MegaDC SuperServer ARS-210M-NR

2U UP MegaDC supporting up to 4 double-width GPUs + 4 hot-swap 2.5" NVMe drives
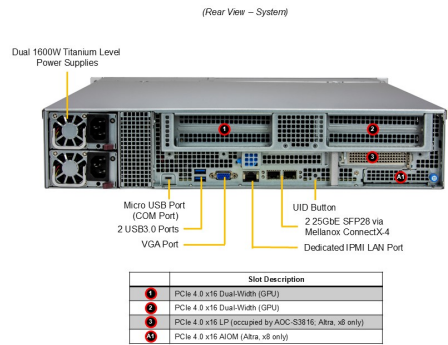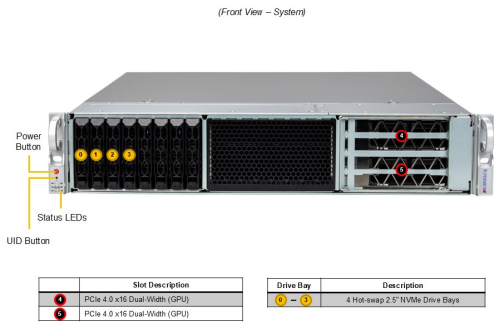
Key Applications

High Performance Computing, Immersive Media, Cloud Gaming / AICAN, AI Inference / Training, Dense-VDI, Video-on-Demand,

Key Features

- Single Socket Ampere® Altra® Processor (Up to 80 Cores; Up to 3.3Ghz) / Single Socket Ampere® Altra® Max Processor (Up to 128 Cores; Up to 3.0Ghz) ; Up to 250W TDP;
- 16 DIMMs; Up to 4TB ECC Registered DDR4-3200MHz RDIMM/LRDIMM;
- Supports up to 4 PCIe 4.0 x16 Double Wide GPU Cards (Up to 300W per GPU), 1 PCIe 4.0 x16 LP Slot, 1 AIOM Slot (OCP3.0 Mezzanine Compatible);
- 2x 25Gb LAN SFP28 Ports via Mellanox ConnectX®-4 Lx EN Controller;
- 4x 2.5" U.2 NVMe Hot-Swap Drive Bays (Options available for up to 16 or 24 Drive Bays via a Modular Bay Design);
- 2000W Redundant Titanium Level high-efficiency power supplies;
- 1 VGA, 1 (Serial) Micro USB Port, 2 USB3.0 (2 Rear);

Form Factor	2U Rackmount Enclosure: 437 x 88.9 x 648mm (17.2" x 3.5" x 25.5") Package: 674 x 279.4 x 863.6mm (26.5" x 11" x 34")
Processor	Single FCLGA-4926 Ampere® Altra® / Altra® Max processor
GPU	Max GPU Count: Up to 4 double-width GPUs Supported GPU: NVIDIA PCIe: H100, L40S, L4, A16, A100, A10
System Memory	Slot Count: 16 DIMM slots Max Memory (2DPC): Up to 4TB 3200MT/s ECC DDR4 RDIMM/LRDIMM

Drive Bays Configuration	Default: Total 4 bays
	  • 4 front hot-swap 2.5" NVMe drive bays
	Option A: Total 16 bays
	  • 16 front hot-swap 2.5" SAS*/SATA* drive bays
	(*SAS/SATA support may require additional storage controller and/or cables, please see the optional parts list for details)
	M.2: 1 M.2 NVMe slot (M-key 22110)

Expansion Slots	Default
	  • 4 PCIe 4.0 x16 FHFL slots
	  • 1 PCIe 4.0 x16 LP slot
	  • 1 PCIe 4.0 x16 AIOM slot (OCP 3.0 compatible)

On-Board Devices	Chipset: System on Chip Network Connectivity: 2 SFP28 25GbE 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: 2 SFP28 25 GbE LAN ports 1 RJ45 1 GBASE-T Dedicated BMC LAN port USB: 2 USB 3.0 ports(rear) Video: 1 VGA port Serial: 1 port

(Front View – System)

(Rear View – System)

Power
Button

Status LEDs

UID Button

Dual 1600W Titanium Level
Power Supplies

Micro USB Port
(COM Port)
2 USB3.0 Ports
VGA Port

UID Button
2 25GbE SFP28 via
Mellanox ConnectX-4
Dedicated IPMI LAN Port

Slot Description	
4	PCIe 4.0 x16 Dual-Width (GPU)
5	PCIe 4.0 x16 Dual-Width (GPU)

Drive Bay	Description
0 — 3	4 Hot-swap 2.5" NVMe Drive Bays

Slot Description	
1	PCIe 4.0 x16 Dual-Width (GPU)
2	PCIe 4.0 x16 Dual-Width (GPU)
3	PCIe 4.0 x16 LP (occupied by AOC-S3816, Altra, x8 only)
A1	PCIe 4.0 x16 AIOM (Altra, x8 only)

System Cooling	Fans: Up to 4 Heavy Duty 8cm Fan(s) Air Shroud: 1 Air Shroud
Power Supply	2x 2000W Redundant (1 + 1) Titanium Level (96%) power supplies
Management	KVM with dedicated LAN ; IPMI 2.0

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: 59 lbs (26.76 kg) Net Weight: 35.3 lbs (16 kg) Available Color: Black
Operating Environment	RoHS Compliant 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-operating Relative Humidity: 5% to 95% ()
Motherboard	**Super R12SPD-A**
Chassis	**CSE-LB26TS-R0AMBNDP**