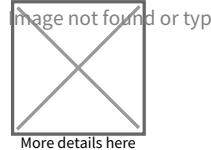# GPU SuperServer SYS-422GS-NB3RT-ALC

DP Intel 4U Liquid-Cooled System with NVIDIA HGX B300 8-GPU (complete rack and onsite service are required)

Key Applications

HPC, AI/Deep Learning Training, Artificial Intelligence, Deep Learning Inferencing, LLMs & Multi-modal LLMs,

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;
- 32x DIMMs with up to 8TB at 5200MT/s or up to 4TB at 6400MT/s DDR5 RDIMM;
- 8x Hot-swap E1.S NVMe storage drive bays and 2x M.2 NVMe boot drives;
- 4x redundant (2+2) 6.6kW Titanium level power supplies;

Form Factor	4U Rackmount Enclosure: 448 x 174 x 991.4mm (17.6" x 6.85" x 39.03") Package: 795 x 410 x 1395mm (31.29" x 16.14" x 54.92")
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 • 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 • 2 PCIe 5.0 x16 FHHL slots
On-Board Devices	System on Chip

Input / Output	LAN: 2 RJ45 10 GbE LAN ports (Intel® X710)
	      8 OSFP 800 Gb/s InfiniBand LAN ports (NVIDIA ConnectX®-8 SuperNIC)
	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
	TPM: 1 TPM header

System Cooling	Fans: Up to 12 heavy duty fans with optimal fan speed control Liquid Cooling: Direct to Chip (D2C) Cold Plate
Power Supply	4x 6600W Redundant (2 + 2) 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: Monitors for CPU Cores, Chipset Voltages, Memory
	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: 307.77 lbs (139.6 kg) Net Weight: 253.53 lbs (115 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-GP405TS-R000NP2**