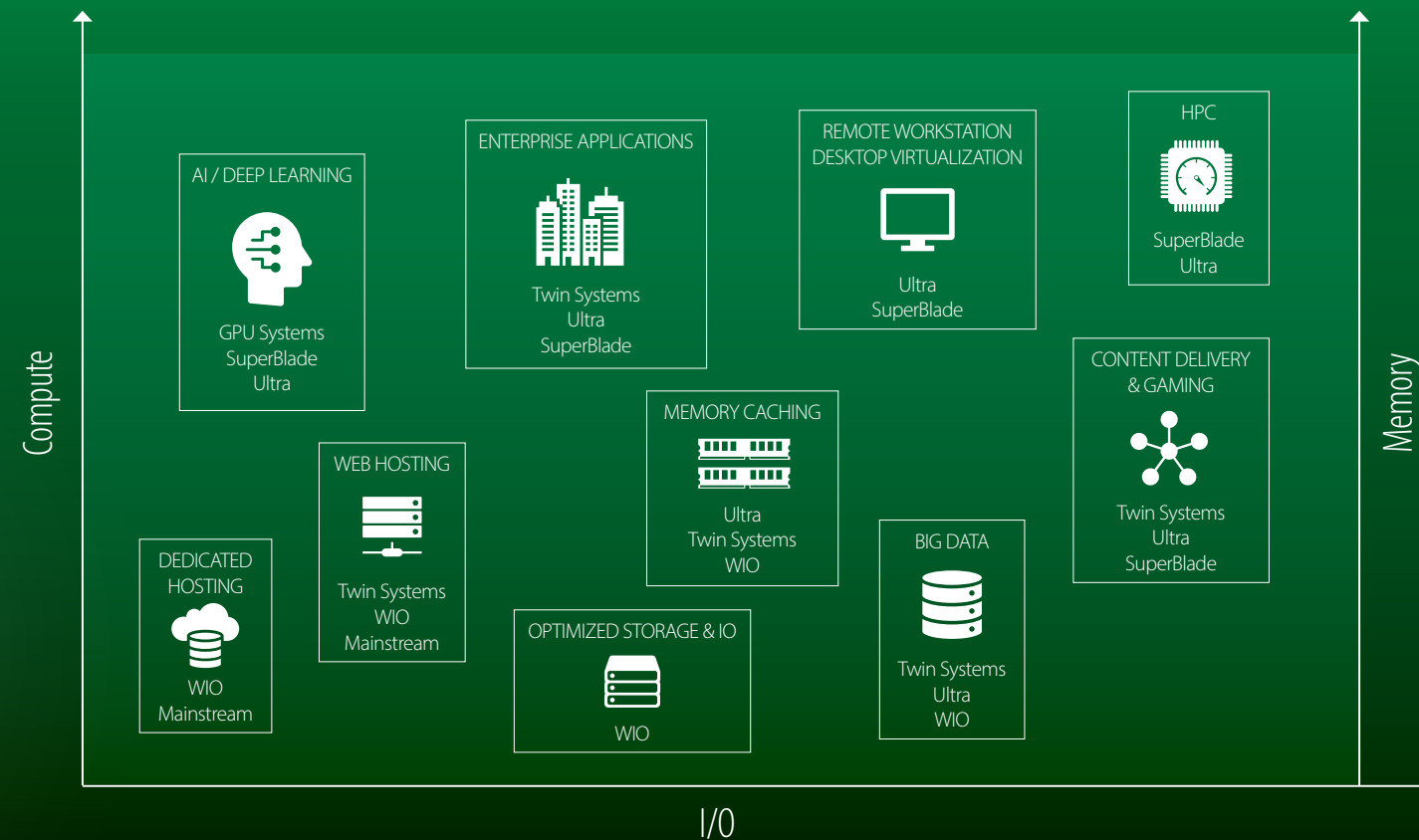
3-Year Limited Warranty and 24-Hour Technical Support



SuperBlade®



BigTwin™



Ultra

Industry Leading IOPS,
Energy Efficiency, and Flexibility



GPU System

8 Direct-Attached *PCI-E 4.0* GPUs



WIO

Cost and Energy Efficiency
For Data Center Environments



Twin Systems

Industry Leading Multi-Node Architectures



Mainstream

Efficient and Cost-Effective Designs
For Mainstream Applications



SuperBlade®

High Density, Performance, and Efficient
Resource-Saving Architecture



Dual Socket SP3, up to 280W TDP

32 DIMM slots DDR4-3200MHz, up to 8TB

Flexible onboard networking up to 2x 25G Ethernet

24/12x U.2 NVMe in 2U/1U or 12/4x 3.5" SATA in 2U/1U

Up to redundant 1200W/1600W Titanium Level

Dual Socket SP3, up to 280W TDP

32 DIMM slots DDR4-3200MHz, up to 8TB

Onboard GbE and flexible AIOM networking

Up to 4x NVMe U.2 and 4x 2.5" SATA drives

Redundant (2+2) 4000W Titanium Level

Single Socket SP3, up to 280W TDP

Up to 16 DIMM slots DDR4-3200MHz, up to 4TB

Onboard 2x 10G Ethernet

2.5" or 3.5" NVMe/SATA drives

Up to redundant 750W Platinum Level

Up to dual Socket SP3, up to 225W TDP

Up to 16 DIMM slots DDR4-3200MHz, up to 4TB

Flexible onboard SIOM networking up to 100G Ethernet

Up to 4x 2.5" NVMe/SATA + 2x 2.5" SATA or 3x 3.5" SATA

Up to redundant 2200W Titanium Level

Single or dual Socket SP3, up to 225W TDP

Up to 16 DIMM slots DDR4-3200MHz, up to 4TB

Up to onboard 2x 10G Ethernet

Up to 8x 3.5" SATA drives in 2U with SAS option

1U, 2U, 4U rackmount/tower

Up to 20x 1-socket SuperBlade servers in 8U

Single Socket SP3 with 8 DIMM slots, up to 2TB

Onboard 2x 25G Ethernet and optional 100G EDR

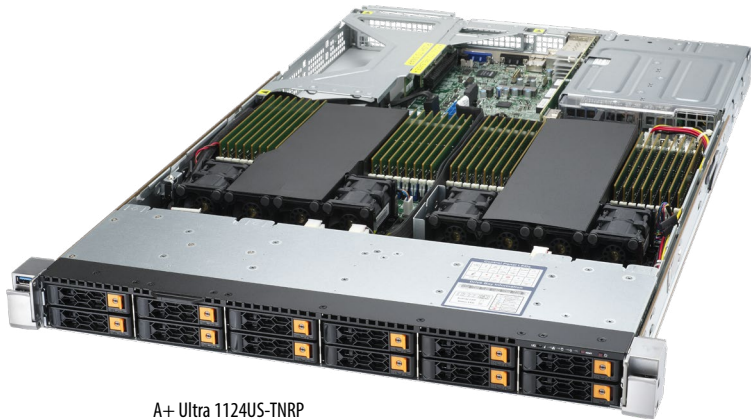
Up to 2 hot-pluggable NVMe/SAS/SATA and 2 M.2

