AI Training SuperServer SYS-421GE-TNHR2-LCC

DP Intel 4U Liquid-Cooled System with NVIDIA HGX H100/H200 8-GPU (onsite service is required for liquid-cooling)

More details here

Key Applications

Scientific Research, Conversational AI, Business Intelligence & Analytics, Drug Discovery, Finance Services and Fraud Detection, AI/Deep Learning Training and Inference, Large Language Model (LLM) and Generative AI, High Performance Computing (HPC), Autonomous Vehicle Technologies,

Key Features

- Complete liquid-cooled rack integration is required for purchase;
- 5th/4th Gen Intel® Xeon® Scalable processor support;
- 8 NVIDIA H200/H100 GPUs;
- 32 DIMM slots, ECC RDIMM DDR5 up to 4TB 5600MT/s (1DPC) or up to 8TB 4400MT/s (2DPC);
- 8 PCIe 5.0 x16 LP, 2x PCIe 5.0 x16 FHHL slots;
- 8 front hot-swap 2.5" NVMe U.2, 2x front hot-swap NVMe M.2;
- 4 Redundant 52500W Titanium Level power supplies;
- 2 10GbE RJ-45, 1x Dedicated BMC/IPMI;

Form Factor	4U Rackmount Enclosure: 449 x 174 x 895.35mm (17.6" x 6.85" x 35.25") Package: 730 x 410 x 1280mm (28.7" x 16.14" x 50.39")
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: 8 onboard GPUs Supported GPU: NVIDIA SXM: HGX H100 8-GPU (80GB), HGX H200 8-GPU (141GB) CPU-GPU Interconnect: PCIe 5.0 x16 CPU-to-GPU Interconnect GPU-GPU Interconnect: NVIDIA® NVLink™ with NVSwitch™
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 8 bays • 8 front hot-swap 2.5" NVMe drive bays M.2: 2 M.2 NVMe slots (M-key)
Expansion Slots	Default • 8 PCIe 5.0 x16 LP slots • 2 PCIe 5.0 x16 FHHL slots Option A • 8 PCIe 4.0 x16 LP slots • 4 PCIe 5.0 x16 FHHL slots
On-Board Devices	Chipset: Intel® C741 Network Connectivity: 2 RJ45 10GbE with Intel® X710-AT2
Input / Output	1 VGA port

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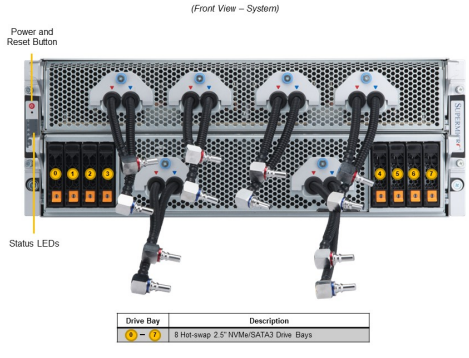

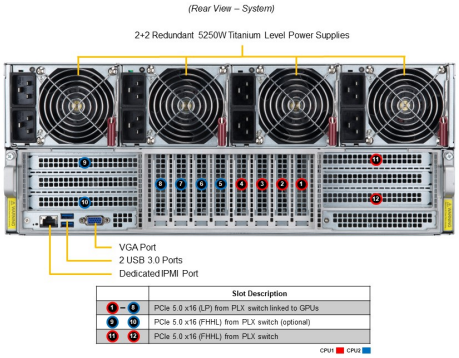

System Cooling	Fans: Up to 4 Fan 8cm Fan(s) Liquid Cooling: Direct to Chip (D2C) Cold Plate
Power Supply	4x 5250W Redundant (2 + 2) Titanium Level (96%) power supplies
System BIOS	BIOS Type: AMI 32MB UEFI
Management	SuperCloud Composer®; Supermicro Server Manager (SSM); Super Diagnostics Offline (SDO); 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: 216 lbs (98 kg) Net Weight: 176 lbs (80 kg) Available Color: Silver
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-M**
Chassis	**CSE-GP403TS-R000NFP**

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