R143-EG0 (rev. AAC2)

Rack Server - AMD EPYC™ 8004 - 1U UP 1 x PCIe Gen5 GPU (NVMe/SATA/SAS)

AI # AI Inference # Visual Computing # Networking
Hybrid/Private Cloud Server

Supports 1 x Dual slot Gen5 GPU
Single AMD EPYC™ 8004 Series Processors
6-Channel RDIMM DDR5, 12 x DIMMs
Dual ROM Architecture
4 x 3.5"/2.5" Gen4 NVMe/SATA/SAS hot-swappable bays
1 x M.2 slot with PCIe Gen3 x4 interface
1 x FHFL PCIe Gen5 x16 slot for GPUs
1 x FHFL PCIe Gen5 x16 slot
1 x FHHL PCIe Gen5 x16 slot
1 x OCP 3.0 Gen5 x16 slot

Dimensions (WxHxD, mm)

1U
438 x 43.5 x 815

Motherboard

MEG3-GU0

CPU

AMD EPYC™ 8004 Series Processors
Single processor, 5nm technology
Up to 64 cores, 128 threads
cTDP up to 225W

Socket

1 x LGA 4844
Socket SP6

Chipset

System on Chip

Memory

12 x DIMM slots
DDR5 memory supported only
6-Channel memory architecture
RDIMM up to 96GB supported
Memory speed: Up to 4800 MT/s (1DPC), 3600 MT/s (2DPC)

LAN

Rear side:
1 x 10/100/1000 Mbps Management LAN

Video

Integrated in Aspeed® AST2600
2D Video Graphic Adapter with PCIe bus interface
1920x1200@60Hz 32bpp

Storage

Front side:
4 x 3.5"/2.5" Gen4 NVMe/SATA/**SAS*** hot-swappable bays

***SAS card is required to support SAS drives.**

SAS

Require SAS add-in cards

RAID

Require RAID add-in cards

Expansion Slots

PCIe Cable x 3:
- 1 x PCIe x16 (Gen5 x16) FHFL slot, for GPUs
- 1 x PCIe x16 (Gen5 x16) FHFL slot, **occupied when Dual slot GPU is installed**
- 1 x PCIe x16 (Gen5 x16) FHHL slot

1 x OCP 3.0 slot with PCIe Gen5 x16 bandwidth
Supports NCSI function

1 x M.2 slot:
- M-key
- PCIe Gen3 x4
- Supports 2280/22110 cards

Internal I/O

1 x TPM header

Front I/O

2 x USB 3.2 Gen1
1 x Power button with LED
1 x ID button with LED
1 x NMI button
1 x Reset button
2 x LAN activity LEDs (disabled)
1 x Storage activity LED
1 x System status LED

Rear I/O

2 x USB 3.2 Gen1
1 x Mini-DP
1 x MLAN
1 x ID button with LED

Backplane Board

Speed and bandwidth:
PCIe Gen4 x4 or SATA 6Gb/s or SAS 12Gb/s

TPM

1 x TPM header with SPI interface
- **Optional** TPM2.0 kit: CTM010

Power Supply

1+1 1300W 80 PLUS Platinum redundant power supplies

AC Input:
- 100-240V~/ 12-7A, 50-60Hz
- 200-240V~/ 8A, 50-60Hz

DC Input: (Only for China)
- 240Vdc/ 6.5A

DC Output:
- Max 1000W/ 100-240V~
+12V/ 80.5A
+12Vsb/ 3A
- Max 1300W/ 200-240V~ or 240Vdc Input
+12V/ 105.4A
+12Vsb/ 3A

System Management

Aspeed® AST2600 management controller
GIGABYTE Management Console (AMI MegaRAC SP-X) web interface

Dashboard
HTML5 KVM
Sensor Monitor (Voltage, RPM, Temperature, CPU Status ...etc.)
Sensor Reading History Data
FRU Information
SEL Log in Linear Storage / Circular Storage Policy
Hardware Inventory
Fan Profile
System Firewall
Power Consumption
Power Control
Advanced power capping
LDAP / AD / RADIUS Support
Backup & Restore Configuration
Remote BIOS/BMC/CPLD Update
Event Log Filter
User Management
Media Redirection Settings
PAM Order Settings
SSL Settings
SMTP Settings

OS Compatibility

Please refer to OS compatibility table in support page

System Fans

8 x 40x40x56mm (29,700rpm)

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 Dimensions

1038 x 588 x 238 mm

Packaging Content

1 x R143-EG0-AAC2
1 x CPU heatsink
1 x Mini-DP to D-Sub cable
1 x GPU power cable (12VHPWR to 12VHPWR, 450mm)
1 x 2-Section Rail kit

Part Numbers

- Barebone package: 6NR143EG0DR000AAC2*
- Motherboard: 9MEG3GU0UR-000
- 2-Section Rail kit (CMA not supported): 25HB2-3A0206-K0R
- CPU heatsink: 25ST1-44320G-A0R
- M.2 heatsink: 12SP2-11000E-00R
- Front board - CFP1010: 9CFP1010NR-00
- Backplane board - CBP1047: 9CBP1047NR-00
- Fan module: 25ST2-405623-A0R
- I/O board - CBG70: 9CBG70NR-00
- Mini-DP to D-Sub cable: 25CRN-200801-K1R
- GPU power cable (12VHPWR, 450mm): 25CRI-450101-Y4R
- Power supply: 25EP0-21300B-F3S

Optional parts:

- 3-Section Rail kit (Supports CMA): 25HB2-A56121-K0R
- Cable Management Arm: 25HB1-R18300-K0R