Up to 1 double-wide or 2 single-wide GPUs per server

A+ Ultra Servers

Industry Leading IOPS, Energy Efficiency, and Flexibility

- Optimized for highest processor TDPs
- 32 DIMM slots for up to 8TB
- All hot-pluggable *PCI-E 4.0* U.2 NVMe

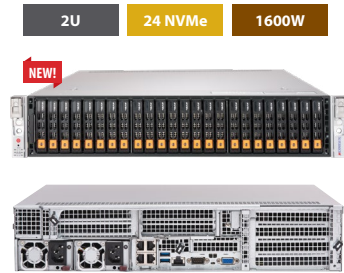


A+ Ultra 1124US-TNRP

HIGHEST PERFORMANCE A+ ULTRA SERVERS

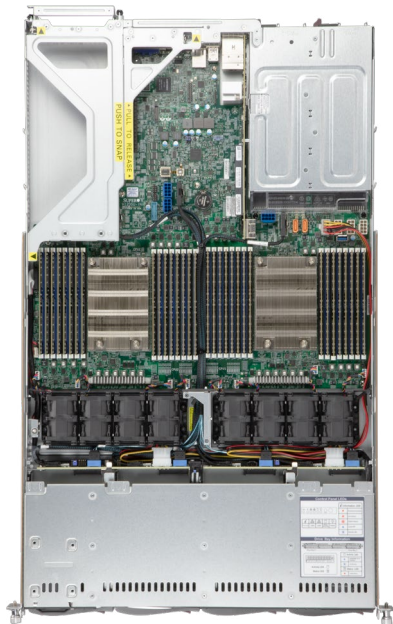
Supermicro A+ Ultra system are designed to deliver the highest performance, flexibility, scalability and serviceability to demanding IT environments, and to power mission-critical Enterprise workloads, including support for dual 2nd Generation AMD EPYC™ processors and 32 DIMMs of DDR4-3200MHz memory for up to 8TB of capacity.

- Uncompromised performance design with 2 CPU sockets and 32 memory slots optimized for supporting the highest processor TDPs
- Best-in-class storage features including all NVMe, optional SAS3, and low latency optimizations
- Vast networking and expansion possibilities with Ultra Riser cards



H12 Generation	AS-1124US-TNRP	AS-2124US-TNRP
Form Factor	<ul style="list-style-type: none"> 1U rackmount 	<ul style="list-style-type: none"> 2U rackmount
Processor Support	<ul style="list-style-type: none"> Dual Socket SP3 for AMD EPYC™ 7002 Series processors, up to 128 cores, up to 280W TDP¹ 	<ul style="list-style-type: none"> Dual Socket SP3 for AMD EPYC™ 7002 Series processors, up to 128 cores, up to 280W TDP¹
Memory Slots & Capacity	<ul style="list-style-type: none"> 32 DIMM slots, DDR4-3200MHz; up to 8TB Reg. ECC 	<ul style="list-style-type: none"> 32 DIMM slots, DDR4-3200MHz; up to 8TB Reg. ECC
Expansion Slots	<ul style="list-style-type: none"> 2 PCI-E 4.0 x16 (FH/9.5"L) slots 1 PCI-E 4.0 x16 (LP) slot 1 PCI-E 4.0 x16 (proprietary designed for internal LP slot) 	<ul style="list-style-type: none"> 1 PCI-E 4.0 x16 slot
Storage	<ul style="list-style-type: none"> 12 hot-pluggable 2.5" U.2 NVMe (PCI-E 4.0) drive bays Optional support for SAS3 and SATA3 	<ul style="list-style-type: none"> 24 hot-pluggable 2.5" U.2 NVMe (PCI-E 4.0) drive bays Optional support for SAS3 and SATA3
I/O Ports	<ul style="list-style-type: none"> 2 RJ45 and 2 SFP+ 10G Ethernet ports 1 built-in VGA port 4 USB 3.0 ports (2 rear; 1 front + 1 Type A) 	<ul style="list-style-type: none"> 2 RJ45 and 2 SFP+ 10G Ethernet ports 1 built-in VGA port 3 USB 3.0 ports (2 rear, 1 Type A)
System Management	<ul style="list-style-type: none"> Built-in server management tool (IPMI 2.0, KVM/media over LAN) with dedicated LAN port 	<ul style="list-style-type: none"> Built-in server management tool (IPMI 2.0, KVM/media over LAN) with dedicated LAN port
System Cooling	<ul style="list-style-type: none"> 8x 40x56mm fans w/ Optimal Fan Speed Control 	<ul style="list-style-type: none"> 4x 80x80x38mm fans w/ Optimal Fan Speed Control
Power Supply	<ul style="list-style-type: none"> Redundant 1200W Titanium Level PSUs†† 	<ul style="list-style-type: none"> Redundant 1600W Titanium Level PSUs††

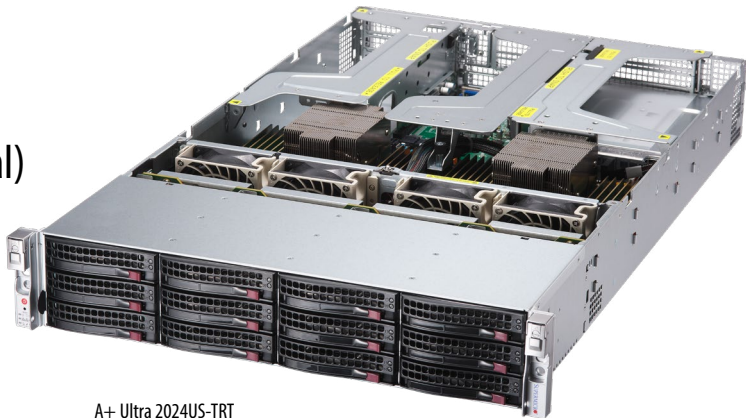
¹ Certain high TDP CPUs may be supported only under specific conditions. Please contact Supermicro Technical Support for additional information about specialized system optimization.
 †† Full redundancy based on configuration and application load.



