

Ultra SuperServer SYS-220U-TNR



Key Applications

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

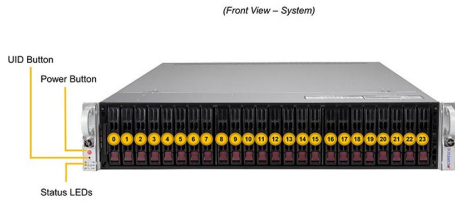
Key Features

- 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;
- 1 internal PCI-E 4.0 x8 (in x16 slot, LP); 1 PCI-E 4.0 x16 (FH, 10.5"L); 1 PCI-E 4.0 x16 (LP); 5 PCI-E 4.0 x8 (FH, 10.5"L);
- Flexible networking options;
- 22x 2.5" hot-swap hybrid NVMe/SATA/SAS drive bays + 2x2.5" hot-swap SATA/SAS drive bays;
- 4 heavy duty fans with optimal fan speed control;
- 1600W redundant Titanium level power supplies;

[More details here](#)

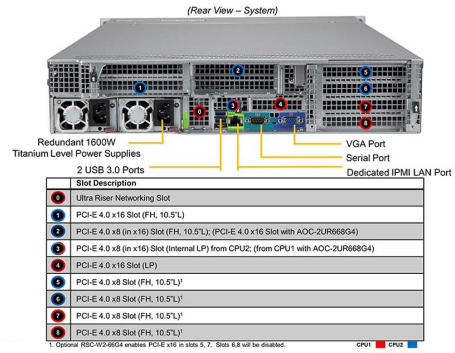


Form Factor	2U Rackmount Enclosure: 437 x 89 x 717.2mm (17.2" x 3.5" x 28.2") Package: 625 x 253 x 1154mm (24.6" x 9.96" x 45.43")
Processor	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA-4189 (Socket P+) supported TDP up to 270W; 3 UPI
Drive Bays	24x 2.5" hot-swap NVMe/SATA/SAS drive bays; 22x 2.5" NVMe hybrid; Optional RAID support via RAID controller AOC
Expansion Slots	Slot 1: PCI-E 4.0 x16 FH, 10.5"L Slot 2: PCI-E 4.0 x8 FH, 10.5"L Slot 3: PCI-E 4.0 x8 Internal LP Slot 4: PCI-E 4.0 x16 LP Slot 5: PCI-E 4.0 x8 FH, 10.5"L Slot 6: PCI-E 4.0 x8 FH, 10.5"L Slot 7: PCI-E 4.0 x8 FH, 10.5"L Slot 8: PCI-E 4.0 x8 FH, 10.5"L Note: Optional RSC-W2-66G4 enables PCI-E x16 in slots 5, 7. Slots 6,8 will be disabled.
On-Board Devices	SATA: SATA3 (6Gbps) via Intel® PCH 621A; RAID 0/1/5/10 support NVMe: NVMe (16GT/s); RAID 0/1/5/10 support NVMe (16GT/s); RAID 0/1/5/10 support Chipset: Intel® C621A Network Connectivity: 2x 10GbE BaseT with Intel® X710-AT2 (optional) OR 2x 10GbE BaseT and 2x 10GbE SFP+ with Intel® X710-TM4 (optional) No NIC option supported IPMI: Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
Input / Output	LAN: 1 RJ45 Dedicated BMC LAN port USB: 2 USB 3.0 port(s) (2 rear) Video: 1 VGA port(s) Serial Port: 1 COM Port(s) (1 rear) DOM: 2 SuperDOM (Disk on Module) port



Slot	Description
1 - 11	2.5" Hot-swap SAS3/SATA3 Drive Bays
12 - 13	2.5" Hot-swap NVMe/SAS3/SATA3 Drive Bays (NVMe from CPU1)**
14 - 15	2.5" 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



Slot Description
1 Ultra Riser Networking Slot
2 PCI-E 4.0 x16 Slot (FH, 10.5" L)
3 PCI-E 4.0 x8 (in x16) Slot (FH, 10.5" L); 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, 10.5" L) ¹
7 PCI-E 4.0 x8 Slot (FH, 10.5" L) ¹
8 PCI-E 4.0 x8 Slot (FH, 10.5" L) ¹
9 PCI-E 4.0 x8 Slot (FH, 10.5" L) ¹
10 PCI-E 4.0 x8 Slot (FH, 10.5" L) ¹

1. Optional RBCW24604 enables PCIe x16 in slots 5, 7. Slots 6,8 will be disabled.

Cooling System	4x 8cm heavy duty fan(s)
Power Supply	1600W Redundant Power Supplies with PMBus Dimension (W x H x L): 73.5 x 40 x 203 mm Output Type: AC-Input
System BIOS	BIOS Type: AMI 32MB SPI Flash EEPROM
Management	SuperDoctor® 5; Watch Dog; NMI; SUM; KVM with dedicated LAN; Intel® Node Manager; IPMI 2.0; Redfish API; Supermicro Out of Band (OOB) License (Included with Server)
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	Height: 3.5" (89 mm) Width: 17.2" (437 mm) Depth: 28.2" (717.2 mm) Gross Weight: 63 lbs (28.6 kg) Net Weight: 37 lbs (16.8 kg) Packaging: 9.96" (H) x 24.6" (W) x 45.43" (D) Available Color: Black Front & Silver Body
Operating Environment	Operating Temperature: 10°C ~ 35°C (50°F ~ 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-219U3TS-R1K62P-T