

# Mainstream SuperServer SYS-620P-TR



## Key Applications

- Virtualization
- Enterprise Server
- Data Center Optimized
- Application and data serving
- Model analysis
- Compute Intensive Applications

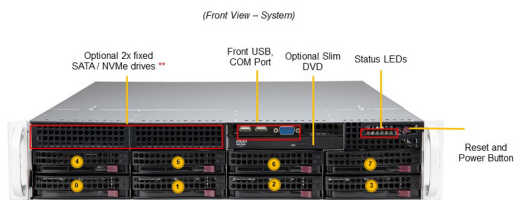
## Key Features

- Dual sockets P+ (LGA-4189) 3rd Gen Intel® Xeon® Scalable processors; CPU TDP supports Up to 270W TDP; 3 UPI up to 11.2 GT/s;
- Intel® C621A Chipset ; SATA: Intel® C621A controller for 8 SATA3 (6 Gbps) ports; RAID 0,1,5,10;
- Up to 4TB 3DS ECC RDIMM, DDR4-3200MHz, Up to 4TB 3DS ECC LRDIMM, DDR4-3200MHz ; - Up to 4TB Intel® Optane™ Persistent Memory 200 Series, DDR4-3200MHz, in 18 DIMM slots (P1-DIMMB2 and P2-DIMMB2 are reserved for Intel® Optane Persistent Memory 200 Series only);
- 4 PCI-E 4.0 x16 Low Profile (LP); 2 PCI-E 4.0 x8 Low Profile (LP);

[More details here](#)

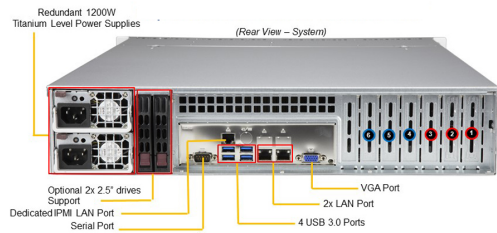


<b>Form Factor</b>	2U Rackmount Enclosure: 437 x 89 x 647mm (17.2" x 3.5" x 25.5") Package: 678 x 290 x 876mm (26.7" x 11.4" x 34.5")
<b>Processor</b>	3rd Gen Intel® Xeon® Scalable processors Dual Socket LGA-4189 (Socket P+) supported TDP up to 270W;
<b>Drive Bays</b>	8x 3.5" hot-swap drive bays;
<b>Expansion Slots</b>	Slot 1: PCI-E 4.0 x8 LP Slot 2: PCI-E 4.0 x16 LP Slot 3: PCI-E 4.0 x16 LP Slot 4: PCI-E 4.0 x16 LP Slot 5: PCI-E 4.0 x16 LP Slot 6: PCI-E 4.0 x8 LP
<b>On-Board Devices</b>	Chipset: Intel® C621A Network Connectivity: 2x 1GbE port(s) 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 dedicated IPMI LAN port USB: 2 USB 2.0 port(s) (2 front) 4 USB 3.0 port(s) (4 rear) Video: 1 VGA port(s) Serial Port: 2 COM Port(s) (1 rear; 1 front) DOM: 2 SuperDOM (Disk on Module) port



Slot	Description
1 - 2	3.5" Hot-swap SAS3/SATA3 Drive Bays*

\*SAS3 support requires additional parts in optional parts list  
 \*\*2x fixed SATAs / NVMe support requires additional parts in optional parts list



Slot	Description
1	PCI-E 4.0 x8 Slot, Low Profile
2	PCI-E 4.0 x16 Slot, Low Profile
3	PCI-E 4.0 x16 Slot, Low Profile
4	PCI-E 4.0 x16 Slot, Low Profile
5	PCI-E 4.0 x16 Slot, Low Profile

<b>Cooling System</b>	3 heavy duty fan(s)
<b>Power Supply</b>	AC 1200W, Titanium Level, Redundancy,PMBUS 1.2, +12V/+5Vsb, 360x76x40 mm,HF,RoHS/REACH Dimension (W x H x L): 76 x 40 x 336 mm Output Type: Gold Finger
<b>System BIOS</b>	BIOS Type: AMI 32MB SPI Flash EEPROM
<b>Management</b>	NMI; SUM; KVM with dedicated LAN; SPM; Intel® Node Manager; SSM; Redfish API; IPMI2.0; Supermicro Out of Band (OOB) License (included in the unit)
<b>PC Health Monitoring</b>	CPU: Monitors for CPU Cores, Chipset Voltages, Memory 4+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: 25.5" (647 mm) Gross Weight: 69 lbs (31.2 kg) Net Weight: 35.5 lbs (16.1 kg) Packaging: 11.4" (H) x 26.7" (W) x 34.5" (D) Available Color: Black
<b>Operating Environment</b>	ROHS: RoHS Compliant 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 X12DPi-N6</a>
<b>Chassis</b>	CSE-825BTS-R1K23LPP1