A+ Ultra Servers

Industry Leading IOPS, Energy Efficiency, and Flexibility

- Optimized for highest processor TDPs
- Hot-pluggable 3.5" SATA drive bays (SAS optional)
- Up to 4 low-profile GPUs on 2U system

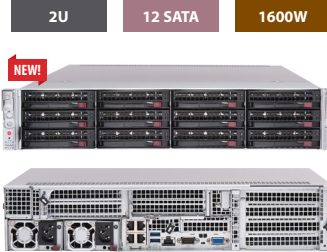
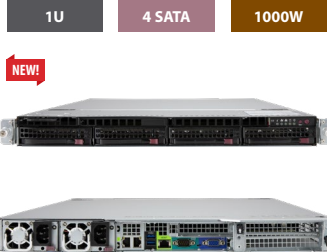


A+ Ultra 2024US-TRT

HIGHEST PERFORMANCE A+ ULTRA SERVERS

Supermicro A+ 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 dual 2nd Generation AMD EPYC™ processors and 32 DIMMs of DDR4-3200MHz memory for up to 8TB of capacity.

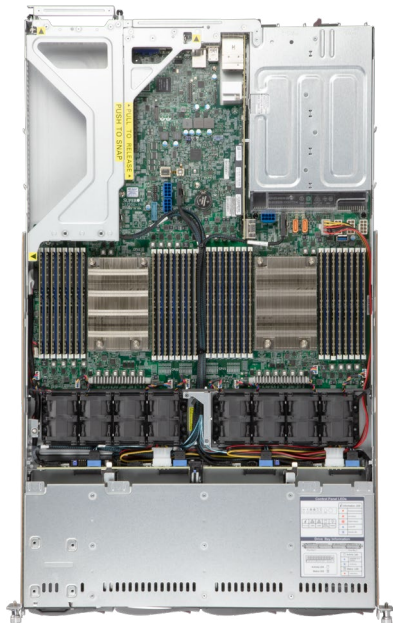
- Uncompromised performance design with 2 CPU sockets and 32 memory slots optimized for supporting the highest processor TDPs
- Best-in-class server features including all NVMe, hybrid storage and low latency optimizations
- Vast networking and expansion possibilities with Ultra Riser cards



H12 Generation	AS -1024US-TRT	AS -2024US-TRT
Form Factor	• 1U rackmount	• 2U rackmount
Processor Support	• Dual Socket SP3 for AMD EPYC™ 7002 Series processors, up to 128 cores, up to 280W TDP [†]	• Dual Socket SP3 for AMD EPYC™ 7002 Series processors, up to 128 cores, up to 280W TDP [†]
Memory Slots & Capacity	• 32 DIMM slots, DDR4-3200MHz; up to 8TB Reg. ECC	• 32 DIMM slots, DDR4-3200MHz; up to 8TB Reg. ECC
Expansion Slots	• 2 PCI-E 4.0 x16 (FH/9.5"L) slot • 1 PCI-E 4.0 x16 (LP) slot • 1 PCI-E 4.0 x16 (proprietary designed for internal LP slot)	• 2 PCI-E 4.0 x16 (FH/9.5"L) slot • 1 PCI-E 4.0 x16 (FHFL) slot • 1 PCI-E 4.0 x16 (LP) slot • 1 PCI-E 4.0 x8 (in x16) slot • 1 PCI-E 4.0 x8 (proprietary designed for internal LP slot)
Storage	• 4 hot-pluggable 3.5" SATA3 drive bays • Optional support SAS3 and U.2 NVMe	• 12 hot-pluggable 3.5" SATA3 drive bays • Optional support for SAS3 and U.2 NVMe
I/O Ports	• 2 RJ45 10G Ethernet ports • 1 built-in VGA port • 4 USB 3.0 ports (2 rear, 1 front, 1 Type A)	• 2 RJ45 10G Ethernet ports • 1 built-in VGA port • 3 USB 3.0 ports (2 rear, 1 Type A)
System Management	• Built-in server management tool (IPMI 2.0, KVM/media over LAN) with dedicated LAN port	• Built-in server management tool (IPMI 2.0, KVM/media over LAN) with dedicated LAN port
System Cooling	• 8x 40x56mm fans w/ Optimal Fan Speed Control	• 4x 80x80x38mm fans w/ Optimal Fan Speed Control
Power Supply	• Redundant 1000W Titanium Level PSUs ^{††}	• Redundant 1600W Titanium Level PSUs ^{††}

[†] Certain high TDP CPUs may be supported only under specific conditions. Please contact Supermicro Technical Support for additional information about specialized system optimization.

^{††} Full redundancy based on configuration and application load.



A+ GPU System

Maximum Acceleration for AI / Deep Learning and HPC

- Up to 8 full-height double-wide GPUs
- Direct-attach **PCI-E 4.0** x16 CPU-to-GPU lanes
- Flexible AIOM/OCP 3.0 networking for up to 100G



A+ GPU System 4124GS-TNR

MAXIMUM ACCELERATION A+ GPU SYSTEM

Supermicro A+ GPU System 4124GS-TNR is a new AMD EPYC based AI and Deep Learning platform designed to extract maximum performance and return of investment from standard PCI-E based GPUs. Supporting up to 8 double-wide or single-wide GPU cards, each CPU socket on the system provides four direct CPU-to-GPU PCI-E 4.0 x16 slots for lowest latency and highest bandwidth. An additional three PCI-E 4.0 x8 slots or two PCI-E 4.0 x16 slots are configurable for a variety of usage cases, including extra HPC networking connectivity or storage expansion opportunities.



