

GPU SuperServer SYS-521GE-TNRT

DP Intel 5U Dual-Root PCIe GPU System with up to 10 GPUs and extended thermal capacity



Key Applications

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

Key Features

- 5th/4th Gen Intel® Xeon® Scalable processor support;
- 32 DIMM slots Up to 8TB: 32x 256 GB DRAM Memory Type: 5600MTs ECC DDR5;
- AIOM/OCP 3.0 Support
 - 13 PCIe Gen 5.0 X16 FHFL Slots;
- 8x HOT SWAP 2.5" SATA/SAS (AOC required)
 8x 2.5" Hot-swap SATA drive bays
 8x2.5" Hot-swap NVMe drive bays;
- 10 Hot-Swap Heavy Duty Fans with Optimal Fan Speed Control;
- 4x 2700W (2+2) Redundant Power Supplies, Titanium Level;



Form Factor	5U Rackmount
	Enclosure: 437 x 222.5 x 737mm (17.2" x 8.75" x 29")
	Package: 720 x 440 x 1080mm (28.34" x 17.32" x 42.51")
	Tackage. 120 x 440 x 100011111 (20.54 x 11.52 x 42.51)
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 10 double-width or 10 single-width GPU(s)
	Supported GPU: NVIDIA PCIe: H100 NVL, H100, L40S, A100
	CPU-GPU Interconnect: PCIe 5.0 x16 Switch Dual-Root
	GPU-GPU Interconnect: NVIDIA® NVLink® Bridge (optional)
System Memory	Slot Count: 32 DIMM slots
	Max Memory (1DPC): Up to 4TB 5600MT/s ECC DDR5 RDIMM
	Max Memory (2DPC): Up to 415 3000MT/s ECC DDR5 RDIMM
	Max Methory (2DFC). Op to 615 4400M1/S ECC DDR3 RDIMIM
Drive Bays Configuration	Default: Total 16 bay(s)
	• 8 front hot-swap 2.5" NVMe drive bay(s)
	• 8 front hot-swap 2.5" SATA drive bay(s)
	Option A: Total 24 bay(s)
	8 front hot-swap 2.5" NVMe drive bay(s)
	• 8 front hot-swap 2.5" NVMe* drive bay(s)
	• 8 front hot-swap 2.5" SATA drive bay(s)
	(*NVMe support may require additional storage controller and/or cables, please see the optional parts list for
	details)
	M.2: 2 M.2 NVMe slot(s) (M-key)
	M.Z. Z M.Z NVMe Stot(S) (M-key)
Expansion Slots	Default
	• 13 PCIe 5.0 x16 FHFL slot(s)
On-Board Devices	Chipset: Intel® C741
	Network Connectivity: 2 RJ45 10GbE with Intel® X710-AT2
	IPMI: Support for Intelligent Platform Management Interface v.2.0
	IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
	irimi 2.0 with virtual filedia over LAN and Kvin-over-LAN support
Input / Output	1 VGA port(s)





8x 2.5' SATA3

Drive Bay

Description

(8-7) 8x 2.5' IVMs Dne Bays

(9-8) 8x 2.5' IVMs SASSATA1 Dne Bays (optional)

(9-9) 8x 2.5' SATA3 Dne Bays

(Rear View - System)

4x 2700W
Redundard (2+2)
Transium Level
Power Supples

2x USB 3.0 Ports
1x Dedicated IPM Port

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System Cooling	Fans: 10 heavy duty fans with optimal fan speed control Air Shroud: 1 Air Shroud(s)
	Liquid Cooling: Direct to Chip (D2C) Cold Plate (optional)
Power Supply	4x 2700W Redundant Titanium Level power supplies
System BIOS	BIOS Type: AMI 32MB SPI Flash EEPROM
Management	SuperCloud Composer; Supermicro Server Manager (SSM); Supermicro Update Manager (SUM); SuperDoctor® 5; Super Diagnostics Offline; TAS: Supermicro Thin-Agent Service (TAS); SAA(new!); IPMICFG; SMCIPMITool
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	Weight: Gross Weight: 100 lbs (45.3 kg)
	Net Weight: 65.5 lbs (29.7 kg)
	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-OA
Chassis	CSE-528GTS-R5K40P