GPU SuperServer SYS-A22GA-NBRT

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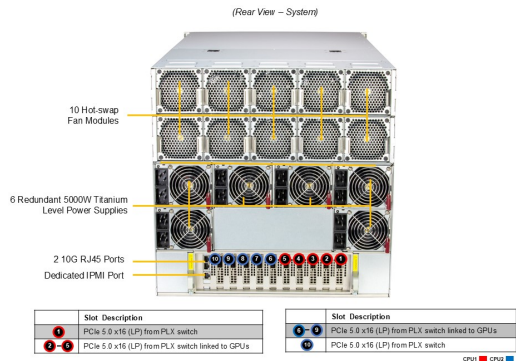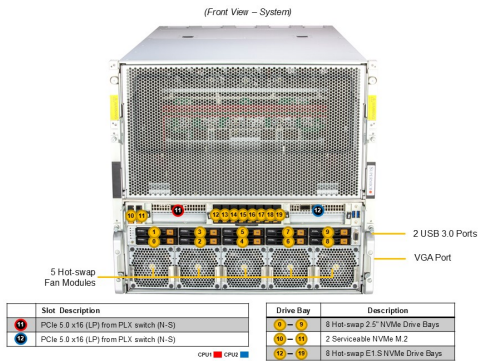
Key Applications

AI / Deep Learning, Scientific Research, Conversational AI, Drug Discovery, High Performance Computing (HPC),

Key Features

- Dual Intel® Xeon® 6900 series processors with P-cores, up to 500W TDP, 6UPI;
- Support for up to 8 onboard SXM GPU accelerator cards;
- 24 DIMM slots, ECC DDR5 designed for up to 6400MT/s (1DPC only);
- 2 10G NIC (X710), 1 VGA, 2 USB 3.0, and 1 Dedicated IPMI;
- 8 PCIe 5.0 x16 LP and 2 PCIe 5.0 x16 FHHL;
- 10 PCIe 5.0 NVMe U.2 and 2 NVMe M.2;

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: Up to 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 2280/22110/25110)
Expansion Slots	Option A • 8 PCIe 5.0 x16 LP slots • 2 PCIe 5.0 x16 (in 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 5000W Titanium Level Power Supplies
2 10G RJ45 Ports
Dedicated IPMI Port

Slot	Description
11	PCIe 5.0 x16 (LP) from PLX switch (N-S)
12	PCIe 5.0 x16 (LP) from PLX switch (N-S)

Drive Bay	Description
1 – 9	8 Hot-swap 2.5" NVMe Drive Bays
10 – 11	2 Serviceable NVMe M.2
12 – 19	8 Hot-swap E1.S NVMe Drive Bays

CPU1 ■ CPU2 ■

Slot	Description
1	PCIe 5.0 x16 (LP) from PLX switch
2 – 6	PCIe 5.0 x16 (LP) from PLX switch linked to GPUs

Slot	Description
6 – 9	PCIe 5.0 x16 (LP) from PLX switch linked to GPUs
10	PCIe 5.0 x16 (LP) from PLX switch

CPU1 ■ CPU2 ■

System Cooling	Fans: 19 counter-rotating 80x80x38mm Fan(s)
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: 183 lbs (83.1 kg) Net Weight: 122.7 lbs (55.64 kg) Available Color: Silver
Operating Environment	Operating Temperature: 10°C ~ 35°C (50°F ~ 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**