

Mainstream SuperServer SYS-620P-TRT



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Note: Image above may show a varied configuration of optional parts. Please refer to parts list for standard parts included.

New

Key Applications

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

Key Features

1. 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

2. Intel® C621A Chipset

3. 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. 4 PCI-E 4.0 x16 Low Profile (LP)
2 PCI-E 4.0 x8 Low Profile (LP)

5. Dual 10GBase-T LAN with Intel® X550 Ethernet Controller

6. 8 hotswap 3.5" SATA3 (6 Gbps) drive bays with Intel® C621A controller for RAID 0,1,5,10
1 M.2 support:
 - M.2 Interface: PCI-E 3.0 x4
 - M.2 Form Factor: 2260, 2280, 22110
 - M.2 Key: M-Key
 Optional 1 slim DVD-ROM drive
Optional 2 fixed 2.5" NVMe/SSD/HDD/SuperDOM

7. 3 heavy duty Hot-swappable 13.5K RPM Middle Cooling Fans with optimal fan speed control
1 air shroud

8. 1200W Redundant Power Supplies Titanium level 100-240Vac and 200-240 Vdc

9. 1 rear VGA, 1 Type A port, 2 COM Ports (1 front; 1 rear) and 6 USB ports (2 front USB 2.0 and 4 rear USB 3.0)

Specifications

Product SKUs

- SYS-620P-TRT** ■ SuperServer SYS-620P-TRT (**Black**)

Motherboard

Super X12DPI-NT6

Processor

- CPU**
 - Dual Socket P+ (LGA-4189)
 - 3rd Gen Intel® Xeon® Scalable processors
 - Support CPU TDP 270W

System Memory

- Memory**
 - Memory Capacity: 16 DIMM slots
 - Up to 4TB: PMem and DRAM
 - Memory Type: 3200MHz ECC LRDIMM/RDIMM DDR4
 - Intel® Optane™ persistent memory 200 series

On-Board Devices

- Chipset** ■ Intel® C621A
- Network Connectivity** ■ 2x 10GbE 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

Input / Output

- 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 front; 1 rear)
- DOM** ■ 2 SuperDOM (Disk on Module) port

System BIOS

- BIOS Type** ■ AMI 32MB SPI Flash EEPROM

Management

- Software**
 - [Supermicro Out of Band \(OOB\) License](#) (included in the unit)
 - [IPMI2.0](#)
 - Redfish API
 - SSM
 - Intel® Node Manager
 - [SPM](#)
 - KVM with dedicated LAN
 - [SUM](#)
 - NMI

Chassis

- Form Factor** ■ 2U Rackmount
- Model** ■ **CSE-825BTS-R1K23LPP1**

Dimensions and Weight

- Height** ■ 3.5" (89mm)
- Width** ■ 17.2" (437mm)
- Depth** ■ 25.5" (647mm)
- Package** ■ 11.4" (H) x 26.7" (W) x 34.5" (D)
- Weight**
 - Net Weight: 35.5 lbs (16.1 kg)
 - Gross Weight: 69 lbs (31.2 kg)
- Available Color** ■ Black

Front Panel

- Buttons**
 - Power On/Off
 - System Reset
- LEDs**
 - HDD activity
 - Network activity
 - Power status
 - System information (overheat/UID)

Expansion Slots

- PCI-Express (PCI-E)**
 - 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

Drive Bays / Storage

- Hot-swap** ■ 8x 3.5" hot-swap SATA3 drive bays
- M.2** ■ 1 M.2 NVMe
- Peripheral Bays** ■ 1x slim DVD drive bays (optional)

System Cooling

- Fans** ■ 3 heavy duty fans with optimal fan speed control

Power Supply

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

- Certification**



Titanium Level

[Test Report]

Operating Environment

Power Configurations ■ ACPI/APM Power Management

PC Health Monitoring

CPU ■ 4+1 Phase-switching voltage regulator
■ Monitors for CPU Cores, Chipset Voltages, Memory

FAN ■ Fans with tachometer monitoring
■ Pulse Width Modulated (PWM) fan connectors
■ Status monitor for speed control

