

UP Workstation SYS-540A-TR



Key Applications

Deep Learning/AI/Machine Learning Development

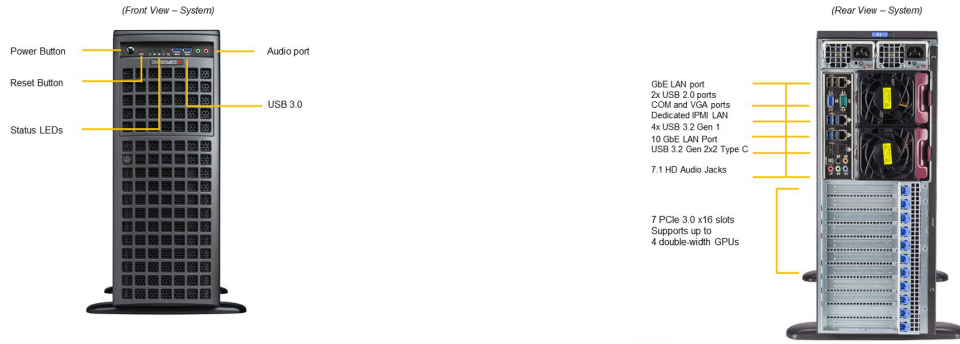
Key Features

- Supports 3rd Gen Intel® Xeon® Scalable or Xeon® W-3300 Processors with TDP up to 270W;
- 7 PCI-E 4.0 Slots;
- 1x 10GBase-T, 1x 1GbE, and dedicated IPMI LAN ports;
- 4x 92mm hot-swap fan(s) 2x 80mm rear hot-swap exhaust PWM fan(s);
- 2200W Redundant (1+1) Power Supplies Titanium Level Certified;

[More details here](#)



Form Factor	Full-Tower Rackmount Enclosure: 178 x 460 x 673mm (7" x 18.1" x 26.5") Package: 685.8 x 322.6 x 952.5mm (27" x 12.7" x 37.5")
Processor	3rd Gen Intel® Xeon® Scalable processors Single Socket LGA-4189 (Socket P+) supported TDP up to 270W; Intel® Xeon® W-3300 processors Single Socket LGA-4189 (Socket P+) supported TDP up to 270W;
System Memory	16 DIMM slots Up to 4TB ECC LRDIMM, DDR4-3200MHz
Drive Bays	8x 3.5" hot-swap SATA drive bays;
Expansion Slots	Slot 1: PCI-E 4.0 x16 Slot 2: PCI-E 4.0 x8 (in x16) Slot 3: PCI-E 4.0 x16 Slot 4: PCI-E 4.0 x8 (in x16) Slot 5: PCI-E 4.0 x16 Slot 6: PCI-E 4.0 x8 (in x16) Slot 7: PCI-E 4.0 x16
On-Board Devices	Chipset: Intel® C621A Network Connectivity: 1x 1GbE BaseT with Intel® I210-AT 1x 1GbE BaseT with Realtek RTL8211F PHY (dedicated IPMI) 1x 10GbE BaseT with Marvell AQC113 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	SATA: 8 SATA (6Gbps) port(s) USB: 4 USB 2.0 port(s) (2 via header; 2 rear) 6 USB 3.2 Gen 1 port(s) (4 rear; 2 via header) 1 USB 3.2 Gen 2x2 port(s) (1 rear) 2 USB 3.2 Gen 2 port(s) (1 rear Type A; 1 rear Type C) Video: 1 VGA port(s)



Cooling System	4x 92mm hot-swap fans; 2x 80mm rear hot-swap exhaust PWM fans
Power Supply	2200W Redundant Power Supplies with PMBus Dimension (W x H x L): 76 x 40 x 336 mm Output Type: Backplanes (gold finger)
System BIOS	BIOS Type: AMI 256MB SPI Flash
Management	Watch Dog; SUM; SuperDoctor 5; IPMI 2.0; KVM with dedicated LAN; SPM
PC Health Monitoring	Voltage: +1.8V, +12V, +3.3V, +5V, +5V standby, 10 -fan status, 3.3V standby, HT, Memory, VBAT
Dimensions and Weight	Height: 18.1" (460 mm) Width: 7" (178 mm) Depth: 26.5" (673 mm) Gross Weight: 57 lbs (25.85 kg) Net Weight: 52.9 lbs (24 kg) Packaging: 12.7" (H) x 27" (W) x 37.5" (D) Available Color: black
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 X12SPA-TF
Chassis	CSE-747BTS-R2K20BP

Parts List - (Items Included)

