ARM Server - 2U UP 4-GPU HPC Server

**Features**

- Supports up to 4 x PCIe Gen4 double slot GPU cards
- Single socket Ampere® Altra® Processor
- 8-Channel RDIMM/LRDIMM DDR4, 16 x DIMMs
- 2 x 1Gb/s LAN ports (Intel® I350-AM2)
- 1 x Dedicated management port
- 4 x 3.5" SATA/SAS hot-swappable HDD/SSD bays
- 2 x Ultra-Fast M.2 with PCIe Gen4 x4 interface
- 3 x PCIe Gen4 x8 low profile expansion slots in rear side
- Aspeed® AST2500 management controller
- 2 x 80 PLUS Platinum 1600W (240V) power supply

**Specification**

- **Dimensions**: 2U (W438 x H87.5 x D660 mm)
- **Motherboard**: MP32-AR2
- **CPU**: Ampere® Altra® Processor
  - Single processor, 7nm technology, LGA4926 socket
  - Up to 80-core per processor
- **Chipset**: System on Chip
- **Memory**: 8-Channel DDR4 memory, 16 x DIMM slots
  - RDIMM/LRDIMM modules up to 256GB supported
  - Up to 4TB of memory capacity supported per processor
  - Memory speed: Up to 3200 Mhz
- **LAN**: 2 x 1GbE LAN ports (1 x Intel® I350-AM2)
  - 1 x 10/100/1000 management LAN
- **Video**: Integrated in Aspeed® AST2500
  - 2D Video Graphic Adapter with PCIe bus interface
  - 1920x1200@60Hz 32bpp, DDR4 SDRAM
- **Storage**: 4 x 3.5" SATA/SAS hot-swappable HDD/SSD bay
  - 2.5" HDD/SSD supported
- **SAS**: Supported
- **RAID**: RAID 0/ 1/ 1E/ 10
- **Expansion Slots**: 4 x PCIe x16 slots (4.0 x16) for GPU cards
  - 2 x PCIe x16 slots (4.0 x8), Low-profile
  - 1 x PCIe x8 slot (4.0 x8), Low-profile
  - 2 x M.2 slots (4.0 x4)
- **Front I/O**: 1 x USB 3.0
- **Rear I/O**: 3 x USB 3.0, 1 x VGA, 1 x COM, 2 x RJ45, 1 x MLAN
- **Backplane I/O**: Backplane P/N: 9CBPG041NR-00
  - Speed and bandwidth: SAS 12Gb/s, SATA 6Gb/s
- **TPM**: 1 x TPM header with SPI interface
  - Optional TPM2.0 kit: CTM010
- **Power Supply**: Dual 1600W 80 PLUS Platinum power supply
  - AC Input: 100-240V
- **System Management**: Aspeed® AST2500 management controller
  - GIGABYTE Management Console (AMI MegaRAC SP-X)
- **OS Compatibility**:
  - CentOS 8.3-2011 (ARM64)
  - SLES 15 SP2 (ARM64)
  - Ubuntu 18.04.5-server / 20.04.1-legacy-server (ARM64)
  - FreeBSD 13.0 current (ARM64)
  - OracleLinux R8 U2 (ARM64)
  - Debian 10.9 (Buster) (ARM64)
- **System Fans**: 5 x 80x80x38mm (16,300rpm)
- **Operating Properties**: Operating temperature: 10°C to 35°C
  - Operating humidity: 8-80% (non-condensing)
  - Non-operating temperature: -40°C to 60°C
  - Non-operating humidity: 20%-95% (non-condensing)
- **Packaging Content**: 1 x G242-P31 system
  - 1 x CPU heatsink
  - 1 x Rail kit
- **Reference Numbers**: Barebone with rail kit: 6NG242P31MR-00
  - Motherboard: 9MP32AR2NR-00
  - Rail kit: 25HB2-3A0202-K0R
  - CPU heatsink: 25ST1-253420-C1R
  - PCIe type SAS RAID Card: 9CRA3338NR-00
  - Power supply: 25EP0-216088-L0S

Learn more about GIGABYTE server solutions, visit [www.gigabyte.com/Enterprise](http://www.gigabyte.com/Enterprise)

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