G242-P34
2U ARM Based HPC Server - NVIDIA ARM Devkit

**Features**

- Hardware-level root of trust support
- Up to 2 x NVIDIA® A100 PCIe Gen4 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 hot-swappable HDD/SSD bays
- 2 x Ultra-Fast M.2 with PCIe Gen4 x4 interface
- 2 x PCIe Gen4 x16 expansion slots for GPU cards (Internal)
- 3 x PCIe Gen4 x8 low profile expansion slots in rear side
- 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 Slot**: 2 x PCIe x16 (4.0 x16) for NVIDIA A100 GPU
  - 2 x PCIe x16 (4.0 x16) for NVIDIA Bluefield-2 DPU
  - 2 x PCIe x16 (4.0 x8), Low-profile
  - 2 x M.2 slots (4.0 x4), supports 2242/2260/2280/22110 cards
- **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**: 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**

- **Management**: Aspeed® AST2500 management controller
- **OS Compatibility**: GIGABYTE Management Console (AMI MegaRAC SP-X)
  - CentOS 8.3-2011 / 8.4-2105 / 8.5-2111 (ARM64)
  - FreeBsd 11.0-CURRENT (ARM64)
  - Debian 10 64-bit / 11 64-bit (ARM64)
  - Ubuntu 18.04.5 LTS / 20.04.1 LTS (ARM64)
  - OracleLinux R8 U2 / R8 U5 (ARM64)
  - RHEL 8.3 / 8.5 (ARM64)
  - SLES 15 SP2 / 15 SP3 (ARM64)
  - Ubuntu 18.04.5 LTS / 20.04.1 LTS (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-P34 system
- 1 x CPU heatsink
- 1 x Rail kit

**Reference Numbers**

- Barebone with rail kit: 6NG242P34MR-00
  - Motherboard: 9MP32AR2NR-00
  - Rail kit: 25HB2-3A0202-K0R
  - CPU heatsink: 25ST1-2534Z0-C1R
  - PCIe type SATA HBA Card: 1CST2180NR-00
- Power supply: 25EP0-216008-L0S

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

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