GPU SuperServer SYS-521GE-TNRT

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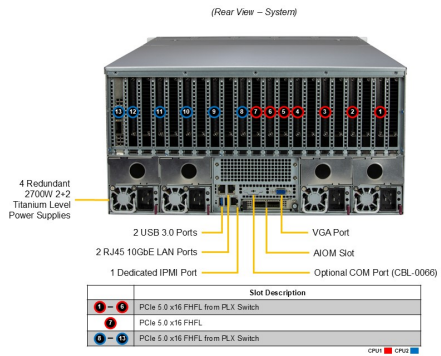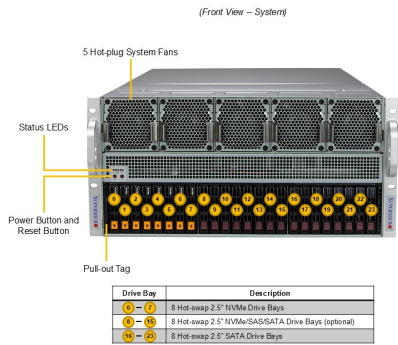
More details here

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, H200 NVL (141GB), L4, L40S, 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

(Front View – System)

5 Hot-plug System Fans

Status LEDs

Power Button and
Reset Button

Pull-out Tag

Drive Bay	Description
0 – 7	8 Hot-swap 2.5" NVMe Drive Bays
8 – 15	8 Hot-swap 2.5" NVMe/SAS/SATA Drive Bays (optional)
16 – 23	8 Hot-swap 2.5" SATA Drive Bays

(Rear View – System)

4 Redundant
2700W 2+2
Titanium Level
Power Supplies

2 USB 3.0 Ports — VGA Port
2 RJ45 10GbE LAN Ports — AIOM Slot
1 Dedicated IPMI Port — Optional COM Port (CBL-0066)

Slot Description		
1 – 6	PCIe 5.0 x16 FHFL from PLX Switch	
7	PCIe 5.0 x16 FHFL	
8 – 13	PCIe 5.0 x16 FHFL from PLX Switch	

CPU1 ■ CPU2 ■

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®; 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