

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

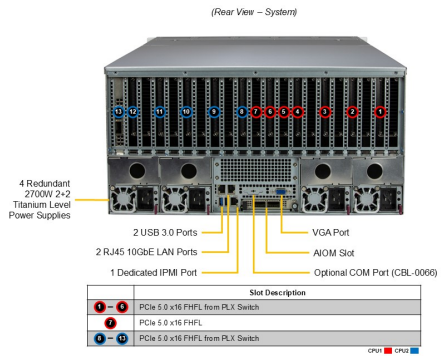
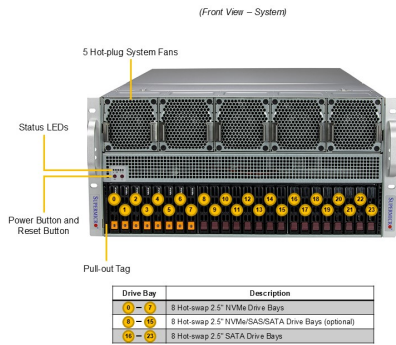
High Performance Computing, VDI, AI/Deep Learning Training, Media/Video Streaming, Cloud Gaming, Animation and Modeling, Design & Visualization, 3D Rendering, Diagnostic Imaging,

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;



Form Factor	5U Rackmount Enclosure: 438 x 222.5 x 786.1mm (17.2" x 8.75" x 31") 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 2 quad-width or 2 triple-width or 8 double-width or 10 single-width GPUs Supported GPU: NVIDIA PCIe: H100 NVL, H200 NVL (141GB), L4, L40S, NVIDIA RTX PRO™ 4500 Blackwell Server Edition, NVIDIA RTX PRO™ 6000 Blackwell Server Edition, RTX 6000 Ada Generation 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 bays • 8 front hot-swap 2.5" NVMe drive bays • 8 front hot-swap 2.5" SATA drive bays Option A: Total 24 bays • 8 front hot-swap 2.5" NVMe drive bays • 8 front hot-swap 2.5" NVMe* drive bays • 8 front hot-swap 2.5" SATA drive bays (*NVMe support may require additional storage controller and/or cables, please see the optional parts list for details) M.2: 2 M.2 NVMe slots (M-key)
Expansion Slots	Default • 13 PCIe 5.0 x16 FHFL slots
On-Board Devices	Chipset: Intel® C741 Network Connectivity: 2 RJ45 10GbE with Intel® X710-AT2
Input / Output	1 VGA port



System Cooling	Fans: Up to 10 heavy duty fans with optimal fan speed control Air Shroud: 1 Air Shroud 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® (SCC); 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: 8+4 Phase-switching voltage regulator Monitors for CPU Cores, Chipset Voltages, Memory Fan: Fans with tachometer monitoring Pulse Width Modulated (PWM) fan connectors Status monitor for speed control 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 to 35°C (50°F to 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