

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

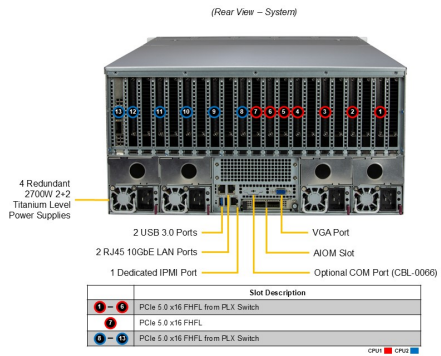
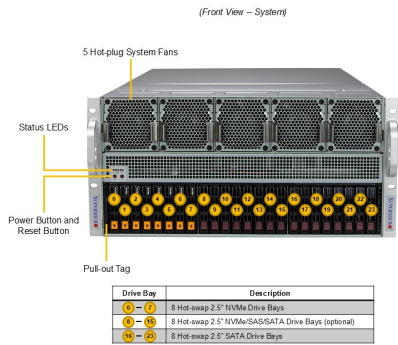
High Performance Computing, VDI, AI/Deep Learning Training, Media/Video Streaming, Cloud Gaming, Animation and Modeling, Design & Visualization, 3D Rendering, Diagnostic Imaging,

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
8x2.5" 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, NVIDIA RTX PRO™ 6000 Blackwell Server Edition, H200 NVL (141GB), RTX 6000 Ada Generation, L40S, L4 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 <ul style="list-style-type: none"> • 8 front hot-swap 2.5" NVMe drive bays • 8 front hot-swap 2.5" SATA drive bays Option A: Total 24 bays <ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • 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 | <p>Fans: Up to 10 heavy duty fans with optimal fan speed control</p> <p>Air Shroud: 1 Air Shroud</p> <p>Liquid Cooling: Direct to Chip (D2C) Cold Plate (optional)</p> |
| Power Supply | 4x 2700W Redundant Titanium Level (96%) power supplies |
| System BIOS | BIOS Type: AMI 32MB SPI Flash EEPROM |
| Management | <p>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!</p> |
| PC Health Monitoring | <p>CPU: Monitors for CPU Cores, Chipset Voltages, Memory</p> <p>8+4 Phase-switching voltage regulator</p> <p>FAN: Fans with tachometer monitoring</p> <p>Status monitor for speed control</p> <p>Pulse Width Modulated (PWM) fan connectors</p> <p>Temperature: Monitoring for CPU and chassis environment</p> <p>Thermal Control for fan connectors</p> |
| Dimensions and Weight | <p>Weight: Gross Weight: 100 lbs (45.3 kg)</p> <p>Net Weight: 65.5 lbs (29.7 kg)</p> <p>Available Color: Black Front & Silver Body</p> |
| Operating Environment | <p>Operating Temperature: 10°C to 35°C (50°F to 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 | Super X13DEG-OA |
| Chassis | CSE-528GTS-R5K40P |