GPU SuperServer SYS-A22GA-NBRT

DP Intel 10U System with NVIDIA HGX B200 8-GPU
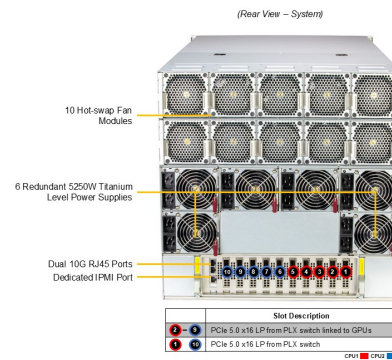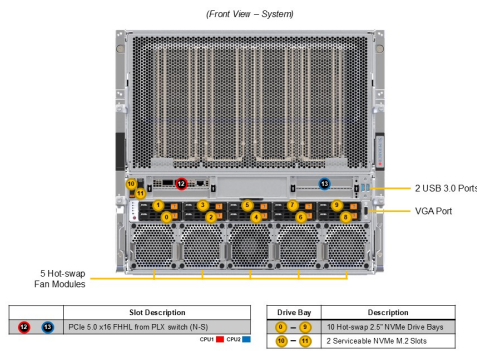
Key Applications

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® 6900 series processors with P-cores;
- 8x NVIDIA SXM B200 GPUs, 1.4TB of GPU memory space;
- 24x DIMM slots, ECC RDIMM / MRDIMM DDR5 up to 8800MT/s (1DPC);
- 10x PCIe 5.0 x16 LP, 2x PCIe 5.0 x16 FHHL slots;
- 10x front hot-swap 2.5" NVMe U.2, 2x front hot-swap NVMe M.2;
- 2x 10GbE RJ-45, 1x Dedicated BMC/IPMI;

Form Factor	10U Rackmount Enclosure: 449 x 438.8 x 843.28mm (17.6" x 17.2" x 33.2") Package: 1255 x 640 x 694mm (49.4" x 25.2" x 27.3")
Processor	Dual Socket BR (LGA-7529) Intel® Xeon® 6900 series processors with P-cores Up to 128C/256T; Up to 504MB Cache per CPU
GPU	Max GPU Count: 8 onboard GPUs Supported GPU: NVIDIA SXM: HGX B200 8-GPU (180GB) 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 Max Memory (1DPC): Up to 6TB 8800MT/s ECC DDR5 MRDIMM
Drive Bays Configuration	Default: Total 10 bays • 10 front hot-swap 2.5" PCIe 5.0 x4 NVMe drive bays M.2: 2 M.2 PCIe 4.0 x4 NVMe slots (M-key 2280/22110)

Expansion Slots	Default
	  • 10 PCIe 5.0 x16 LP slots
	  • 2 PCIe 5.0 x16 FHHL slots

On-Board Devices	Chipset: System on Chip Network Connectivity: 2 RJ45 10GbE with Intel® X710
Input / Output	LAN: 1 RJ45 1 GbE Dedicated BMC LAN port USB: 2 USB 3.0 ports(rear) Video: 1 VGA port TPM: 1 TPM header

(Front View – System)

(Rear View – System)

2 USB 3.0 Ports
VGA Port
5 Hot-swap Fan Modules

10 Hot-swap Fan Modules
6 Redundant 5250W Titanium Level Power Supplies
Dual 10G RJ45 Ports
Dedicated IPMI Port

Slot Description	
12 13	PCIe 5.0 x16 FHHL from PLX switch (N-S)
	CPU1 ■ CPU2 ■

Drive Bay	Description
0 – 9	10 Hot-swap 2.5" NVMe Drive Bays
10 – 11	2 Serviceable NVMe M.2 Slots

Slot Description	
2 – 9	PCIe 5.0 x16 LP from PLX switch linked to GPUs
1 10	PCIe 5.0 x16 LP from PLX switch
	CPU1 ■ CPU2 ■

System Cooling
Fans: 15 counter-rotating 80x80x80mm Fan(s)
　　　4 counter-rotating 60x60x56mm Fan(s)
Air Shroud: 1 Air Shroud

Power Supply
6x 5250W Redundant (3 + 3) power supplies

System BIOS
BIOS Type: AMI 64MB SPI Flash

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: 341 lbs (155 kg)
　　　Net Weight: 293 lbs (133 kg)
Available Color: Silver

Operating Environment
Operating Temperature: 10°C to 35°C (50°F to 95°F)
Non-operating Temperature: -40°C to 70°C (-40°F to 158°F)
Operating Relative Humidity: 8% to 90% (non-condensing)
Non-operating Relative Humidity: 5% to 95% (non-condensing)

Motherboard
Super X14DBG-DAP

Chassis
CSE-GP1001TS-R000NPF