



Supermicro ARM/Ampere Based Servers

Supermicro ARM-based servers are designed for a range of workloads requiring high-performance frequencies and low-latency responses. ARM-based servers are optimized for single sockets and single thread per core workloads, which results in consistent performance in many scenarios. In addition, the ARM line of servers has shown excellent performance per watt when running many real-world applications. The ARM line of servers using the AmpereOne® CPU is ideal for workloads such as cloud-native applications, such as database queries, cloud gaming, and telco and edge solutions.

	ARS-111M-NR	ARS-211M-NR	ARS-211ME-FNR
Front View			
Rear View			
Server Description	Enterprise Server	GPU Optimized	Telco Edge Optimized
Form Factor	1U Rackmount	2U Rackmount	2U Rackmount
Processor	Single AmpereOne® (Up to 192 Cores; Up to 3.0Ghz)		
Max Memory	16 DIMMs DDR5-4800 (8-channels, 2DPC), Up to 4TB		
Storage	10 hot-swap 2.5" U.2 NVMe	4 hot-swap 2.5" U.2 NVMe (Option for 16 or 24 NVMe)	6 hot-swap 2.5" U.2 NVMe
Network	BCM57414 2x 25Gb SFP28 with NC-SI		
Expansion (OCP 3.0 Mezzanine Compatible) 1 AIOM Slot	3 PCIe 5.0 x16 (LP) Slots, 1 AIOM Slot, 1 OCP NIC 3.0	Up to 4 PCIe 5.0 x16 Double-Wide GPU Cards (Up to 300W per GPU), 1 PCIe 5.0 x16 LP Slot, 1 OCP NIC 3.0	Up to 4 PCIe 5.0 x16 FHHL GPU Cards, 1 PCIe 5.0 x16 LP Slot, 1 OCP NIC 3.0
Applications	Enterprise Server, Hyperscale Data Center, Front-end Server Infrastructure	Dense-VDI, Video-On-Demand, High Performance Computing, Immersive Media, AI Inference /Training, Cloud Gaming / AICAN	Artificial Intelligence (AI) at the Edge, Telco Edge, Cloud Service Providers, Open RAN



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	ARS-110M-NR	ARS-210M-NR	ARS-520M-NRL	ARS-210ME-FNR
Front View				
Rear View				
Server Description	Enterprise Server	GPU Optimized	Database Optimized	Telco Edge Optimized
Form Factor	1U Rackmount	2U Rackmount	2U Rackmount	2U Rackmount
Processor	Single Ampere® Altra® (Up to 80 Cores; Up to 3.3Ghz) or Altra® Max (Up to 128 Cores; Up to 3.0Ghz)			
Max Memory	16 DIMMs; 4TB DDR4-3200 ECC registered			
Storage	10 hot-swap 2.5" U.2 NVMe	4 hot-swap 2.5" U.2 NVMe (Option for 16 or 24 NVMe)	12 hot-swap 3.5" drive bays and 4 hot-swap 2.5" U.2 NVMe	6 hot-swap 2.5" U.2 NVMe
Network	2x 10GbE SFP28 via Mellanox ConnectX®-4 Lx EN Controller (or 1x 25G SFP28 w/ redundancy)			
Expansion (OCP 3.0 Mezzanine Compatible) 1 AIOM Slot	3 PCIe 4.0 x16 (LP) Slots, 1 AIOM Slot, 1 OCP NIC 3.0	Up to 4 PCIe 4.0 x16 Double-Wide GPU Cards (Up to 300W per GPU), 1 PCIe 4.0 x16 LP Slot, 1 OCP NIC 3.0	3 PCIe 4.0 x16 (LP) Slots, 1 OCP NIC 3.0	Up to 4 PCIe 4.0 x16 FHHL GPU Cards, 1 PCIe 4.0 x16 LP Slot, 1 OCP NIC 3.0
Applications	Enterprise Server, Hyperscale Data Center, Front-end Server Infrastructure	Dense-VDI, Video-On-Demand, High Performance Computing, Immersive Media, AI Inference / Training, Cloud Gaming / AICAN	Object Storage, Database Processing, Hyperscale Data Center	Artificial Intelligence (AI) at the Edge, Telco Edge, Cloud Service Providers, Open RAN