

E152-ZE1 (rev. A00)

Edge Server – 1U short depth AMD EPYC™ 7003 series server system

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- Supports 1 x Dual slot or 2 x Single slot GPU cards
- AMD EPYC™ 7003 series processors
- Single processor, 7nm technology
- 8-Channel RDIMM/LRDIMM DDR4 per processor, 8 x DIMMs
- 2 x 1Gb/s LAN ports (Intel I350-AM2)
- 1 x Dedicated management port
- 2 x 2.5" Gen4 NVMe/SATA hot-swappable bays
- 2 x M.2 slots with PCIe Gen4 x4 interface
- 2 x FHFL PCIe Gen4 x16 slots for GPUs
- 1 x LP PCIe Gen4 x16 slot
- 1 x OCP 3.0 Gen4 x16 slot



OVERVIEW SPECIFICATIONS SUPPORT RESOURCES Where to Buy

Dimensions (WxHxD, mm)

1U
438 x 43.5 x 400

Motherboard

MZE2-G10

CPU

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

Compatible with AMD EPYC™ 7002 series processors

Socket

1 x LGA 4094
Socket SP3

Chipset

System on Chip

Memory

8 x DIMM slots
DDR4 memory supported only
8-Channel memory per processor 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

LAN

Front side:

2 x 1Gb/s LAN ports (Intel® I350-AM2)
Supports NCSI function

1 x 10/100/1000 management LAN

Video

Integrated in Aspeed® AST2600
2D Video Graphic Adapter with PCIe bus interface
1920x1200@60Hz 32bpp, DDR4 SDRAM

Storage

Front side:

2 x 2.5" Gen4 NVMe/SATA hot-swappable bays

[Supports 7mm drives only](#)

SAS

N/A

RAID

N/A

Expansion Slots

1 x PCIe x16 (Gen4 x16) FHFL slot, for GPUs
1 x PCIe x16 (Gen4 x16) FHFL slot, for GPUs, **occupied when Dual slot GPU is inserted**
1 x PCIe x16 (Gen4 x16) low-profile slot

1 x OCP 3.0 slot with PCIe Gen4 x16 bandwidth
Supports NCSI function

2 x M.2 slots (CMTP182):
- M-key
- PCIe Gen4 x4
- Supports 2280/22110 cards

Internal I/O

2 x M.2 slots
1 x TPM header
1 x USB 3.0 connector
1 x Front Panel connector
1 x HDD BPB connector
1 x OCP 3.0 slot

Front I/O

2 x USB 3.0
1 x Mini-DP
2 x RJ45
1 x MLAN
1 x Power button with LED
1 x ID button with LED
1 x System status LED

Rear I/O

N/A

Backplane Board

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

TPM

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

Power Supply

1+1 1000W 80 PLUS Platinum redundant power supplies

AC Input:
- 100-127V~/15A, 50-60Hz
- 200-240V~/8A, 50-60Hz

DC Output:
- Max 1000W
+ 12V/ 83.3A
+ 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

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

1 x 40x40x28mm (25,000rpm)
5 x 40x40x56mm (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: 7.7 kg
Gross Weight: 11.72 kg

Packaging Dimensions

628 x 549 x 200 mm

Packaging Content

1 x E152-ZE1
1 x CPU heatsink

*Rail kit not included. Please refer to optional parts for compatible rail kit.

Part Numbers

- Barebone package: 6NE152ZE1MR-00-A*
- Motherboard: 9MZE2G10NR-00
- CPU heatsink: 25ST1-453211-A3R
- Backplane board - CBPH022: 9CBPH022NR-00
- Fan module (40x40x28mm): 25ST2-442827-DOR
- Fan module (40x40x56mm): 25ST2-44562M-DOR
- Fan module (40x40x56mm): 25ST2-44562N-DOR
- M.2 riser card - CMTP182: 9CMTP182NR-00
- Riser card - CRSE020: 9CRSE020NR-00
- Riser card - CRSH01H: 9CRSH01HNR-00
- NVMe card - CNV3152: 9CNV3152NR-00
- Power supply: 25EP0-210000-D05

Optional parts:

- 2-Section Rail kit (385-480mm): 25HB2-3A0204-KOR
- 2-Section Rail kit (660-840mm): 25HB2-3A0203-KOR

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* Advertised performance is based on maximum theoretical interface values from respective Chipset vendors or organization who defined the interface specification. Actual performance may vary by system configuration.

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* Due to standard PC architecture, a certain amount of memory is reserved for system usage and therefore the actual memory size is less than the stated amount.