

R162-ZA2 (rev. A00)

AMD EPYC™ 7003 Server System - 1U 12-Bay | Application: Networking

- Hardware-level root of trust support
- AMD EPYC™ 7003 series processor family
- Single processor, 7nm technology
- 8-Channel RDIMM/LRDIMM DDR4, 16 x DIMMs
- 2 x 1Gb/s LAN ports (Intel® I350-AM2)
- 1 x Dedicated management port
- 12 x 2.5" Gen4 NVMe hot-swappable bays
- 1 x M.2 slot with PCIe Gen4 x4 interface
- 2 x M.2 slots with PCIe Gen3 x4 interface
- 2 x FHHL PCIe Gen4 x16 and x8 slots
- 1 x Internal FHHL PCIe Gen4 x16 slot
- 1 x OCP 3.0 Gen4 x16 mezzanine slot
- 1 x OCP 2.0 Gen3 x8 mezzanine slot
- Dual 800W 80 PLUS Platinum redundant power supply



OVERVIEW SPECIFICATIONS SUPPORT RESOURCES BUY

Dimensions (WxHxD, mm)

1U
438 x 43.5 x 780

Motherboard

MZA2-CE0 Rev. 3.0

CPU

AMD EPYC™ 7003 series processor family
Single processor, 7nm technology
Up to 64-core, 128 threads per processor
cTDP up to 240W

NOTE:

Select 1300W power supply to support cTDP 280W CPU
(PN: 25EP0-213004-F3S or 25EP0-213006-F3S)

Compatible with AMD EPYC™ 7002 series processor family

Socket

1 x LGA 4094
Socket SP3

Chipset

System on Chip

Memory

16 x DIMM slots
DDR4 memory supported only
8-Channel memory architecture
RDIMM modules up to 128GB supported
LRDIMM modules up to 128GB supported
3DS RDIMM/LRDIMM modules up to 256GB supported
Memory speed: Up to 3200*/2933 MHz

*Follow BIOS setting and memory QVL list if running 3200 Mhz with 2DPC

LAN

Rear side:

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

Storage

Front side:

12 x 2.5" Gen4 NVMe hot-swappable bays

SAS

N/A

RAID

N/A

Expansion Slots

Riser Card CRS1221 x 2:

- 1 x PCIe x16 (Gen4 x16) FHHL slot
- 1 x PCIe x16 (Gen4 x8 or x16) FHHL slot, shared with OCP 2.0

Internal Riser Card CRS101H:

- 1 x PCIe x16 (Gen4 x16) FHHL slot, occupied by CNV3134, 4 x U.2 HBA

1 x OCP 3.0 mezzanine slot with PCIe Gen4 x16 bandwidth

1 x OCP 2.0 mezzanine slot with PCIe Gen3 x0 or x8 bandwidth, shared with CRS1221

1 x M.2 slot:

- M-key
- PCIe Gen4 x4
- Supports NGFF-2280/22110 cards

2 x M.2 slots (CMTPO63):

- M-key
- PCIe Gen3 x4
- Supports NGFF-2280/22110 cards

Internal I/O

- 3 x M.2 slots
- 1 x USB 3.0 header
- 1 x COM header
- 1 x TPM header
- 1 x OCP 3.0 mezzanine slot
- 1 x OCP 2.0 mezzanine slot
- 1 x Front panel header
- 1 x Backplane board header
- 1 x PMBus connector
- 1 x IPMB connector
- 1 x Clear CMOS jumper
- 1 x BIOS recovery jumper

Front I/O

- 1 x USB 3.0
- 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 HDD activity LED
- 1 x System status LED

Rear I/O

- 2 x USB 3.0
- 1 x VGA
- 2 x RJ45
- 1 x MLAN
- 1 x ID button with LED

Backplane I/O

Speed and bandwidth:
PCIe Gen4 x4

TPM

- 1 x TPM header with SPI interface
- Optional TPM2.0 kit: [CTM010](#)

Power Supply

Dual 800W 80 PLUS Platinum redundant power supply

AC Input:
- 100-240V~/10-4A, 50-60Hz

DC Input:
- 240Vdc/ 4.5A

DC Output:

- Max 800W
+ 12V/ 66A
+ 12Vsb/ 2.5A

System Management

Aspeed® AST2500 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
LDAP / AD / RADIUS Support
Backup & Restore Configuration
Remote BIOS/BMC/CPUD Update
Event Log Filter
User Management
Media Redirection Settings
PAM Order Settings
SSL Settings
SMTP Settings

OS Compatibility

Windows Server 2016 (x2APIC/256T not supported)
Windows Server 2019
Windows Server 2022

[Red Hat Enterprise Linux 8.3 \(x64\) or later](#)
[Red Hat Enterprise Linux 9.0 \(x64\) or later](#)

[SUSE Linux Enterprise Server 12 SP5 \(x64\) or later](#)
[SUSE Linux Enterprise Server 15 SP2 \(x64\) or later](#)

[Ubuntu 18.04.5 LTS \(x64\) or later](#)
[Ubuntu 20.04 LTS \(x64\) or later](#)
[Ubuntu 22.04 LTS \(x64\) or later](#)

[VMware ESXi 6.7 Update3 P03 or later](#)
[VMware ESXi 7.0 Update1 or later](#)
[VMware ESXi 8.0 or later](#)

[Citrix Hypervisor 8.2.0 or later](#)

System Fans

4 x 40x40x56mm (29,700rpm)
4 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)