Temperature ■ Monitoring for CPU and chassis environment
■ Thermal Control for fan connectors

RoHS ■ RoHS Compliant

Environmental Spec. ■ 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)

Parts List

Parts List - (Items Included)			
	Part Number	Qty	Description
Motherboard / Chassis	MBD-X12DPI-NT6	1	Super X12DPI-NT6 Motherboard
	CSE-825BTS-R1K23LPP1	1	2U Chassis
Backplane	BPN-SAS3-825TQ	1	8-port 2U SAS3 12Gbps TQ backplane, support up to 8x 3.5-inch SAS3/SATA3 HDD/SSD
Cable 1	CBL-0343L-01	2	30AWG IPASS/4SATA 76/66/54/45CM W/SB
Drive Tray(s)	MCP-220-00007-01	1	Black USB/COM port tray for SC825, 836
Parts	MCP-260-00042-0N	1	STD I/O shield for X9 socket R server MB with Gasket.
Manual	MNL-2241-QRG	1	SYS-620P-TR(T) Quick Reference Guide
Software	SFT-OOB-LIC	1	License key for enabling OOB BIOS management
Heatsink / Retention	SNK-P0078P	1	2U Passive CPU Heat Sink for X12 Generation Intel Whitley and Cedar Island Platforms
Heatsink / Retention	SNK-P0078PC	1	2U Passive CPU Heat Sink w/ a Side Air Channel for X12 Generation Intel Whitley and Cedar Island Platforms
*Power Supply	PWS-1K23A-1R	2	AC-DC 1200W, Titanium Level, Redundancy, 1U, PMBUS 1.2, +12V/+5Vsb, 336x76x40 mm,HF,RoHS/REACH
*Power Distributor	PDB-PT825-S8824	1	SC825 24PIN REDUNDANT PWR DISTRIBUTOR W/ SHORT CBL
*Cable 2	CBL-0071L	1	ROUND 16 TO 16 PIN RIBBON FP CABLE 30"L, LF
*Cable 3	CBL-PWCD-0160-IS	2	PWCD,US,NEMA5-15P TO IEC60320 C13,6FT,16AWG,RoHS/REACH
*Cable 4	CBL-PWEX-1078	3	PWEX,FAN,1X4/P2.5 TO 1X4/P2.54,20CM,22AWG,5A/PIN,RoHS
*FAN 1	FAN-0206L4	3	80x80x38 mm, 13.5K RPM, Middle Cooling Fan for 2U and above Servers
*Front Panel	FPB-FP836-D	1	Front control board Dual color LED(FP836-D)forSC823M,825,825M,828,829,835,836
*Drive Tray(s)	MCP-220-00023-01	1	Black USB dummy tray support 1x 2.5" slim HDD for SC825, 836
*Drive Tray(s)	MCP-220-00075-0B	8	Black gen 5.5 hot-swap 3.5" HDD tray
*Drive Tray(s)	MCP-220-82502-0B	2	Black fixed 3.5" HDD tray or FDD dummy tray
*Rear Window	MCP-240-82608-0N	1	216B/826B LP rear window,RoHS/REACH,PBF
*Peripheral Drive1	MCP-290-00007-01	1	Black DVD dummy cover for SC825, 836
*Rail Set	MCP-290-00053-0N	1	Rail set, quick/quick, default for 2,3U 17.2";W
*Drive Tray(s)	MCP-290-82607-0N	1	826B/216B rear dummy cover for 2 X 2.5
*Air Shroud	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
Optional Gen3 8-ports SAS Raid controller kit for SYS-620P-TRT	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
Optional parts needed to support 2x fixed NVMe drives	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 NMVe drives

Optional parts needed to support 2x fixed SATA drives	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 1x 2.5 inch SATA drives and 1x CBL-0082L can support 2x 2.5 inch SATA drives
use 1x BTR-TFM8G-LSICVM02 and 1x BKT-BBU-BRACKET-05 with AOC-S3108L-H8IR-16DD or AOC-S3108L-H8IR	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