

GPU SuperServer ARS-511GD-NB-LCC

Super AI Station with NVIDIA GB300 Grace Blackwell Ultra Desktop Superchip



Key Applications

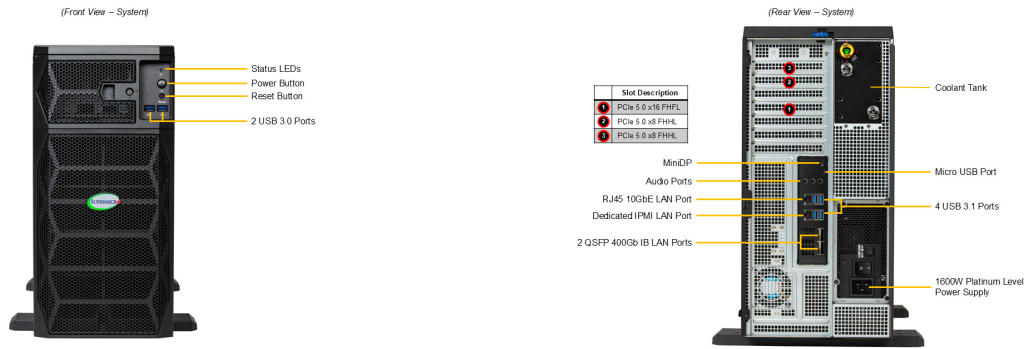
Research Lab/National Lab, AI Inference / Training, AI Development, Data Science,

Key Features

- NVIDIA Grace™ CPU Superchip, 72 Core;
- NVIDIA Blackwell B300 GPU, up to 252GB HBM3e (Onboard);
- 4x 128GB LPDDR5x SOCAMM (Total 496GB total memory per NVIDIA Grace™ CPU)
 - Up to 748GB of coherent memory;
- NVIDIA ConnectX®-8 SuperNIC™;
- Up to 20 PFLOPS of AI Performance
 - Closed loop liquid cooling
 - Support rackmount via optional kit
 - Pre-Installed OS: Ubuntu with NVIDIA AI Developer Tools;



Form Factor	Tower or 5U Enclosure: 454.7 x 218.4 x 701mm (17.9" x 8.6" x 27.6") Package: 388 x 655 x 956mm (15.3" x 25.8" x 37.6")
Processor	Single processor(s) NVIDIA 72-core NVIDIA Grace CPU on NVIDIA GB300 Grace Blackwell Ultra Superchip 72C/72T
GPU	Max GPU Count: 1 onboard GPU Supported GPU: NVIDIA: B300 GPU on NVIDIA GB300 Grace Blackwell Ultra Superchip CPU-GPU Interconnect: NVIDIA NVLink®-C2C
System Memory	Onboard Memory 496GB ECC LPDDR5X Additional GPU Memory: 252GB ECC HBM3e
Drive Bays Configuration	4 M.2 PCIe 5.0 x4 NVMe slots (M-key 2280(default))
Expansion Slots	PCI-Express (PCIe) Configuration: Default <ul style="list-style-type: none"> • 1 PCIe 5.0 x16 FHFL double-width slot • 2 PCIe 5.0 x8 (in x16) FHHL slots M.2: 1 M.2 PCIe 5.0 x4 slot (E-key 2230(default))
On-Board Devices	2 QSFP 400GbE with NVIDIA ConnectX®-8 SuperNIC
Input / Output	LAN: 1 RJ45 1 GbE Dedicated BMC LAN port 1 RJ45 10 GbE LAN port 2 QSFP28 400 GbE LAN ports (NVIDIA ConnectX®-8 SuperNIC) USB: 2 USB 3.0 Type-A ports(Front) 4 USB 3.0 Gen2 Type-A ports(Rear) Video: 1 mini-DP port Audio: Rear Audio



System Cooling Fans: 2x 120mm Fan(s)
 1x 80mm Fan(s)
 1x 60mm Fan(s)
 1x 40mm Fan(s)
 Liquid Cooling: Direct to Chip (D2C) Cold Plate

Power Supply 1x 1600W Titanium Level (94%) power supply

System BIOS BIOS Type: AMI 64MB SPI Flash EEPROM

PC Health Monitoring CPU: Monitors for CPU Cores, Chipset Voltages, Memory
 Fan: Fans with tachometer monitoring
 Temperature: Monitoring for CPU and chassis environment
 Thermal Control for fan connectors

Dimensions and Weight Weight: Gross Weight: 112.4 lbs (51 kg)
 Net Weight: 88 lbs (40 kg)
 Available Color: Black Front & Black Body

Operating Environment Operating Temperature: 10°C to 25°C (50°F to 77°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 GPU-NVGB300-WSHPM](#)

Chassis CSE-759TS-R0CNBP