

# GPU SuperServer SYS-521GE-TNRT

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



[More details here](#)

## Key Applications

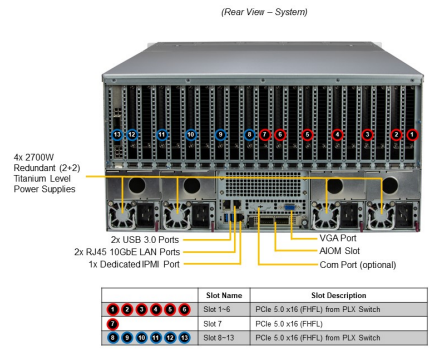
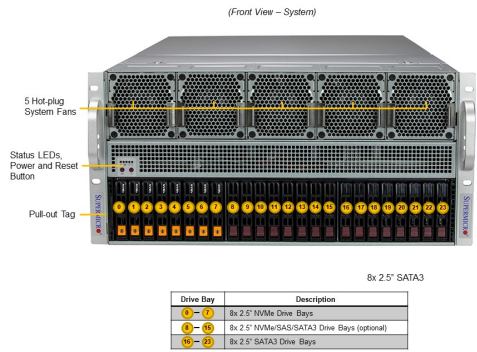
High Performance Computing, VDI, AI/Deep Learning Training, Media/Video Streaming, Cloud Gaming, Animation and Modeling, Design & Visualization, 3D Rendering, Diagnostic Imaging,

## 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  
8x 2.5" 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")
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 8TB 4400MT/s ECC DDR5 RDIMM
Drive Bays Configuration	Default: Total 16 bay(s) <ul style="list-style-type: none"> <li>• 8 front hot-swap 2.5" NVMe drive bay(s)</li> <li>• 8 front hot-swap 2.5" SATA drive bay(s)</li> </ul> Option A: Total 24 bay(s) <ul style="list-style-type: none"> <li>• 8 front hot-swap 2.5" NVMe drive bay(s)</li> <li>• 8 front hot-swap 2.5" NVMe* drive bay(s)</li> <li>• 8 front hot-swap 2.5" SATA drive bay(s)</li> </ul> (*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)
Expansion Slots	Default <ul style="list-style-type: none"> <li>• 13 PCIe 5.0 x16 FHFL slot(s)</li> </ul>
On-Board Devices	Chipset: Intel® C741 Network Connectivity: 2 RJ45 10GbE with Intel® X710-AT2
Input / Output	1 VGA port(s)



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 (96%) power supplies
System BIOS	BIOS Type: AMI 32MB SPI Flash EEPROM
Management	SuperCloud Composer; Supermicro Server Manager (SSM); Supermicro Update Manager (SUM); Supermicro SuperDoctor® 5 (SD5); Super Diagnostics Offline (SDO); Supermicro Thin-Agent Service (TAS); SuperServer Automation Assistant (SAA) New!
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	<a href="#">Super X13DEG-OA</a>
Chassis	<a href="#">CSE-528GTS-R5K40P</a>