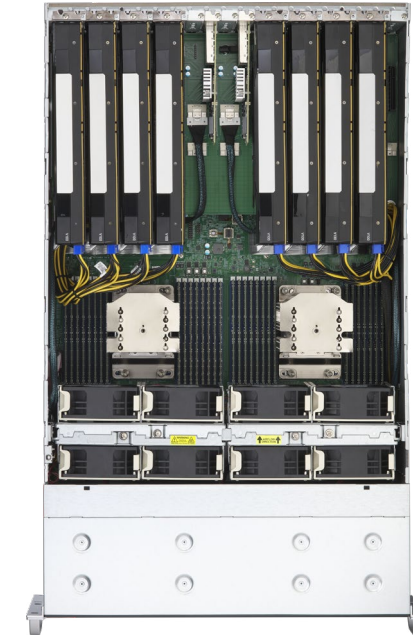
4U 2 CPU 32 DIMM 8 GPU 4 NVMe 4 SATA 4000W



H12 Generation

AS- 4124GS-TNR

Form Factor	<ul style="list-style-type: none"> • 4U rackmount
Processor Support	<ul style="list-style-type: none"> • Dual Socket SP3 for AMD EPYC™ 7002 Series processors, up to 128 cores, up to 280W TDP
Memory Slots & Capacity	<ul style="list-style-type: none"> • 32 DIMM slots, DDR4-3200MHz; up to 8TB Reg. ECC
Expansion Slots	<ul style="list-style-type: none"> • 8 PCI-E 4.0 x16 and 3 PCI-E 4.0 x8 slots (default mode) • 8 PCI-E 4.0 x16 and 2 PCI-E 4.0 x16 slots (SATA only mode) • AIOM networking options (see page 23 for more details) • Up to 160 PCI-E 4.0 lanes total (two processors installed)
Storage	<ul style="list-style-type: none"> • 4 hot-pluggable 2.5" SATA3 drive bays • Up to 4 hot-pluggable 2.5" U.2 NVMe drive bays
I/O Ports	<ul style="list-style-type: none"> • 1 built-in VGA port • 2 USB 3.0 ports (rear), 1 USB 2.0 (header) • 2 RJ45 1G Ethernet ports
System Management	<ul style="list-style-type: none"> • Built-in server management tool (IPMI 2.0, KVM/media over LAN) with dedicated LAN port
System Cooling	<ul style="list-style-type: none"> • 8 heavy duty fans w/ Optimal Fan Speed Control
Power Supply	<ul style="list-style-type: none"> • Redundant (2+2) 4x 2000W Titanium Level PSUs



A+ WIO Servers

Industry's Widest Variety of I/O Optimized Servers

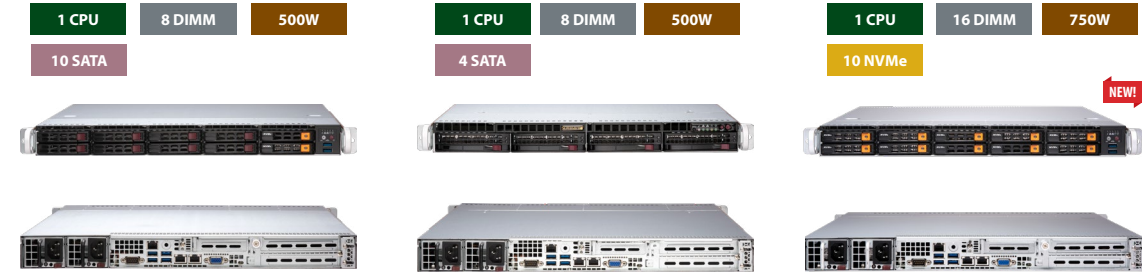


AS-1114S-WN10RT

I/O OPTIMIZED A+ WIO SERVERS

Supermicro A+ 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, A+ WIO servers also provide attractive cost advantages and investment protection.

- Best single-socket I/O configurability with 8 or 16 DIMMs
- Up to 10 U.2 NVMe and dual onboard 10GbE
- Redundant high-efficiency Platinum Level power supplies



H12 Generation	AS-1114S-WTRT	AS-1014S-WTRT	AS-1114S-WN10RT
Form Factor	<ul style="list-style-type: none"> • 1U rackmount 	<ul style="list-style-type: none"> • 1U rackmount 	<ul style="list-style-type: none"> • 1U rackmount
Processor Support	<ul style="list-style-type: none"> • Single Socket SP3 for AMD EPYC™ 7002 Series processors, up to 64 cores, up to 280W TDP 	<ul style="list-style-type: none"> • Single Socket SP3 for AMD EPYC™ 7002 Series processors, up to 64 cores, up to 280W TDP 	<ul style="list-style-type: none"> • Single Socket SP3 for AMD EPYC™ 7002 Series processors, up to 64 cores, up to 280W TDP
Memory Slots & Capacity	<ul style="list-style-type: none"> • 8 DIMM slots, DDR4-3200MHz; up to 2TB Reg. ECC 	<ul style="list-style-type: none"> • 8 DIMM slots, DDR4-3200MHz; up to 2TB Reg. ECC 	<ul style="list-style-type: none"> • 16 DIMM slots, DDR4-3200MHz; up to 4TB Reg. ECC
Expansion Slots	<ul style="list-style-type: none"> • 2 PCI-E 4.0 x16 (FHHL) slots • 1 PCI-E 4.0 x16 (LP) slot 	<ul style="list-style-type: none"> • 2 PCI-E 4.0 x16 (FHHL) slots • 1 PCI-E 4.0 x16 (LP) slot 	<ul style="list-style-type: none"> • 2 PCI-E 4.0 x16 (FHFL) slot • 1 PCI-E 4.0 x16 (LP) slot
Storage	<ul style="list-style-type: none"> • 10 hot-pluggable 2.5" SATA3 drive bays • 2 M.2 NVMe/SATA3 slots • Optional 2 NVMe (PCI-E 3.0) U.2 drives support vis 	<ul style="list-style-type: none"> • 4 hot-pluggable 3.5" SATA3 drive bays • 2 M.2 NVMe/SATA3 slots • Optional 4 U.2 NVMe (PCI-E 3.0) drive support via additional kit for NVMe devices 	<ul style="list-style-type: none"> • 10 hot-pluggable NVMe PCI-E 4.0 x4 U.2 drive bays • 2 M.2 NVMe/SATA3 slots • Optional up to 10x 2.5" SATA3 drives via additional kit for SATA3 drives
I/O Ports	<ul style="list-style-type: none"> • 2 RJ45 10G Ethernet ports • 1 built-in VGA port • 7 USB 3.0 ports (4 rear, 2 front, 1 Type A) 	<ul style="list-style-type: none"> • 2 RJ45 10G Ethernet ports • 1 built-in VGA port • 7 USB 3.0 ports (4 rear, 2 front, 1 Type A) 	<ul style="list-style-type: none"> • 2 RJ45 10G Ethernet ports • 1 built-in VGA port • 7 USB 3.0 ports (4 rear, 2 front, 1 Type A)
System Management	<ul style="list-style-type: none"> • Built-in server management tool (IPMI 2.0, KVM/ media over LAN) with dedicated LAN port 	<ul style="list-style-type: none"> • Built-in server management tool (IPMI 2.0, KVM/ media over LAN) with dedicated LAN port 	<ul style="list-style-type: none"> • Built-in server management tool (IPMI 2.0, KVM/ media over LAN) with dedicated LAN port
System Cooling	<ul style="list-style-type: none"> • 4 counter-rotating 4cm PWM fans, 2 fans for AOC 	<ul style="list-style-type: none"> • 4 counter-rotating 4cm PWM fans, 2 fans for AOC 	<ul style="list-style-type: none"> • 4 counter-rotating 4cm PWM fans, 2 fans for AOC
Power Supply	<ul style="list-style-type: none"> • Redundant 500W Platinum Level PSUs 	<ul style="list-style-type: none"> • Redundant 500W Platinum Level PSUs 	<ul style="list-style-type: none"> • Redundant 750W Platinum Level PSUs

