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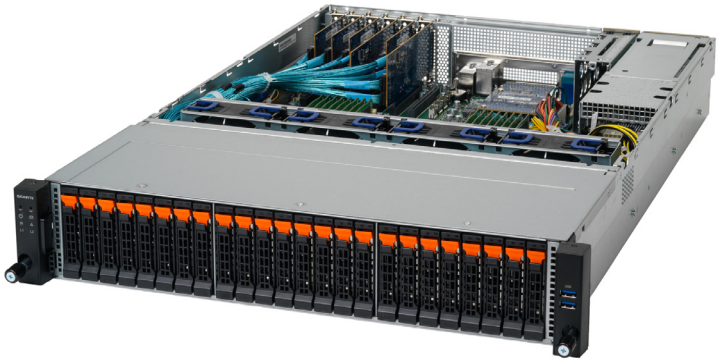

Mt. Snow Platform — Single Socket Rack Server

The Mt. Snow platform provides a balance of performance and power that can scale up with ease. Available in a single socket configuration with the Ampere® Altra™ processor, Mt. Snow provides 80 cores with predictable performance that is ideal for independent VMs and containers. Mt. Snow is well suited for a variety of workloads, including edge computing, telco application, web-tier, AIC, and storage.

Efficiency

Ampere Altra processor-based single socket rack server provides high performance with industry leading power efficiency per core.

The versatile platform offers 96 lanes of PCIe Gen4 for flexible I/O connectivity. Mt. Snow also supports CCIX interface to support applications including memory expansion and cache coherent acceleration.

Memory, Storage, and Networking

Mt. Snow supports 16 DDR4 3200 MHz DIMMS with a maximum memory capacity of 4 TB.

It also supports OCP NIC 3.0 adapters to capitalize on the mechanical, thermal, manageability, and security benefits.

In addition, Mt. Snow includes two internal M.2 NVMe storage interfaces for ultra-fast reads/writes and eliminates PCIe switch adapters.

Platform Management

Mt. Snow includes MegaRAC® BMC and Aptio® V BIOS support. Key features include dynamic fan control, temperature monitoring, and TPM 2.0 for security. The platform includes two redundant power supplies providing the reliability required for datacenters. BMC includes support for IPMI and Redfish protocols for remote management.

Visit https://www.amperecomputing.com/altra/ to learn more about Ampere's Mt. Snow platform.

Processor Subsystem

- 80 Arm v8.2+ 64-bit CPU cores up to 3.30 GHz with Sustained Turbo
- 64 KB L1 I-cache, 64 KB L1 D-cache per core
- 1 MB L2 cache per core
- 32 MB System Level Cache (SLC)
- 2x full-width (128b) SIMD
- Coherent mesh-based interconnect
  - Distributed snoop filtering

Memory

- 8x 72-bit DDR4-3200 channels
- ECC, Symbol-based ECC, and DDR4 RAS features
- Up to 16 DIMMs and 4 TB/socket

System Resources

- Full interrupt virtualization (GICv3)
- Full I/O virtualization (SMMUv3)
- Enterprise server-class RAS

Ordering Information

The Mt. Snow server Order Part Number is: AC-1GBXXA2Y1, where:

- XX: Server Manufacturing Level
  - 06: Level 6
  - 10: Level 10
- Y: Configuration
  - S: SATA
  - N: NVMe

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Specifications

Model	Mt. Snow
Form Factor	2U Rack Server
Number of Processors	1x Ampere Altra CPU, 80 Arm v8.2+ 64-bit CPU cores at 3.30 GHz with Sustained Turbo
Memory	• 8x 72-bit DDR4-3200 channels: up to 16 DIMMs per socket (2DPC) • Up to 4 TB of DRAM memory support
USB Interfaces	1 USB port on the front panel and 2 USB ports on the rear panel
I/O and Controls Layout	• Up to 8x PCIe Gen4 slots: – 1 x16 PCIe OCP – 3 x16 PCIe (capable of CCIX support @ 25 Gbps) – 3 x16 PCIe x8 in x16 slot – 1 x8 PCIe in x8 slot • One DB-9 COM port at rear • One D-Sub 15 pin VGA port at rear • One TPM Module connector • 2x on board M.2 NVMe SSDs • 1x RJ45 for 1 GbE Management NIC Front panel controls and buttons: • One PWR / One RST / One UID button / One NMI • 2x USB ports Rear panel controls and buttons: • One UID button • VGA connector • BMC UART connector • 3x USB ports • 2x RJ45 ports
Storage Drive Bays (NVMe SSDs)	• 2U Form Factor: 24x 2.5” hot-swap NVMe U.2 SSD slots on the front + 2x 2.5” hot-swap HDDs on the rear • 2x Onboard M.2 NVMe SSDs
OCP NIC	OCP 3.0 Mezzanine Card slot
Network Interfaces	• Onboard: Intel I350 • BMC: Realtek RTL8211E
Power Supply	Dual 2000 W 80 PLUS Platinum redundant power supply
Systems Management	• IPMI 2.0, Redfish, and WebUI • Serial-Over-LAN (SOL) • Remote KVM • Hardware health monitor
Installed Operating System	CentOS 8.0
Firmware Support	• UEFI: Aptio® V • BMC: MegaRAC®
BMC	ASPEED Technologies AST2500 Baseboard Management Controller
Dimensions	26” (Length) x 19” (Width) x 3.5” (Height)

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