**Parts List - (Items Included)**

	Part Number	Qty	Description
<b>Motherboard / Chassis</b>	MBD-X12DPI-N6	1	Super X12DPI-N6 Motherboard
	CSE-825BTS-R1K23LPP1	1	2U Chassis
<b>Backplane</b>	BPN-SAS3-825TQ	1	8-port 2U SAS3 12Gbps TQ backplane, support up to 8x 3.5-inch SAS3/SATA3 HDD/SSD
<b>Cable 1</b>	CBL-0343L-01	2	30AWG IPASS/4SATA 76/66/54/45CM W/SB
<b>Drive Tray(s)</b>	MCP-220-00007-01	1	Black USB/COM port tray for SC825, 836
<b>Parts</b>	MCP-260-00042-0N	1	STD I/O shield for X9 socket R server MB with Gasket.
<b>Manual</b>	MNL-2241-QRG	1	SYS-620P-TR(T) Quick Reference Guide
<b>Software</b>	SFT-OOB-LIC	1	License key for enabling OOB BIOS management
<b>Heatsink / Retention</b>	SNK-P0078P	1	2U Passive CPU Heat Sink for X12 Generation Intel Whitley and Cedar Island Platforms
<b>Heatsink / Retention</b>	SNK-P0078PC	1	2U Passive CPU Heat Sink w/ a Side Air Channel for X12 Generation Intel Whitley and Cedar Island Platforms
<b>*Power Supply</b>	PWS-1K23A-1R	2	AC-DC 1200W, Titanium Level, Redundancy, 1U, PMBUS 1.2, +12V/+5Vsb, 336x76x40 mm, HF, RoHS/REACH
<b>*Power Distributor</b>	PDB-PT825-S8824	1	SC825 24PIN REDUNDANT PWR DISTRIBUTOR W/ SHORT CBL
<b>*Cable 2</b>	CBL-0071L	1	ROUND 16 TO 16 PIN RIBBON FP CABLE 30"L, LF
<b>*Cable 3</b>	CBL-PWCD-0160-IS	2	PWCD, US, NEMA5-15P TO IEC60320 C13, 6FT, 16AWG, RoHS/REACH
<b>*Cable 4</b>	CBL-PWEX-1078	3	PWEX, FAN, 1X4/P2.5 TO 1X4/P2.54, 20CM, 22AWG, 5A/PIN, RoHS
<b>*FAN 1</b>	FAN-0206L4	3	80x80x38 mm, 13.5K RPM, Middle Cooling Fan for 2U and above Servers
<b>*Front Panel</b>	FPB-FP836-D	1	Front control board Dual color LED(FP836-D)for SC823M, 825, 825M, 828, 829, 835, 836
<b>*Drive Tray(s)</b>	MCP-220-00023-01	1	Black USB dummy tray support 1x 2.5" slim HDD for SC825, 836
<b>*Drive Tray(s)</b>	MCP-220-00075-0B	8	Black gen 5.5 hot-swap 3.5" HDD tray
<b>*Drive Tray(s)</b>	MCP-220-82502-0B	2	Black fixed 3.5" HDD tray or FDD dummy tray
<b>*Rear Window</b>	MCP-240-82608-0N	1	216B/826B LP rear window, RoHS/REACH, PBF
<b>*Peripheral Drive1</b>	MCP-290-00007-01	1	Black DVD dummy cover for SC825, 836
<b>*Rail Set</b>	MCP-290-00053-0N	1	Rail set, quick/quick, default for 2,3U 17.2";W
<b>*Rail Set</b>	MCP-290-00060-0N	1	Threaded rail adapter default for round hole rack
<b>*Drive Tray(s)</b>	MCP-290-82607-0N	1	826B/216B rear dummy cover for 2 X 2.5
<b>*Air Shroud</b>	MCP-310-29001-0N	1	SC825/826/216/213 Intel DP X9, X8 air shroud 13.68x13/12x13

**Notes:**

1. Parts with \* are inside the chassis
2. Excessive parts might not be shipped, including but not limited to excessive drive trays, fans, riser brackets, air shrouds, IO shields, cables.....etc.

**Optional Parts List**

	Part Number	Qty	Description
<b>Optional Gen3 8-ports SAS Raid controller kit for SYS-620P-TR</b>	1x AOC-S3108L-H8IR or AOC-S3108L-H8IR-16DD + 2x CBL-SAST-0699 ( or 2x CBL-SAST-0556)	1	Convert 8x hotswap SATA drives to SAS drives
<b>Optional Gen4 8-ports SAS Raid controller kit for SYS-620P-TR</b>	1x AOC-S3908L-H8IR-P or AOC-S3908L-H8IR-16DD-P or AOC-S3908L-H8IR-32DD-P + 1x CBL-SAST-1270S-100	1	Convert 8x hotswap SATA drives to SAS drives
<b>Optional parts needed to support 2x fixed NVMe drives</b>	1x CBL-SAST-0953 (Slimline x8 to PCIe 2x SFF-8639 Power) and 2x MCP-110-82501-0N	1	1x MCP-110-82501-0N can support 1x 2.5 inch NVMe fixed drives and 1x CBL-SAST-0953 can support 2x 2.5 inch NVMe drives
<b>Optional parts needed to support 2x fixed SATA drives</b>	2x CBL-0044L (SATA CABLE 61CM FLAT S-S PBF.26AWG flat) and 1x CBL-0082L (Y split, big 4 pin to two RA SATA power extension 15cm, 18AWG)	1	1x CBL-0044L can support can support 1x 2.5 inch SATA drives and 1x CBL-0082L can support can support 2x 2.5 inch SATA drives
<b>use 1x BTR-TFM8G-LSICVM02 and 1x BKT-BBU-BRACKET-05 with AOC-S3108L-H8IR-16DD or AOC-S3108L-H8IR</b>	use 1x BTR-TFM8G-LSICVM02 and 1x BKT-BBU-BRACKET-05 with AOC-S3108L-H8IR-16DD or AOC-S3108L-H8IR	1	SuperCap and mounting bracket used for SAS raid controllers