

# GPU SuperServer SYS-741GE-TNRT



More details here

## Key Applications

High Performance Computing, VDI, AI/Deep Learning Training, Media/Video Streaming, Cloud Gaming, Animation and Modeling, Design & Visualization, 3D Rendering, Diagnostic Imaging, AI Training,

## Key Features

- 5th/4th Gen Intel® Xeon® Scalable processor support;
- 16 DIMM slots Up to 4TB: 16x 256 GB DRAM Memory Type: 5600MT/s ECC DDR5;
- 4x PCIe 5.0 x16 (double-width) slots, 3x PCIe 5.0 x16 (single-width) slots; Up to 4x double width, full length GPUs;
- 2x M.2 NVMe for boot drive only; Up to 8x NVMe drives (8 NVMe drives supported by default); Total 8x 3.5" Hot-swap SATA/NVMe/SAS drive bays;
- 4 Removable heavy duty fans w/ Optimal Fan Speed Control;
- 2x 2000W (1+1) Redundant Power Supplies, Titanium Level;



Form Factor	Tower Enclosure: 437 x 178 x 737mm (17.2" x 7" x 29") Package: 330.2 x 685.8 x 965.2mm (13" x 27" x 38")
Processor	Dual Socket E (LGA-4677) 5th Gen Intel® Xeon®/4th Gen Intel® Xeon® Scalable processors Up to 64C/128T; Up to 320MB Cache per CPU
GPU	Max GPU Count: Up to 4 double-width or 7 single-width GPU(s) Supported GPU: AMD PCIe: Instinct MI210 NVIDIA PCIe: H100, RTX A5500, RTX A4000, L4, A30, L40, RTX A6000, RTX 6000 ADA, L40S, A100 CPU-GPU Interconnect: PCIe 5.0 x16 CPU-to-GPU Interconnect GPU-GPU Interconnect: NVIDIA® NVLink® Bridge (optional)
System Memory	Slot Count: 16 DIMM slots Max Memory (1DPC): Up to 2TB 5600MT/s ECC DDR5 RDIMM Max Memory (2DPC): Up to 4TB 4400MT/s ECC DDR5 RDIMM
Drive Bays	8x 3.5" hot-swap NVMe/SATA/SAS drive bays (8x 2.5" NVMe hybrid) 2 M.2 NVMe
Expansion Slots	7 PCIe 5.0 x16 FHFL slot(s)
On-Board Devices	SATA: SATA3 (6Gbps); RAID 0/1/5/10 support Chipset: Intel® C741 Network Connectivity: 2x 10GbE BaseT with Intel® X550-AT2 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	Video: 1 VGA port(s)



System Cooling	Fans: 4 heavy duty fans with optimal fan speed control
Power Supply	2000W Redundant Titanium Level power supplies
System BIOS	BIOS Type: AMI 32MB SPI Flash EEPROM
Management	Redfish API; Supermicro Server Manager (SSM); Supermicro Power Manager (SPM); Supermicro Update Manager (SUM); SuperDoctor® 5; Super Diagnostics Offline ; KVM with dedicated LAN ; IPMI 2.0
PC Health Monitoring	<p>CPU: Monitors for CPU Cores, Chipset Voltages, Memory 8+4 Phase-switching voltage regulator</p> <p>FAN: Fans with tachometer monitoring Status monitor for speed control Pulse Width Modulated (PWM) fan connectors</p> <p>Temperature: Monitoring for CPU and chassis environment Thermal Control for fan connectors</p>
Dimensions and Weight	<p>Height: 7" (178 mm)</p> <p>Width: 17.2" (437 mm)</p> <p>Depth: 29" (737 mm)</p> <p>Gross Weight: 62 lbs (28.1 kg)</p> <p>Net Weight: 46 lbs (20.9 kg)</p> <p>Packaging: 27" (H) x 13" (W) x 38" (D)</p> <p>Available Color: Black Front &amp; Silver Body</p>
Operating Environment	<p>Operating Temperature: 10°C ~ 35°C (50°F ~ 95°F)</p> <p>Non-operating Temperature: -40°C to 60°C (-40°F to 140°F)</p> <p>Operating Relative Humidity: 8% to 90% (non-condensing)</p> <p>Non-operating Relative Humidity: 5% to 95% (non-condensing)</p>
Motherboard	<a href="#">Super X13DEG-QT</a>
Chassis	CSE-749TS-R2K05BP

## Parts List

### Standard Parts (Parts Included)

#### Motherboard / Chassis

Part Number	MBD-X13DEG-QT	CSE-749TS-R2K05BP
Qty	1	1
Description	Super X13DEG-QT Motherboard	Tower Chassis

#### Backplane

Part Number	BPN-NVME5-749N-S8
Qty	1
Description	8-port 3.5" LFF direct-attached HDD SAS4/NVMe Gen5 backplane for 4U SC749 Tower, all ports support 32GT/s NVMe Gen5 and/or 24Gb/s SAS4.,RoHS

