

MegaDC SuperServer ARS-112M-NR

1U UP R14 MegaDC with 12 hot-swap 2.5" NVMe drives



Key Applications

Enterprise Server, Hyperscale Data Center, Cloud Service Providers, Front End Server, Infrastructure, Multi-Purpose CDN,

Key Features

- Single Ampere® AmpereOne M® Processor up to 425W with Air Cooling;
- Up to 12 DIMMs supporting up to 1.5TB DDR5-5600 Speed (12-Channel);
- Up to 4 PCIe 5.0 slots + 1 PCIe 5.0 AIOM (OCP3.0 TSFF) slots;
- Up to 1 double-wide FHFL GPU or optional for up to 2 single-wide FHFL GPUs;
- Up to 12 front hot-swap 2.5" NVMe drive bays;
- 2 Redundant 860W Titanium Level power supplies;



Form Factor	1U Rackmount Enclosure: 438.4 x 43.6 x 620mm (17.26" x 1.7" x 24.4") Package: 636 x 216 x 882mm (25" x 8.5" x 34.7")
Processor	Single FCLGA7228 AmpereOne® M processor 192C/192T; 64MB Cache
GPU	Max GPU Count: Up to 1 double-width or 2 single-width GPUs Supported GPU: NVIDIA PCIe: H200 NVL (141GB), L40S, NVIDIA RTX PRO™ 4500 Blackwell CPU-GPU Interconnect: PCIe Gen5 x16
System Memory	Slot Count: 12 DIMM slots/12 Channels Max Memory (1DPC): 1.5TB 5600MT/s ECC DDR5 RDIMM/LRDIMM
Drive Bays Configuration	Default: Total 12 bays • 12 front hot-swap 2.5" PCIe 5.0 x4 NVMe/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(default)/2280)
Expansion Slots	PCI-Express (PCIe) Configuration: Default • 1 PCIe 5.0 x16 FHFL double-width slot • 1 PCIe 5.0 x8 FHFL slot • 1 PCIe 5.0 x8 LP slot • 1 PCIe 5.0 x16 AIOM slot (OCP 3.0 compatible) Option A* • 1 PCIe 5.0 x16 FHFL slot M.2: 1 M.2 PCIe 4.0 x4 NVMe slot (M-key 22110(default)/2280)
On-Board Devices	NVMe: NVMe; (Native) Chipset: Ampere® Network Connectivity: 1 RJ45 10GbE with Intel® E610 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 1 RJ45 10 GbE LAN port (Intel® E610) USB: 2 USB 3.0 Type-A ports (Rear)

Video: 1 Mini-DP port (Rear)
Serial: 1 COM (Micro USB) port (Rear)
TPM: 1 TPM Onboard TPM & TPM Header

(Front View - System)
Configuration 1



	Description
	4 Hot-swap NVMe E1S Drive Bays

(Front View - System)
Configuration 3



Slot	Description
1	PCIe 5.0 x8 FHFL (optional for x16)
2	PCIe 5.0 x8 HHFL
3	PCIe 5.0 x16 FHFL double-width
4	PCIe 5.0 x16 FHFL (optional)
5	PCIe 5.0 x16 AIOM (OCF 3.0 TSFF)

System Cooling	Fans: Up to 6 Heavy Duty 4cm Fan(s) Air Shroud: 1 Air Shroud
Power Supply	2x 860W Redundant (1 + 1) Titanium Level (96%) Hot-plug power supplies
System BIOS	BIOS Type: AMI 128MB Flash ROM
Management	Redfish API; IPMI (Intelligent Platform Management Interface) v2.0 with KVM support; SuperServer Automation Assistant (SAA) New!; IPMICFG; SMCIPMITool
PC Health Monitoring	CPU: Monitors for CPU Cores, Chipset Voltages, Memory Fan: Fans with tachometer monitoring Pulse Width Modulated (PWM) fan connectors Status monitor for speed control Up to 6-fan status tachometer monitoring Temperature: Monitoring for CPU and chassis environment Thermal control for 6x Fan connectors
Dimensions and Weight	Weight: Gross Weight: 30 lbs (13.6 kg) Net Weight: 11 lbs (5 kg) Available Color: Silver
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-Condensing) Non-operating Relative Humidity: 5% to 95% (Non-Condensing)
Motherboard	Super R14SPD
Chassis	CSE-ML101TS-R000NDFP