



GPU SuperServer SYS-822GS-NB3RT

DP Intel 8U System with NVIDIA HGX B300 8-GPU

Key Applications

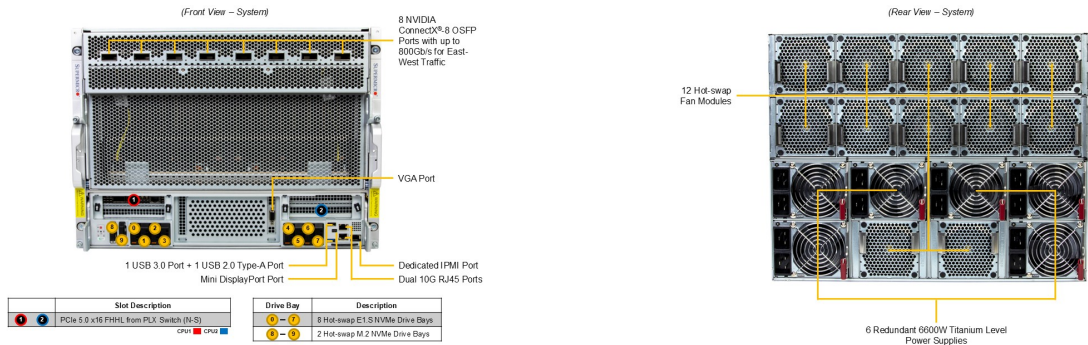
Scientific Research, Conversational AI, Business Intelligence & Analytics, Drug Discovery, Finance Services and Fraud Detection, AI/Deep Learning Training and Inference, Large Language Model (LLM) and Generative AI, High Performance Computing (HPC), Autonomous Vehicle Technologies,

Key Features

- Dual Intel® Xeon® 6700 series processors with P-cores, up to 350W TDP;
- NVIDIA HGX B300 8-GPU with 5th Generation NVLink® 1.8TB/s, 2.3TB of HBM3e GPU memory per system;
- 8x NVIDIA ConnectX®-8 SuperNICs, up to 800Gb/s, up to two North/South NICs;
- 8x Hot-swap E1.S NVMe storage drive bays and 2x M.2 NVMe boot drives;
- 32x DIMMs with up to 8TB at 5200MT/s or up to 4TB at 6400MT/s DDR5 RDIMM;
- 6x redundant (3+3) 6.6kW Titanium level power supplies;



Form Factor	8U Rackmount Enclosure: 449 x 356 x 950mm (17.6" x 13.8" x 37.4") Package: 730 x 670 x 1280mm (28.74" x 26.38" x 50.39")
Processor	Dual Socket E2 (LGA-4710) Intel® Xeon® 6700-series processors with P-cores Up to 86C/172T; Up to 336MB Cache per CPU
GPU	Max GPU Count: 8 onboard GPUs Supported GPU: NVIDIA SXM: HGX B300 8-GPU (288GB) GPU-GPU Interconnect: NVIDIA® NVLink™ with NVSwitch™
System Memory	Slot Count: 32 DIMM slots Max Memory (1DPC): Up to 4TB 6400MT/s ECC DDR5 RDIMM Max Memory (2DPC): Up to 8TB 5200MT/s ECC DDR5 RDIMM
Drive Bays Configuration	Default: Total 8 bays <ul style="list-style-type: none">8 front hot-swap E1.S NVMe drive bays M.2: 2 M.2 NVMe slots (M-key; RAID support via S3808N controller)
Expansion Slots	Default <ul style="list-style-type: none">2 PCIe 5.0 x16 FHHL slots
On-Board Devices	Chipset: System on Chip Network Connectivity: 8 OSFP 800GbE 2 RJ45 10GbE
Input / Output	LAN: 8 OSFP 800 GbE LAN ports (NVIDIA ConnectX®-8 SuperNIC) 2 RJ45 10 GbE LAN ports (Intel® X710) USB: 1 USB 3.0 Type-A port(Front) 1 USB 2.0 Type-A port(Front) Video: 1 VGA port 1 mini-DP port



System Cooling	Fans: Up to 12 heavy duty fans with optimal fan speed control
Power Supply	6x 6600W Redundant (3 + 3) Titanium Level (96%) power supplies
System BIOS	BIOS Type: AMI 64MB 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: 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: 302 lbs (137 kg) Net Weight: 263 lbs (119 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 X14DBG-LC
Chassis	CSE-GP807TS-R000NP