#### Cable

Part Number	CBL-MCIO-1240M5L CBL-PWEX-1078	CBL-PWEX-1142B-40	CBL-SAST-1230-100	CBL-0071L	CBL-0160L
Qty	4 5	1	2	1	2
Description	MCIOx8 (STR_pTab to LE), 40cm,30AWG,RoHS PWEX,FAN,1X4/P2.5 TO 1X4/P2.54,20CM,22AWG,5A/PIN,RoHS	MicroHi(2x4 to 2x4), PH3.0, 40cm, 8.5A/p, 18AWG, RoHS	Slimline x4 (LE) to Slimline x4 (STR),JNT,30CM,100 OHM,	ROUND 16 TO 16 PIN RIBBON FP CABLE	US POWER CORD 16AWG, PB FREE 30"L, LF

#### Parts

Part Number	MCP-260-00180-0B	MCP-290-74701-0B	MCP-290-74703-0B	MCP-290-74709-0B
Qty	1	1	1	1
Description	STD I/O Shield for X13DEG-QT with EMI Gasket & Black Mylar	Black plastic top cover for SC747	fixed 3.5" dummy cover for SC747	Plastic feet (2 pcs/set) for 4U tower chassis, black color

#### Software

Part Number	SFT-OOB-LIC
Qty	1
Description	License key for enabling OOB BIOS management

#### Heatsink / Retention

Part Number	SNK-P0090AP4
Qty	2
Description	4U Active CPU HS for X13 Gen. Intel Eagle Stream Platform

#### \* Power Supply

Part Number	PWS-2K05A-1R
Qty	2
Description	1U 2000W Redundant Titanium Power Supply W/PMbus 73.5x40x265mm,RoHS/REACH

#### \* Power Distributor

Part Number	PDB-PT747-DSG
Qty	1
Description	4U 4GPU support redundancy 2PWS up to 3KW output pass thr

#### \* Fan

Part Number	FAN-0199L4-1	FAN-0199L4-2
Qty	1	4
Description	92x92x38 mm, 11.5K RPM Cooling fan w/ 5A Fan Connector,RoHS	92x92x38 mm, 11.5K RPM Cooling fan w/ 5A Fan Connector,RoHS

#### \* Front Bezel

Part Number	MCP-210-74701-0B
Qty	1
Description	SC747 plastic front bezel

#### \* Drive Tray(s)

Part Number	MCP-220-00073-0B	MCP-220-00150-0B
Qty	3	8
Description	Black 5.25 drive tray w/o rail (SC747)	NVMe Panetone 159C on Latch

#### \* Front Panel

Part Number	MCP-280-74702-0N
Qty	1
Description	SC747BTQ-R2K04B Front Control Panel PCB (2x USB3.0, Audio)

#### 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

#### DVD Kit

Part Number	CBL-0082L <a href="https://store.supermicro.com/supermicro-15cm-4-pin-peripheral-connector-to-2-right-angle-sata-power-extension-cable-cbl-0082l.html">eStore (https://store.supermicro.com/supermicro-15cm-4-pin-peripheral-connector-to-2-right-angle-sata-power-extension-cable-cbl-0082l.html)</a>	CBL-PWEX-0947Y-30	DVM-TEAC-DVDRW24-HBT	CBL-0044L <a href="https://store.supermicro.com/supermicro-sata-flat-straight-straight-57-5cm-cable-cbl-0044l.html">eStore (https://store.supermicro.com/supermicro-sata-flat-straight-straight-57-5cm-cable-cbl-0044l.html)</a>
Qty	1	1	1	1
Description	Y SPLIT SATA POWER ADAPTER, PB FREE	MicroFit 2x2,PH3.0 to 2 1X4,PH5.08,30cm,9.5A/pin,16AWG,RoH S	BLACK TEAC 5.25" HH 24X DVD-RW SATA DRIVE	SATA CABLE 57.5CM FLAT S S PBF.26AWG flat

#### Front Bezel

Part Number	MCP-210-74703-0B
Qty	1

Description Front bezel cover (for 5.25" bay) for rackmount

---

**GPU Kit**

Part Number MCP-320-74901-NN

Qty 1

Description SC749 chassis rear external fan for passive GPU cooling kit

---

**Mounting Rails**

Part Number MCP-290-00059-0B [eStore \(https://store.supermicro.com/4u-5u-rail-kit-mcp-290-00059-0b.html\)](https://store.supermicro.com/4u-5u-rail-kit-mcp-290-00059-0b.html)

Qty 1

Description Rail set+handles, quick/quick, optional for 4U 17.2"W tower

---

**Optional Storage Controller Card + Cable(s)**

Part Number CBL-SAST-1261-100 [eStore \(https://store.supermicro.com/supermicro-slimline-x8-to-2x-slimline-x4-60cm-cable-cbl-sast-1261-100.html\)](https://store.supermicro.com/supermicro-slimline-x8-to-2x-slimline-x4-60cm-cable-cbl-sast-1261-100.html) AOC-S3908L-H8IR-16DD-O

Qty 1 1

Description Slimline x8 (STR) to 2x Slimline x4 (STR),60/60CM 8 int 12Gb/s ports, x8 Gen4, ROC - LP, 16 HDD w/ exp,RoHS

---

**Trusted Platform Module Options**

Part Number AOM-TPM-9670V-O

Qty 1

Description SPI capable vertical TPM 2.0 provisioned for server,RoHS

---

[Global SKU \(/en/products/SMC\\_global\\_skus\)](https://en/products/SMC_global_skus)

---