

GPU SuperServer SYS-A21GE-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,

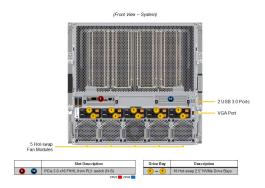
Key Features

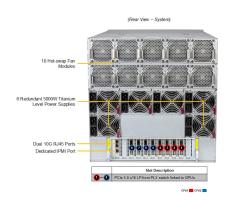
- Dual 5th/4th Gen Intel® Xeon® Scalable processors;
- 8x NVIDIA B200 SXM GPUs, 1.4TB HBM3e GPU Memory Space;
- 32x DIMM slots, DDR5 up to 5600MT/s(1DPC), 4800MT/s(2DPC);
- 8x PCIe 5.0 x16 LP, 2x PCIe 5.0 x16 FHHL slots;
- 10x Front Hot-swap 2.5" NVMe U.2, 2x NVMe M.2;
- 2x 10GbE RJ-45, 1x Dedicated BMC/IPMI;
- 6x 5250W Redundant (3+3) Power Supplies Titanium Level Efficiency;



Form Factor	10U Rackmount Enclosure: 449 x 438.8 x 843.28mm (17.6" x 17.2" x 33.2") Package: 1280 x 710 x 730mm (50.39" x 27.95" x 28.74")
Processor	Dual Socket E (LGA-4677) 5th Gen Intel® Xeon® / 4th Gen Intel® Xeon® Scalable processors Up to 64C/128T; Up to 320MB 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: 32 DIMM slots Max Memory (1DPC): Up to 4TB 5600MT/s ECC DDR5 RDIMM Max Memory (2DPC): Up to 8TB 4400MT/s ECC DDR5 RDIMM
Drive Bays Configuration	Default: Total 10 bays • 10 front hot-swap 2.5" PCIe 5.0 x4 NVMe* drive bays (*NVMe support may require additional storage controller and/or cables) M.2: 2 M.2 PCIe 3.0 x4 NVMe slots (M-key 2280/22110; VROC required for RAID)
Expansion Slots	Default • 8 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
Input / Output	USB: 2 USB 3.0 Type-A ports(Front) Video: 1 VGA port TPM: 1 TPM header







System Cooling	Fans: Up to 15 heavy duty hot-swappable 80mm Fan(s) Up to 4 heavy duty internal 60mm Fan(s)
Power Supply	6x 5250W Redundant (3 + 3) Titanium Level (96%) Hot-plug power supplies
System BIOS	BIOS Type: AMI 32MB UEFI
Management	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!
PC Health Monitoring	CPU: Monitors for CPU Cores, Chipset Voltages, Memory 8+4 Phase-switching voltage regulator 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 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 X13DEG-D
Chassis	CSE-GP1001TS-R000NPF