A+ Twin Systems

Leading Multi-node Architectures

- Highly configurable 2U 4-node systems
- 2-socket with 16 DIMMs or 1-socket with 8 DIMMs per node
- Flexible storage and I/O options including NVMe/SATA3 and SIOM networking



A+ BigTwin™ (2U4N)

NO-COMPROMISE 2U 4-NODE ARCHITECTURE

BigTwin is the 5th generation in the Supermicro Twin Family with a multitude of innovations and engineering breakthroughs. Historically multi-node systems traded off features and capacity for higher density. They were deployed for workloads that did not require the highest performance or the highest memory density on a single node.

TwinPro systems are designed for simplified deployment and maintenance, and assembled with the highest quality to ensure continuous operation even at maximum capacity. Customers in high-end enterprise, data center, HPC and Cloud Computing environments receive the greatest competitive advantage from data center resources with the Supermicro TwinPro.



H12 Generation

Form Factor

- 2U 4-node rackmount

Processor Support

- Single Socket SP3 for AMD EPYC™ 7002 Series processors
- Up to 64 cores, up to 225W TDP †

Memory Slots & Capacity

- 8 DIMM slots per node, DDR4-3200MHz; up to 2TB Reg. ECC

Expansion Slots

- 2 PCI-E 4.0 x16 (LP) slot per node

Storage

- 3 hot-pluggable 3.5" SATA3 drive bays per node
- 4 M.2 NVMe/SATA3 slots per node

I/O Ports (per node)

- Flexible SIOM networking options (see page 23)
- 1 built-in VGA port
- 2 USB 3.0 ports (rear)

System Management

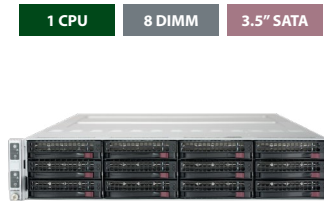
- Built-in server management tool (IPMI 2.0, KVM/media over LAN) with dedicated LAN port per node

System Cooling

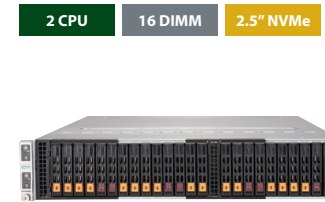
- 4 heavy duty fans w/ Optimal Fan Speed Control

Power Supply

- Redundant 2000W Titanium Level PSUs



TwinPro™ AS- 2014TP-HTR



BigTwin™ AS -2124BT-HTR/HNTR



TwinPro™ Node

BigTwin™ Node



HTR: AII-SATA (2.5")



HNTR: 4 NVMe + 2 SATA or 6 SATA per node

- 2U 4-node rackmount

- Dual Socket SP3 for AMD EPYC™ 7002 Series processors
- Up to 128 cores, up to 225W TDP †

- 16 DIMM slots per node, DDR4-3200MHz; up to 4TB Reg. ECC

- 2 PCI-E 4.0 x16 (LP) slot per node

HTR:

- 6 hot-pluggable 2.5" SATA3 drive bays per node
- 1 M.2 NVMe/SATA3 slot per node

HNTR:

- 6 hot-pluggable 2.5" drive bays per node: 4 NVMe/SATA3 and 2 SATA3; or 6 SATA3
- 1 M.2 NVMe/SATA3 slot per node

- Flexible SIOM networking options (see page 23)
- 1 built-in VGA port
- 2 USB 3.0 ports (rear)

- Built-in server management tool (IPMI 2.0, KVM/media over LAN) with dedicated LAN port per node

- 4 heavy duty fans w/ Optimal Fan Speed Control

- Redundant 2200W Titanium Level PSUs

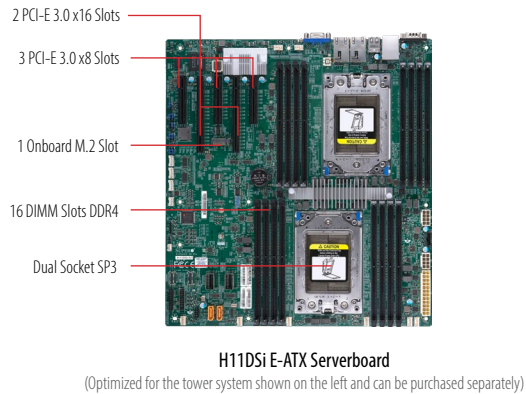
† Certain CPUs with high TDP may be supported only under specific conditions. Please contact Supermicro Technical Support for additional information about specialized system optimization.

