GPU A+ Server AS -4125GS-TNRT1

DP AMD 4U Single-Root PCIe GPU System with up to 10 PCIe GPUs
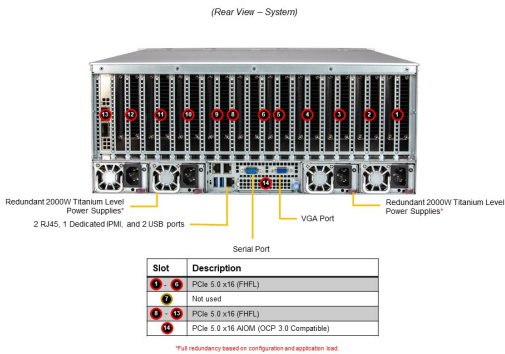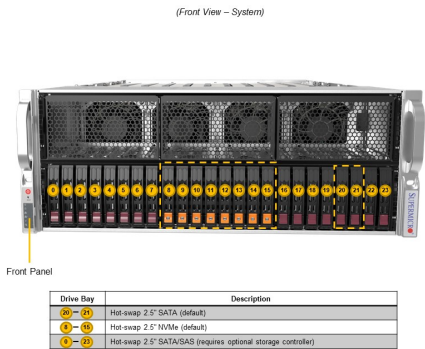

More details here

Key Applications

AI / Deep Learning, Big Data Analytics and AI, High Performance Computing, Engineering/scientific research,

Key Features

- Flexible GPU support: active & passive GPUs
  Single Root Configuration with PCIe Switch for up to 10 double width, full length GPUs
  8 Hot-Swap Heavy Duty Fans with Optimal Fan Speed Control;
- Single AMD EPYC™ 9004/9005 series processors up to 400W TDP;
- Supports up to 12DIMM Slots, 6000 MT/s 3TB DDR5 memory
  (Please check System Memory Section for detail);
- AIOM / OCP 3.0 Support;
- Total of 8 Hot-swap 2.5" NVMe drive bays;
- Total of 4x 2000W Redundant (2+2 or 3+1) Titanium Level power supplies
  (2+2 under 4000 Watt, 3+1 under 6000 Watt)
  (Power supply full redundancy based on configuration and application load);

Form Factor	4U Rackmount Enclosure: 437 x 178 x 737mm (17.2" x 7" x 29") Package: 685 x 675 x 1041mm (27" x 26.57" x 41")
Processor	Single processor(s) AMD EPYC™ 9004/9005 Series Processors (* AMD EPYC™ 9005 Series drop-in support requires board revision 2.x) Up to 160C/320T
GPU	Max GPU Count: Up to 10 double-width or 10 single-width GPUs Supported GPU: NVIDIA PCIe: H100 NVL, H100, NVIDIA RTX PRO™ 6000 Blackwell Max-Q Workstation Edition, RTX 5000 Ada, RTX 4000 Ada Generation, L40, RTX A6000, RTX 6000 Ada Generation, L40S, L4, A100 AMD PCIe: Instinct™ MI210 CPU-GPU Interconnect: PCIe 5.0 x16 Switch Single-Root GPU-GPU Interconnect: NVIDIA® NVLink™ Bridge (optional), AMD Infinity Fabric™ Link (optional)
System Memory	Slot Count: 12 DIMM slots Max Memory (1DPC): Up to 3TB 4800MT/s ECC DDR5 RDIMM (AMD EPYC™ 9004 Series Processor) Max Memory (1DPC): Up to 3TB 6000MT/s ECC DDR5 RDIMM (AMD EPYC™ 9005 Series Processor)

Drive Bays Configuration	Default: Total 10 bays
	  • 8 front hot-swap 2.5" NVMe drive bays
	  • 2 front hot-swap 2.5" SATA drive bays

Expansion Slots	Default
	  • 11 PCIe 5.0 x16 (in x16) FHFL slots
	Option A
	  • 12 PCIe 5.0 x16 (in x16) FHFL slots

On-Board Devices	SATA: SATA (6Gbps) Chipset: AMD SP5 Network Connectivity: 2 RJ45 10GbE
Input / Output	LAN: 1 RJ45 1 GbE Dedicated BMC LAN port 2 RJ45 10 GBASE-T LAN ports USB: 2 ports(rear) Video: 1 VGA port Serial: 1 COM port(rear)

(Front View – System)

(Rear View – System)

Front Panel

Drive Bay	Description
20 — 21	Hot-swap 2.5" SATA (default)
0 — 15	Hot-swap 2.5" NVMe (default)
0 — 23	Hot-swap 2.5" SATA/SAS (requires optional storage controller)

Redundant 2000W Titanium Level Power Supplies*

2 RJ45, 1 Dedicated IPMI, and 2 USB ports

VGA Port

Serial Port

Redundant 2000W Titanium Level Power Supplies*

Slot	Description
1 - 6	PCIe 5.0 x16 (FHFL)
7	Not used
8 - 13	PCIe 5.0 x16 (FHFL)
14	PCIe 5.0 x16 AIOM (OCP 3.0 Compatible)

*Full redundancy based on configuration and application load.

System Cooling	Fans: Up to 8 heavy duty fans with optimal fan speed control
Power Supply	4x 2000W Redundant (3 + 1) Titanium Level (96%) power supplies
System BIOS	BIOS Type: AMI 32MB SPI Flash EEPROM
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
	   7 +1 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: 100 lbs (45.3 kg) Net Weight: 65.5 lbs (29.7 kg) Available Color: Black Front & Silver Body
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 H13DSG-O-CPU**
Chassis	**CSE-418G2TS**