

GPU SuperServer SYS-741GE-TNRT



Key Applications

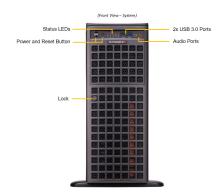
High Performance Computing, VDI, AI/Deep Learning Training, Media/Video Streaming, Cloud Gaming, Animation and Modeling, Design & Visualization, 3D Rendering, Diagnostic Imaging, Al Training,

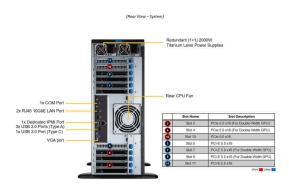
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 16 DIMM slots Up to 4° DDR5; 4x PCIe 5.0 x16 (doubl to 4x double width, fu 	on® Scalable processor support; TB: 16x 256 GB DRAM Memory Type: 5600MTs ECC e-width) slots, 3x PCIe 5.0 x16 (single-width) slots; Up Il length GPUs; drive only; Up to 8x NVMe drives (8 NVMe drives	
	; Total 8x 3.5" Hot-swap SATA/NVMe/SAS drive bays;	i iiiiii
, ,	uty fans w/ Optimal Fan Speed Control;	
	dant Power Supplies, Titanium Level;	
orm 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")	

Form Factor	Tower	
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	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	CPU: Monitors for CPU Cores, Chipset Voltages, Memory 8+4 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
Dimensions and Weight	Height: 7" (178 mm) Width: 17.2" (437 mm) Depth: 29" (737 mm) Gross Weight: 62 lbs (28.1 kg) Net Weight: 46 lbs (20.9 kg) Packaging: 27" (H) x 13" (W) x 38" (D) Available Color: Black Front & Silver Body
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 X13DEG-QT
Chassis	CSE-749TS-R2K05BP

Parts List

Standard Parts (Parts Included)

Motherboard / Chassis

Part Number MBD-X13DEG-QT CSE-749TS-R2K05BP

Qty

Super X13DEG-QT Motherboard Description **Tower Chassis**

Backplane

Part Number BPN-NVME5-749N-S8

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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

Qty

Parts Part Number

Qty

Description

Description

CBL-MCIO-1240M5L Part Number

CBL-PWEX-1078

STD I/O Shield for X13DEG-QT with EMI Black plastic top cover for SC747

CBL-SAST-1230-100 CBL-0071L

MCIOx8 (STR_pTab to LE), 40cm,30AWG,RoHS

MicroHi(2x4 to 2x4), PH3.0, 40cm, 8.5A/p, 18AWG, RoHS

CBL-PWEX-1142B-40

Slimline x4 (LF) to Slimline x4 (STR),INT,30CM,100 OHM,

ROUND 16 TO 16 PIN RIBBON FP CABLE US POWER CORD 16AWG, PB FREE

CBL-0160L

30"L, LF

PWEX,FAN,1X4/P2.5 TO

1X4/P2.54,20CM,22AWG,5A/PIN,RoHS

MCP-290-74701-0B MCP-290-74703-0B MCP-290-74709-0B

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

License key for enabling OOB BIOS Description

MCP-260-00180-0B

Gasket & Black Mylar

management

Heatsink / Retention Part Number SNK-P0090AP4

Qty

4U Active CPU HS for X13 Gen. Intel Description

Eagle Stream Platform

* Power Supply

Part Number PWS-2K05A-1R

Qty

1U 2000W Redundant Titanium Power Description

Supply W/PMbus

73.5x40x265mm,RoHS/REACH

* Power Distributor

PDB-PT747-DSG Part Number

Qty

Description 4U 4GPU support redundancy 2PWS up

to 3KW output pass thr

* Fan Part Number FAN-0199L4-1 FAN-0199L4-2

Qty

Description 92x92x38 mm, 11.5K RPM Cooling fan 92x92x38 mm, 11.5K RPM Cooling fan w/ 5A Fan Connector,RoHS

w/ 5A Fan Connector,RoHS

* Front Bezel

MCP-210-74701-0B Part Number Qty

SC747 plastic front bezel Description

* Drive Tray(s) Part Number

MCP-220-00073-0B MCP-220-00150-0B

Qty

Description Black 5.25 drive tray w/o rail (SC747) NVMe Panetone 159C on Latch

* Front Panel

MCP-280-74702-0N Part Number

Qty

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

Oty

Part Number CBL-PWEX-0947Y-30 DVM-TEAC-DVDRW24-HBT CBL-0082L •@Store CBL-0044L • eStore

> (https://store.supermicro.com/ supermicro-15cm-4-pinperipheral-connector-to-2right-angle-sata-powerextension-cable-cbl

(https://store.supermicro.com/ supermicro-sata-flat-straightstraight-57-5cm-cable-cbl-

0044l.html)

0082l.html)

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Y SPLIT SATA POWER ADAPTER, PB MicroFit 2x2.PH3.0 to 2 BLACK TEAC 5.25" HH 24X DVD-RW SATA CABLE 57.5CM FLAT S S Description FREE

1X4,PH5.08,30cm,9.5A/pin,16AWG,RoH SATA DRIVE PBF.26AWG flat

Front Bezel

MCP-210-74703-0B Part Number

Qty 1 Description Front bezel cover (for 5.25" bay) for rackmount

GPU Kit

MCP-320-74901-NN Part Number

Qty

SC749 chassis rear external fan for Description

passive GPU cooling kit

Mounting Rails

Part Number MCP-290-00059-0B •@Store

> (https://store.supermicro.com/ 4u-5u-rail-kit-mcp-290-00059-

<u>0b.html)</u>

Qty

Rail set+handles, quick/quick, optional Description

for 4U 17.2"W tower

Optional Storage Controller Card + Cable(s) Part Number

AOC-S3908L-H8IR-16DD-O CBL-SAST-1261-100 **-ℓ**Store

(https://store.supermicro.com/ supermicro-slimline-x8-to-2xslimline-x4-60cm-cable-cblsast-1261-100.html)

Qty

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

16 HDD w/ exp,RoHS

Trusted Platform Module Options

AOM-TPM-9670V-O Part Number

Qty

SPI capable vertical TPM 2.0 Description

Global SKU (/en/products/SMC_global_skus)