A+ Mainstream

Versatile Entry-Level Servers for Mainstream Applications

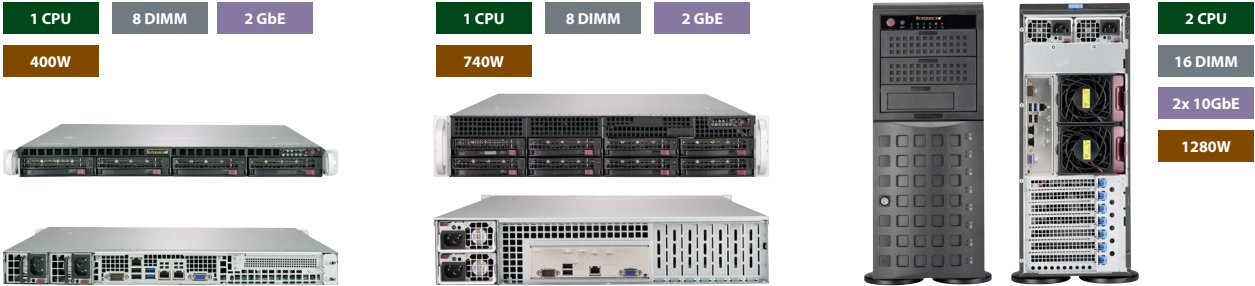


A+ Server/Workstation 4023S-TRT



MAINSTREAM APPLICATION OPTIMIZED

The A+ 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.



H11 Generation	AS -1013S-MTR	AS -2013S-COR	AS -4023S-TRT
Form Factor	<ul style="list-style-type: none">1U rackmount	<ul style="list-style-type: none">2U rackmount	<ul style="list-style-type: none">4U rackmount / tower
Processor Support	<ul style="list-style-type: none">Single Socket SP3 for AMD EPYC™ 7002 Series processors, up to 64 cores, up to 225W TDP †	<ul style="list-style-type: none">Single Socket SP3 for AMD EPYC™ 7002 Series processors, up to 64 cores, up to 225W TDP †	<ul style="list-style-type: none">Dual Socket SP3 for AMD EPYC™ 7002 Series processors, up to 128 cores, up to 225W TDP †
Memory Slots & Capacity	<ul style="list-style-type: none">8 DIMM slots, DDR4-3200MHz; up to 1TB/2TB †† Reg. ECC	<ul style="list-style-type: none">8 DIMM slots, DDR4-3200MHz; up to 1TB/2TB †† Reg. ECC	<ul style="list-style-type: none">16 DIMM slots, DDR4-3200MHz; up to 2TB/4TB †† Reg. ECC
Expansion Slots	<ul style="list-style-type: none">PCI-E 3.0 x16 (FH/HL) slot	<ul style="list-style-type: none">3 PCI-E 3.0 x16 (low profile)3 PCI-E 3.0 x8 (low profile)	<ul style="list-style-type: none">2 PCI-E 3.0 x16 slots3 PCI-E 3.0 x8 slots
Storage	<ul style="list-style-type: none">4 hot-pluggable 3.5" SATA3 drive baysOptional SAS3 via add-on card1 M.2 NVMe slot	<ul style="list-style-type: none">8 hot-pluggable 3.5" SAS3/SATA3 drive bays (on-board Broadcom 3008 IR mode)1 M.2 NVMe slot	<ul style="list-style-type: none">8 hot-pluggable 3.5" SATA3 drive bays3 peripheral 5.25" drive bays1 M.2 NVMe slot
I/O Ports	<ul style="list-style-type: none">2 RJ45 1G Ethernet ports1 built-in VGA port3 USB 3.0 ports, 2 USB 2.0 ports	<ul style="list-style-type: none">2 RJ45 1G Ethernet ports1 built-in VGA port3 USB 3.0 ports, 2 USB 2.0 ports	<ul style="list-style-type: none">2 RJ45 10G Ethernet ports1 built-in VGA port4 rear USB ports
System Management	<ul style="list-style-type: none">Built-in server management tool (IPMI 2.0, KVM/media over LAN) with dedicated LAN port	<ul style="list-style-type: none">Built-in server management tool (IPMI 2.0, KVM/media over LAN) with dedicated LAN port	<ul style="list-style-type: none">Built-in server management tool (IPMI 2.0, KVM/media over LAN) with dedicated LAN port
System Cooling	<ul style="list-style-type: none">4x 40x28mm 4-pin PWM fans	<ul style="list-style-type: none">3 heavy-duty PWM fans with fan speed control	<ul style="list-style-type: none">5 hot-swappable system fans
Power Supply	<ul style="list-style-type: none">Redundant 400W Platinum Level PSUs	<ul style="list-style-type: none">Redundant 740W Platinum Level PSUs	<ul style="list-style-type: none">Redundant 1280W Platinum Level PSUs

† AMD EPYC 7002 series drop-in support requires board revision 2.x; Up to 32 Cores (Board revision 1.x + 7001 Processors), up to 64 Cores (Board revision 2.x + 7002 Processors).
†† Board revision 2.x required to reach 2TB with 8 DIMM slots or 4TB with 16 DIMM slots of maximum memory capacities.

A+ SuperBlade®

Performance and Density Optimized Resource Saving Architecture

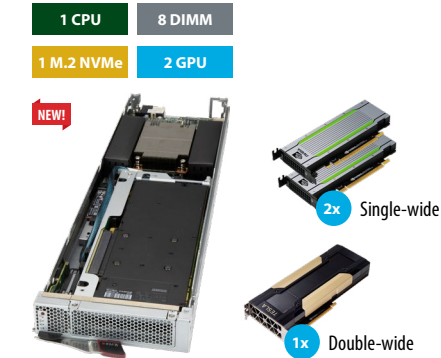
- Up to 20 hot-pluggable nodes in 8U
- Highest density GPU platform for AI and Deep Learning
- Integrated HPC fabrics for up to 100G EDR InfiniBand



20 GPU blade servers in 8U

RESOURCE SAVING ARCHITECTURE




A shared cooling, power and networking infrastructure is key to the high density and server efficiency offered by blade solutions. Supermicro high performance, density optimized and energy efficiency 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 key components of TCO for today's datacenters, such as free-air cooling, power efficiency, node density and networking management.













