

GPU SuperServer AS -4126GS-NB3RT-LCC

DP AMD 4U Liquid-Cooled System with NVIDIA HGX B300 8-GPU



Key Applications

High Performance Computing, Engineering/scientific research, AI/Deep Learning Training, Industrial Automation, Healthcare, Conversational AI, Business Intelligence & Analytics, Drug Discovery, Climate and Weather Modeling, Finance & Economics,

Key Features

- Dual processor(s) AMD EPYC™ 9005 Series Processors up to 500W with Liquid Cooling;
- NVIDIA HGX B300 Liquid cooling 8-GPU with 5th Generation NVLink® 1.8TB/s, 2.3TB of HBM3e GPU memory per system;
- 8 NVIDIA ConnectX®-8 SuperNICs, up to 800Gb/s, up to two dual-port NVIDIA BlueField®-3 DPUs, and 2 RJ45 10GbE (default);
- 24 DIMMs, with up to 6TB at 6400MT/s DDR5 memory (Please check System Memory Section for detail);
- Up to 2 PCIe 5.0 x16 FHHL slots;
- 8 Hot-swap E1.S NVMe storage drive bays and 2 M.2 NVMe boot drives;
- 4U Rackmount chassis with 39.03" (896.8mm) depth;
- Total of 4x 6600W Redundant (2 + 2) Titanium Level power supplies (Power supply full redundancy based on configuration and application load);



Form Factor	4U Rackmount Enclosure: 448 x 174 x 896.8mm (17.6" x 6.85" x 39.03") Package: 795 x 410 x 1395mm (31.29" x 16.14" x 54.92")
Processor	Dual processor(s) AMD EPYC™ 9005/9004 Series Processors Up to 192C/384T; Up to 384MB Cache per CPU
GPU	Max GPU Count: 8 onboard GPUs Supported GPU: NVIDIA SXM: HGX B300 8-GPU (288GB) CPU-GPU Interconnect: PCIe 5.0 x16 CPU-to-GPU Interconnect GPU-GPU Interconnect: NVIDIA® NVLink™ with NVSwitch™
System Memory	Slot Count: 24 DIMM slots Max Memory (1DPC): Up to 6TB 6400MT/s ECC DDR5 RDIMM (AMD EPYC™ 9005 Series Processor) Max Memory (1DPC): Up to 6TB 4800MT/s ECC DDR5 RDIMM (AMD EPYC™ 9004 Series Processor)
Drive Bays Configuration	Default: Total 8 bays <ul style="list-style-type: none"> • 8 front hot-swap E1.S PCIe 5.0 x4 NVMe drive bays M.2: 2 M.2 NVMe slots (M-key)
Expansion Slots	PCI-Express (PCIe) Configuration: Default <ul style="list-style-type: none"> • 2 PCIe 5.0 x16 FHHL slots M.2: 2 M.2 NVMe slots (M-key 22110(default))
On-Board Devices	Chipset: System on Chip Network Connectivity: 8 OSFP 800GbE 2 RJ45 10GbE
Input / Output	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	<p>Fans: Up to 4 Hot-swappable rear fans with optimal fan speed control 80x80x80mm Fan(s)</p> <p>Air Shroud: 1 Air Shroud</p> <p>Liquid Cooling: Direct to Chip (D2C) Cold Plate</p>
Power Supply	4x 6600W Redundant (2 + 2) Titanium Level (96%) power supplies
System BIOS	BIOS Type: AMI 64MB 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: 8+4 Phase-switching voltage regulator</p> <p>Monitors for CPU Cores, Chipset Voltages, Memory</p> <p>FAN: Fans with tachometer monitoring</p> <p>Pulse Width Modulated (PWM) fan connectors</p> <p>Status monitor for speed control</p> <p>Temperature: Monitoring for CPU and chassis environment</p> <p>Thermal Control for fan connectors</p>
Dimensions and Weight	<p>Weight: Gross Weight: 236 lbs (107 kg)</p> <p>Net Weight: 203 lbs (92 kg)</p> <p>Available Color: Silver</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	<u>Super H14DSG-OM</u>
Chassis	CSE-GP405LTS-R000NP