![Supermicro | AMD logo]

GPU A+ Server AS -4124GO-NART

DP AMD System with NVIDIA HGX A100 8-GPU
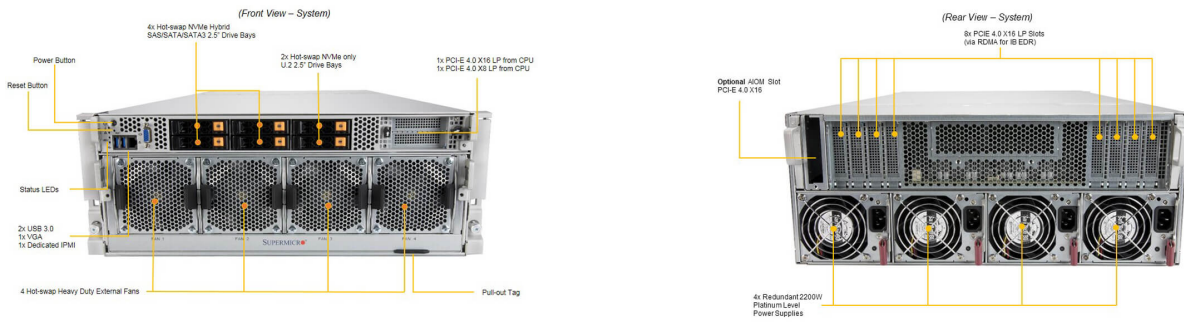
Key Applications

HPC, AI / Deep Learning,

Key Features

- Supports NVIDIA® HGX™ A100 8-GPU
  Highest GPU communication using NVIDIA® NVLINK™ v3.0 + NVIDIA® NVSwitch™
  NICs for GPUDirect RDMA (1:1 GPU Ratio)
  Supports HGX A100 8-GPU 40GB (HBM2) or 80GB (HBM2e);
- Dual AMD EPYC™ 7003/7002 Series Processors
  (The latest AMD EPYC™ 7003 Series Processor with AMD 3D V-Cache™ Technology requires BIOS version 2.3 or newer);
- 8TB Registered ECC DDR4 3200MHz SDRAM in 32 DIMMs;
- 8 PCIe 4.0 x16 via PCIe switch;
  1 PCIe 4.0 x 16 LP and 1 PCIe 4.0 x8 LP via CPUs; AIOM Support;
- 6 Hot-swap 2.5" NVMe drive bays
  (4 via PCIe switch, 2 via CPU)
  Up to 10 U.2 NVMe 2.5" drives available with an optional 4 drive bays at rear of system;

Form Factor	4U Rackmount Enclosure: 446 x 174 x 900mm (17.6" x 6.9" x 35.4") Package: 695 x 750 x 1140mm (27.4" x 29.5" x 44.9")
Processor	Dual Socket SP3 AMD EPYC™ 7002/7003 Series Processors
System Memory	Slot Count: 32 DIMM slots
Drive Bays Configuration	Default: Total 6 bays • 6 front hot-swap 2.5" NVMe drive bays Option A: Total 10 bays • 6 front hot-swap 2.5" NVMe drive bays • 4 rear hot-swap 2.5" NVMe* drive bays (*NVMe support may require additional storage controller and/or cables, please see the optional parts list for details)
Expansion Slots	Default • 1 PCIe 4.0 x16 LP slot • 1 PCIe 4.0 x8 LP slot • 8 PCIe 4.0 x16 via PCI-E switch slots
On-Board Devices	SATA: SATA (6Gbps) Chipset: System on Chip Network Connectivity: Ethernet IPMI: Support for Intelligent Platform Management Interface v.2.0 IPMI 2.0 with virtual media over LAN and KVM-over-LAN support
Input / Output	LAN: 1 RJ45 1 GbE Dedicated BMC LAN port USB: 2 USB 3.0 ports(front) Video: 1 VGA port(Front)

(Front View – System)

Power Button
Reset Button

4x Hot-swap NVMe Hybrid
SAS/SATA/SATA3 2.5" Drive Bays

2x Hot-swap NVMe only
U.2 2.5" Drive Bays

1x PCI-E 4.0 X16 LP from CPU
1x PCI-E 4.0 X8 LP from CPU

Status LEDs

2x USB 3.0
1x VGA
1x Dedicated IPMI

4 Hot-swap Heavy Duty External Fans

Pull-out Tag

(Rear View – System)

Optional AIOM Slot
PCI-E 4.0 X16

9x PCIE 4.0 X16 LP Slots
(via RDMA for IB EDR)

4x Redundant 2200W
Platinum Level
Power Supplies

System Cooling	Fans: 4 hot-swap 11.5K RPM heavy duty Fan(s)
Power Supply	4x 2200W Redundant (3 + 1) Platinum Level (94%) power supplies
System BIOS	BIOS Type: AMI 256MB SPI Flash ROM
Management	Supermicro Server Manager (SSM); Supermicro Power Manager (SPM); Supermicro Update Manager (SUM); Supermicro SuperDoctor® 5 (SD5); KVM with dedicated LAN ; IPMI 2.0; Watch Dog

PC Health Monitoring	CPU: Monitors for CPU Cores, Chipset Voltages, Memory
	    4+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: 225 lbs (102.1 kg) Net Weight: 166 lbs (75.3 kg) Available Color: Black Front & Silver Body
Operating Environment	RoHS Compliant Operating Temperature: 10°C ~ 35°C (50°F ~ 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 H12DGO-6**
Chassis	**CSE-438G**