

Ultra SuperServer SYS-620U-TNR

2U Ultra with 12 NVMe/SAS/SATA bays and 8 PCIe slots



More details here

Key Applications

Virtualization, HPC, Cloud Computing, High End Enterprise Server, Software Defined Storage, Application Tier Service Provider, 5G/Telco,

Key Features

- Dual Socket P+ (LGA-4189) 3rd Gen Intel® Xeon® Scalable Processors;
- Intel® C621A Chipset;
- 32 DIMM Slots; Up to 8TB DRAM; Up to 8TB Intel® Optane™ Persistent Memory (up to 12TB with DRAM); 3200/2933/2666 ECC DDR4 LRDIMM;RDIMM; Intel® Optane™ Persistent Memory 200 series;
- Flexible networking options;
- 12x 3.5" hot-swap hybrid NVMe/SATA/SAS drive bays;
- 4 heavy duty fans with optimal fan speed control;
- 1200W redundant Titanium level power supplies;



Form Factor	2U Rackmount Enclosure: 437 x 89 x 737.9mm (17.2" x 3.5" x 29.05") Package: 605 x 256 x 947mm (23.81" x 10.07" x 37.28")
Processor	Dual Socket P+ (LGA-4189) 3rd Gen Intel® Xeon® Scalable processors Up to 40C/80T; Up to 60MB Cache per CPU
GPU	Max GPU Count: Up to 4 double-width or 6 single-width GPUs Supported GPU: NVIDIA PCIe: T4, RTX A6000, RTX A5000, RTX A4000, A40, A30, A16, A2, A100, A10
System Memory	Slot Count: 32 DIMM slots Max Memory (2DPC): Up to 8TB 3200MT/s ECC DDR4 RDIMM/LRDIMM Supports Intel® Optane™ persistent memory 200 series
Drive Bays Configuration	Default: Total 12 bays <ul style="list-style-type: none"> • 12 front hot-swap 3.5" NVMe/SAS*/SATA drive bays (*SAS support may require additional storage controller and/or cables)
Expansion Slots	Default <ul style="list-style-type: none"> • 1 PCIe 4.0 x16 (in x16) FH/10.5" L slot • 5 PCIe 4.0 x8 (in x8) FH/10.5" L slots • 1 PCIe 4.0 x8 (in x8) LP slot • 1 PCIe 4.0 x16 (in x16) LP slot
On-Board Devices	SATA: SATA (6Gbps) ; RAID 0/1/5/10 support NVMe: NVMe; RAID 0/1/5/10 support Chipset: Intel® C621A Network Connectivity: 2 RJ45 10GBASE-T with Intel® X710-AT2 (optional) 2 RJ45 10GBASE-T with Intel® X710-TM4 (optional) 2 SFP+ 10GbE with Intel® X710-TM4 (optional) No NIC option supported
Input / Output	LAN: 1 RJ45 1 GbE Dedicated BMC LAN port USB: 2 USB 3.0 ports(rear) Video: 1 VGA port DOM: 2 SuperDOM (Disk on Module) ports

(Front View - System)

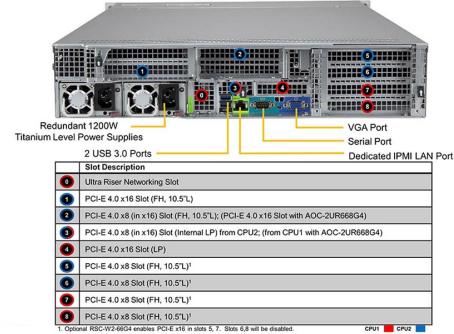


Slot	Description
① – ⑤	3.5" Hot-swap NVMe/SAS3/SATA3 Drive Bays (NVMe from CPU1)**
⑥ – ⑩	3.5" Hot-swap NVMe/SAS3/SATA3 Drive Bays (NVMe from CPU2)**

*SAS3 support requires additional parts in optional parts list

**NVMe support requires additional parts in optional parts list

(Rear View - System)



Redundant 1200W
Titanium Level Power Supplies
2 USB 3.0 Ports

Slot Description
① Ultra Riser Networking Slot
② PCI-E 4.0 x16 Slot (FH, 10.5L)
③ PCI-E 4.0 x8 (in x16) Slot (FH, 10.5L); (PCI-E 4.0 x16 Slot with AOC-2UR668G4)
④ PCI-E 4.0 x8 (in x16) Slot (Internal LP) from CPU2; (from CPU1 with AOC-2UR668G4)
⑤ PCI-E 4.0 x16 Slot (LP)
⑥ PCI-E 4.0 x8 Slot (FH, 10.5L)*
⑦ PCI-E 4.0 x8 Slot (FH, 10.5L)*
⑧ PCI-E 4.0 x8 Slot (FH, 10.5L)*
⑨ PCI-E 4.0 x8 Slot (FH, 10.5L)*

1. Optional RSC-V24654 enables PCI-E x16 in slots 5, 7. Slots 6,8 will be disabled.

CPU1

CPU2

System Cooling

Fans: Up to 4x 8cm heavy duty fans with optimal fan speed control
 Air Shroud: 2 Air Shrouds

Power Supply

1x 1200W Redundant Titanium Level (96%) Hot-plug power supply

System BIOS

BIOS Type: AMI 32MB SPI Flash EEPROM

Management

SuperCloud Composer®; Supermicro Server Manager (SSM); Supermicro Update Manager (SUM); Supermicro SuperDoctor® 5 (SD5); Super Diagnostics Offline (SDO); Supermicro Thin-Agent Service (TAS); SuperServer Automation Assistant (SAA) New!

PC Health Monitoring

CPU: Monitors for CPU Cores, Chipset Voltages, Memory
 7 +1 Phase-switching voltage regulator
 FAN: Fans with tachometer monitoring
 Status monitor for speed control
 Pulse Width Modulated (PWM) fan connectors
 Temperature: Monitoring for CPU and chassis environment
 Thermal Control for fan connectors

Dimensions and Weight

Weight: Gross Weight: 57.5 lbs (26.2 kg)
 Net Weight: 35.5 lbs (16.2 kg)
 Available Color: Black Front & Silver Body

Operating Environment

Operating Temperature: 10°C to 35°C (50°F to 95°F)
 Non-operating Temperature: -40°C to 60°C (-40°F to 140°F)
 Operating Relative Humidity: 8% to 90% (non-condensing)
 Non-operating Relative Humidity: 5% to 95% (non-condensing)

Motherboard[**Super X12DPU-6**](#)**Chassis**[**CSE-829U3TS-R1K22P-T**](#)