

# Ultra SuperServer SYS-620U-TNR



## Key Applications

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

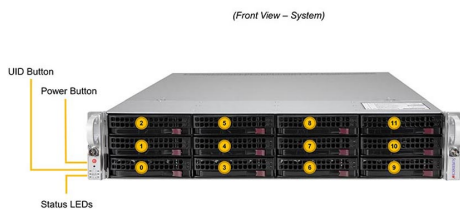
## Key Features

- 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;
- 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;

[More details here](#)

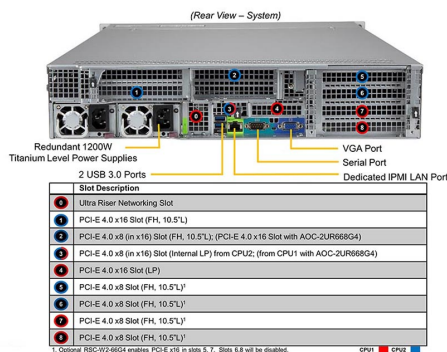


<b>Form Factor</b>	2U Rackmount Enclosure: 437 x 89 x 737.9mm (17.2" x 3.5" x 29.05") Package: 605 x 256 x 947mm (23.81" x 10.07" x 37.28")
<b>Processor</b>	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA-4189 (Socket P+) supported TDP up to 270W; 3 UPI
<b>Drive Bays</b>	12x 3.5" hot-swap NVMe/SATA/SAS drive bays; 12x 2.5" NVMe hybrid; Optional RAID support via RAID controller AOC
<b>Expansion Slots</b>	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.
<b>On-Board Devices</b>	SATA: SATA3 (6Gbps) via Intel® PCH 621A; RAID 0/1/5/10 support NVMe: 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
<b>Input / Output</b>	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 - 2	3.5" Hot-swap NVMe/SAS3*/SATA3 Drive Bays (NVMe from CPU1)**
3 - 6	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



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) <sup>1</sup>
7 PCI-E 4.0 x8 Slot (FH, 10.5" L) <sup>1</sup>
8 PCI-E 4.0 x8 Slot (FH, 10.5" L) <sup>1</sup>
9 PCI-E 4.0 x8 Slot (FH, 10.5" L) <sup>1</sup>

1. Optional RBC-W2-66G4 enables PCIe x16 in slots 5, 7. Slots 6,8 will be disabled.

<b>Cooling System</b>	4x 8cm heavy duty fan(s)
<b>Power Supply</b>	1200W Redundant Power Supplies with PMBus Dimension (W x H x L): 73.5 x 40 x 203 mm Output Type: AC-Input
<b>System BIOS</b>	BIOS Type: AMI 32MB SPI Flash EEPROM
<b>Management</b>	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)
<b>PC Health Monitoring</b>	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
<b>Dimensions and Weight</b>	Height: 3.5" (89 mm) Width: 17.2" (437 mm) Depth: 29.05" (737.9 mm) Gross Weight: 57.5 lbs (26.2 kg) Net Weight: 35.5 lbs (16.2 kg) Packaging: 10.07" (H) x 23.81" (W) x 37.28" (D) Available Color: Black Front & Silver Body
<b>Operating Environment</b>	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)
<b>Motherboard</b>	<a href="#">Super X12DPU-6</a>
<b>Chassis</b>	CSE-829U3TS-R1K22P-T