H12 Generation	SBA-4119S-T2N	SBA-4119S-C2N	SBA-4119SG-X
Form Factor	<ul style="list-style-type: none"> Up to 20 nodes in one 8U enclosure 	<ul style="list-style-type: none"> Up to 20 nodes in one 8U enclosure 	<ul style="list-style-type: none"> Up to 20 nodes in one 8U enclosure
Processor Support	<ul style="list-style-type: none"> Single Socket SP3 for AMD EPYC™ 7002 Series processors, up to 64 cores, up to 280W TDP at 35°C 	<ul style="list-style-type: none"> Single Socket SP3 for AMD EPYC™ 7002 Series processors, up to 64 cores, up to 280W TDP at 35°C 	<ul style="list-style-type: none"> Single Socket SP3 for AMD EPYC™ 7002 Series processors, up to 64 cores, up to 225W TDP at 35°C
Memory Slots & Capacity	<ul style="list-style-type: none"> 8 DIMM slots, DDR4-3200MHz; up to 2TB Reg. ECC 	<ul style="list-style-type: none"> 8 DIMM slots, DDR4-3200MHz; up to 2TB Reg. ECC 	<ul style="list-style-type: none"> 8 DIMM slots, DDR4-3200MHz; up to 2TB Reg. ECC
Expansion Slots	<ul style="list-style-type: none"> 1 PCI-E 4.0 x16 Mezzanine card slot for optional high-performance networking options 	<ul style="list-style-type: none"> 1 PCI-E 4.0 x16 Mezzanine card slot for optional high-performance networking options SAS AOM Module 	<ul style="list-style-type: none"> 1 PCI-E 4.0 x16 Mezzanine card slot for optional high-performance networking options 2 PCI-E 4.0 x16 full-height full-length slots for 1 single-wide or 2 double-wide GPUs
Storage	<ul style="list-style-type: none"> 2 hot-pluggable 2.5" U.2 NVMe/SATA3 drive bays Up to 2 M.2 NVMe (PCI-E 4.0 x4)/SATA3 slots 	<ul style="list-style-type: none"> 2 hot-pluggable 2.5" U.2 NVMe/SAS/SATA3 drive bays Up to 2 M.2 NVMe (PCI-E 4.0 x4)/SATA3 slots 	<ul style="list-style-type: none"> 1 M.2 NVMe (PCI-E 4.0 x4)/SATA3 slot
I/O Ports	<ul style="list-style-type: none"> 2x 25G Ethernet ports Optional 2x 25GbE, or 1x 100G EDR IB port via Mezz 	<ul style="list-style-type: none"> 2x 25G Ethernet ports Optional 2x 25GbE or 1x 100G EDR IB port via Mezz 	<ul style="list-style-type: none"> 2x 25G Ethernet ports Optional 2x 25GbE or 1x 100G EDR IB port via Mezz
System Management	<ul style="list-style-type: none"> IPMI 2.0 Aspeed 2500 / KVM over IP / Redfish API / TPM 2.0/Signed Firmware / HW Root of Trust 	<ul style="list-style-type: none"> IPMI 2.0 Aspeed 2500 / KVM over IP / Redfish API / TPM 2.0/Signed Firmware / HW Root of Trust 	<ul style="list-style-type: none"> IPMI 2.0 Aspeed 2500 / KVM over IP / Redfish API/TPM 2.0/Signed Firmware / HW Root of Trust

† Please refer to Blade CPU/GPU support matrix on our website: <https://www.supermicro.com/en/products/superblade/matrix>

A+ SuperBlade® Enclosures and Networking Options

	1 CMM Dual 10G 100G/EDR	2 CMM Quad 25G	1 CMM Dual 10G
			
	SBE-820C	SBE-820J	SBE-820L
Blade server support	<ul style="list-style-type: none">Up to 20 hot-pluggable half-height 1-socket blade servers	<ul style="list-style-type: none">Up to 20 hot-pluggable half-height 1-socket blade servers	<ul style="list-style-type: none">Up to 20 hot-pluggable half-height 1-socket blade servers
25G/10G/1G Ethernet switches	<ul style="list-style-type: none">Up to 2 hot-pluggable 10G Ethernet switches	<ul style="list-style-type: none">2 hot-pluggable redundant 25G Ethernet switches for onboard dual-port 25GbEOptional 2 hot-pluggable redundant 25G Ethernet switches for optional dual-port 25GbE Mezzanine card	<ul style="list-style-type: none">Up to 2 hot-pluggable 10G Ethernet switches
100G HPC switches	<ul style="list-style-type: none">Single 100G EDR InfiniBand switch with add-on card	<ul style="list-style-type: none">N/A	<ul style="list-style-type: none">N/A
Chassis Management Module (CMM)	<ul style="list-style-type: none">1 CMM for remote system management with software	<ul style="list-style-type: none">Up to 2 hot-pluggable CMMs for remote system management with software	<ul style="list-style-type: none">1 CMM for remote system management with software
Power and cooling	<ul style="list-style-type: none">SBE-820C/J/L-822: Enclosure with 8 hot-swappable 2200W Titanium Level (96% efficiency) power suppliesSBE-820C/J/L-622: Enclosure with 6 hot-swappable 2200W Titanium Level (96% efficiency) power supplies + 2 hot-swappable cooling fansSBE-820C/J/L-422: Enclosure with 4 hot-swappable 2200W Titanium Level (96% efficiency) power supplies + 4 hot-swappable cooling fans		
Dimensions	14" x 17.6" x 32"	14" x 17.6" x 32"	14" x 17.6" x 32"

