R123-C00-AA01

Rack Server - AMD EPYC™ 4004 / Ryzen™ 7000 - 1U UP 4-Bay SATA

Networking

- Single AMD EPYC™ 4004 / Ryzen™ 7000 Series Processors

- Dual Channel ECC/Non-ECC DDR5 UDIMM, 4 x DIMMs
- 2 x 1Gb/s LAN ports via Broadcom　BCM5720
- 4 x 3.5"/2.5" SATA hot-swappable bays
- 1 x M.2 slot with PCIe Gen4 x4 interface
- 1 x FHHL PCIe Gen5 x16 slot
- 2 x LP PCIe Gen4 x4 slots
- Single 400W 80 PLUS Gold power supply

AMD
EPYC | RYZEN

OVERVIEW   **SPECIFICATIONS**   SUPPORT   RESOURCES   **Where to Buy**

Dimensions (WxHxD, mm)

1U
430 x 43.5 x 536

Motherboard

MC03-CE0

CPU

AMD EPYC™ 4004 Series Processors
AMD Ryzen™ 7000 Series Processors
Single processor, 5nm technology
TDP up to 105W

Note: Overclocking not supported due to thermal limitation.

Socket

1 x AM5

Chipset

AMD B650E

Memory

4 x DIMM slots
DDR5 memory supported only
Dual Channel memory architecture
DIMM up to 32GB supported
ECC UDIMM 1Rx8/2Rx8 supported
Non-ECC UDIMM 1Rx8/2Rx8/1Rx16 supported
Memory speed: Up to 5200 MT/s (1DPC), 3600 MT/s (2DPC)

LAN

Rear side:
2 x 1Gb/s LAN ports (1 x Broadcom® BCM5720)
Support NCSI function

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" SATA hot-swappable bays

SATA supported only

SAS

N/A

RAID

RAID 0/1/10

Expansion Slots

Riser Card CRC1014:
- *1 x PCIe x16 (Gen5 x16) FHHL slot, from CPU

Riser Card CRC1021:
- 1 x PCIe x4 (Gen4 x4) low-profile slot, from CPU
- 1 x PCIe x4 (Gen4 x4) low-profile slot, from FCH

1 x M.2 slot:
- M-key
- PCIe Gen4 x4, from CPU
- Supports 2242/2280 cards

*Please select 500W power supply for 75W GPU support.

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
1 x Storage activity LED
1 x System status LED

Rear I/O

2 x USB 3.2 Gen1
1 x VGA
1 x COM
2 x RJ45
1 x MLAN
1 x ID button with LED

Backplane Board

Speed and bandwidth:
SATA 6Gb/s

TPM

1 x **TPM** header with SPI interface
- **Optional TPM**2.0 kit: CTM010

Power Supply

Single 400W 80 PLUS Gold power supply

AC Input:
- 100-240V~/ 6-3A, 50-60Hz

DC Output:
- Max 400W/ 100-240V~
+ 12V/ 33A
+ 5V/ 16A
+ 3.3V/ 14A
+ 5Vsb/ 3A

Optional 500W 80 PLUS Gold power supply

AC Input:
- 100-240V~/ 8-4A, 50-60Hz

DC Output:
- Max 500W/ 100-240V~
+ 12V/ 41A
+ 5V/ 16A
+ 3.3V/ 14A
+ 5Vsb/ 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

EPYC 4004 Series:
Ubuntu 22.04 (x64)
Ubuntu 24.04 (x64)
Windows Server 2022 (x64)

Ryzen 7000 Series:
Windows 10 21H2 (x64)
Windows 11 (x64)

System Fans

6 x 40x40x28mm (25,000rpm)

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)

Weight

Net Weight: 13.87 kg
Gross Weight: 15.87 kg

Packaging Dimensions

815 x 588 x 227 mm

Packaging Content

1 x R123-C00-AA01
1 x CPU heatsink
1 x 2-Section Rail kit

Part Numbers

- Barebone package (EPYC/Ryzen): 6NR123C00DR000AB01*
- Barebone package (Ryzen): 6NR123C00DR000AA01*
- Motherboard: 9MC03CE0NR-000
- 2-Section Rail kit: 25HB2-3A6101-K0R
- CPU heatsink: 25ST1-313101-M1R
- Front panel board - FP1010: 9CFP1010NR-00
- Backplane board - CBP1044: 9CBP1044NR-00
- Fan module: 25ST2-44282D-D0R
- Riser card - CRC1014: 9CRC1014NR-00
- Riser card - CRC1021: 9CRC1021NR-00
- Power supply (400W): 25EP0-2400W3-F3S

Optional parts:

- Power supply (500W): 25EP0-20500D-F3S