	Part Number	Qty	Description
Motherboard / Chassis	MBD-X12SPA-TF	1	Super X12SPA-TF Motherboard
	CSE-747BTS-R2K20BP	1	Full-Tower Chassis
Backplane	BPN-SAS3-747TQ-N4	1	8-port 4U/Tower SAS3 12Gbps Hybrid backplane, support up to 4x 3.5-inch SAS3/SATA3 HDD/SSD and 4x NVMe/SAS3/SATA3 storage devices
Cable 1	CBL-0484L	8	55CM 30AWG SATA S-S CBL
Cable 2	CBL-CDAT-0661	2	8 Pin to 8 Pin Round SGPIO Cable, 40cm, 28AWG, Pinout 1-1
Cable 3	CBL-PWEX-1040	4	PWYCB,GPU,2x4M/CPU to two (2x3F+2x1F)/PCIe,P4.2, 5CM,16/20AW
Parts	MCP-260-00148-0N	1	STD I/O Shield for X12SPA-TF with EMI Gasket
Manual	MNL-2328-QRG	1	540A-TR Quick Reference Guide
Software	SFT-OOB-LIC	1	License key for enabling OOB BIOS management
Heatsink / Retention	SNK-C0121L-1	4	22W x 129.65L x 4.35H mm, Al., Screws, Pad, Anodized, X11SPA 2280 M.2 HS with single package
Heatsink / Retention	SNK-P0081AP4	1	4U Active CPU Heat Sink for X12 Generation UP Gaming and Workstations
*Power Supply	PWS-2K20A-1R	2	1U 2200W Redundant, Titanium, 76(W) X 40(H) X 336(L) mm
*Power Distributor	PDB-PT747-6824	1	Power Distributor Board is for 4U GPU solution using regular
*Cable 4	CBL-0071L	1	ROUND 16 TO 16 PIN RIBBON FP CABLE 30"L, LF
*Cable 5	CBL-0160L	2	US POWER CORD 16AWG, PB FREE
*Cable 6	CBL-0216L	4	4 TO 4 PIN FAN POWER CABLE, 210MM
*Cable 7	CBL-0286L	2	4 TO 4 PIN REAR FAN PWR EXT W/ SQUARE HEADER, 30CM (PWM)
*FAN 1	FAN-0082L4	2	80x80x38 mm 4-pin PWM Fan Assembly for SC743, SC745
*FAN 2	Fan-0114L4	2	92x38mm 4-PIN PWM FAN W/ HUS for SC747
*FAN 3	FAN-0138L4	2	92x92x38 mm, 7.5K RPM, SC747 Middle Fan for Passive Cooling GPU
*Front Bezel	MCP-210-74701-0B	1	SC747 plastic front bezel
*Drive Tray(s)	MCP-220-00073-0B	3	Black 5.25 drive tray w/o rail (SC747)
*Front Panel	MCP-280-74702-0N	1	SC747BTQ-R2K04B Front Control Panel PCB (2x USB3.0, Audio)
*Parts	MCP-290-74701-0B	1	Black plastic top cover for SC747
*Parts	MCP-290-74702-0N	1	GPU Card Holder (11 slots) for SC747TQ, SC842
*Parts	MCP-290-74703-0B	1	fixed 3.5" dummy cover for SC747
*Parts	MCP-290-74709-0B	1	Plastic feet (2 pcs/set) for 4U tower chassis, black color

Notes:

- Parts with * are inside the chassis
- 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
DVD Kit	CBL-0082L •Store	1	Y SPLIT SATA POWER ADAPTER
	CBL-SAST-0624 •Store	1	70cm SATA Cable S-S 30AWG
	DVM-LITE-DVDRW24-HBT1	1	BLACK LITE-ON 5.25" HH 24X DVD-RW SATA DRIVE
Fan Kits for Various GPU Population	MCP-320-74703-0N-KIT	1	Fully-populated with Full-height Double-width Passive GPU cards
	MCP-310-74706-0B	1	Fully-populated with Full-height Double-width Active GPU cards (30°C operating temp.)
	MCP-320-74704-0N-KIT	1	Fully-populated with Low-profile Single-width Passive GPU cards
Front Bezel	MCP-210-74703-0B	1	Front bezel cover (for 5.25" bay) for rackmount
HDD Converter	MCP-220-93801-0B •Store	1	Black Hotswap Gen 6 3.5 to 2.5 HDD Tray
Mobile Rack	CSE-M14TQC	1	SAS3/SATA mobile rack for 4x 2.5" drives
Mounting Rails	MCP-290-00059-0B •Store	1	Chassis Mounting Rails for Rackmount