SuperBlade® Options	Models	(for enclosures)	(for servers)	Description
100G EDR InfiniBand	SBM-IBS-E3616M (switch)			<ul style="list-style-type: none">20x 100G EDR downlinks and 16x 100G EDR uplinksCompatible with SBE-820C
	AOC-IBH-X4ES (Mezz card)			<ul style="list-style-type: none">Single-port 100G EDR InfiniBand Mezzanine cardCompatible with all A+ blade servers
25G Ethernet	SBM-25G-100 (switch)			<ul style="list-style-type: none">20x 25G Ethernet downlink (backward compatible to 20x 10G)4x 100G/40G QSFP28 Ethernet uplinks, each can split into 4x 25G/10G SFP28 uplinks with optional fan-out cables
	AOC-B25G-X4D (Mezz card)			<ul style="list-style-type: none">Dual-port 25G Ethernet Mezzanine cardCompatible with all A+ blade servers
	SBM-25G-P10 (passthrough)			<ul style="list-style-type: none">Ethernet pass-through module supporting 20x 25/10G downlinks5 QSFP28 uplinks, each can split into 4x 25G/10G SFP28 uplinks with optional fan-out cables
10G Ethernet	MBM-XEM-100 (switch)			<ul style="list-style-type: none">20x 10/2.5/1G Ethernet downlinks4x 100G/40G QSFP28 Ethernet uplinks, each can split into 4x 25G/10G SFP28 uplinks with optional fan-out cables
	MBM-XEM-002 (switch)			<ul style="list-style-type: none">20x 10G/2.5G/1G Ethernet downlinks2x 40G QSFP+ and 4x 10G SFP+ Ethernet uplinks
1G Ethernet	MBM-GEM-004 (switch)			<ul style="list-style-type: none">40x 1G Ethernet downlinks8x 1G and 4x 10G SFP+ Ethernet uplinks
Chassis Management Module (CMM)	MBM-CMM-001			<ul style="list-style-type: none">Standard CMM module with redundancy support.
	MBM-CMM-FIO			<ul style="list-style-type: none">Upgrade version to support front I/O access ports on supported enclosures.

A+ Options and Accessories

SAS3 ADD-ON CARDS

Supermicro SAS3 add-on cards feature up to 16 internal SAS ports for high-performance storage applications. It addresses the growing demand for increased data throughput and scalability requirement across the enterprise-class server platforms and delivers cost effective storage solutions using SATA3 drives and maximum performance and reliability with SAS3 drives.

Mini-SAS cables may be required to purchase separately. For more product information and technical specifications, please visit supermicro.com or scan the QR code on the right to retrieve the complete list of options and verify your system compatibility.



SAS3 AOC









AIOM AOC



SIOM AOC

MORE TECHNICAL SPECIFICATIONS ARE AVAILABLE ON OUR WEBSITE



SAS3 Host Bus Adapters in IT Mode			SAS3 RAID Adapters		
					
AOC-S3616L-L16iT	AOC-S3216L-L16iT	AOC-S3008L-L8e	AOC-S3108L-H8iR-16DD	AOC-S3108L-H8iR	AOC-S3008L-L8i
Broadcom® SAS 3616	Broadcom® SAS 3216	Broadcom® SAS 3008	Broadcom® SAS 3108	Broadcom® SAS 3108	Broadcom® SAS 3008
<ul style="list-style-type: none">• 16 internal ports• 12Gb/s per port• Low Profile• 1024 SATA/SAS Drives	<ul style="list-style-type: none">• 16 internal ports• 12Gb/s per port• Low Profile• 1024 SATA/SAS Drives	<ul style="list-style-type: none">• 8 internal ports• 12Gb/s per port• Low Profile• 122 SATA/SAS Drives	<ul style="list-style-type: none">• 8 internal ports• 12Gb/s per port• Low Profile• 16 SATA/SAS Drives	<ul style="list-style-type: none">• 8 internal ports• 12Gb/s per port• Low Profile• 240 SATA/SAS Drives	<ul style="list-style-type: none">• 8 internal ports• 12Gb/s per port• Low Profile• 63 SATA/SAS Drives













AIOM NETWORKING



Supermicro Advanced I/O Module (AIOM) extends the OCP 3.0 specification with unique features that tackle some of the biggest challenges such as thermal control, ability to support a wide range of networking options in a small size form factor, remote management, and quick and simple deployment. With AIOM, datacenters may enjoy longer refresh cycles and receive better ROI.

For large scale cloud datacenters, AIOM provides improved mechanical and thermal designs (improved airflow) and increased serviceability, allowing the AIOM modules to be serviced and/or replaced without opening the chassis. Many more AIOM options will be available, including 2x 1G RJ45, 4x 1G RJ45, 2x 10G RJ45, 2x 10G SFP+, 4x 10G SFP+, 2x 25G SFP28 & 2x 100G QSFP28 and more.

SIOM NETWORKING

Supermicro® Super I/O Module (SIOM) delivers up to 50% of I/O cost savings and freedom to select networking options from 1Gb/s to 100Gb/s through a Supermicro optimized form factor that is easy to scale, service and manage across a broad range of Supermicro server and storage systems. The SIOM also enables a higher degree of system integration and increased capacity by saving PCI-E slots that are traditionally reserved for add on cards.

					
AOC-MGP-i2M	AOC-MGP-i4M	AOC-MTGN-i2SM	AOC-MTG-i4SM	AOC-MTG-i2TM	AOC-MTG-i4TM
2x GbE RJ45	4x GbE RJ45	2x 10GbE SFP+	4x 10GbE SFP+	2x 10GbE RJ45	4x 10GbE RJ45
					
AOC-MTG-b2TM	AOC-MH25G-b2S2GM	AOC-MH25G-m2S2TM	AOC-MHIBF-m2Q2GM	AOC-MHIBF-m1Q2GM	AOC-MHIBE-m1CGM
2x 10GbE RJ45	2x 25GbE SFP28 & 2x GbE RJ45	2x 25GbE SFP28 & 2x 10GbE RJ45	2x FDR IB QSFP & 2x GbE RJ45	1x FDR IB QSFP & 2x GbE RJ45	1x EDR/100GbE QSFP28 & 1x GbE RJ45

	
AOC-A25G-b2SM	AOC-AG-i4SM
2x 25GbE SFP28	4x GbE SFP



Supermicro®, the leading innovator in high-performance, high-efficiency server technology is a premier provider of advanced server Building Block Solutions® for Datacenter, Cloud Computing, Enterprise IT, Hadoop/Big Data, HPC and Embedded Systems worldwide. Supermicro is committed to protecting the environment through its “We Keep IT Green™” initiative and provides customers with the most energy-efficient, environmentally-friendly solutions available on the market.

Learn more at www.supermicro.com/epyc

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