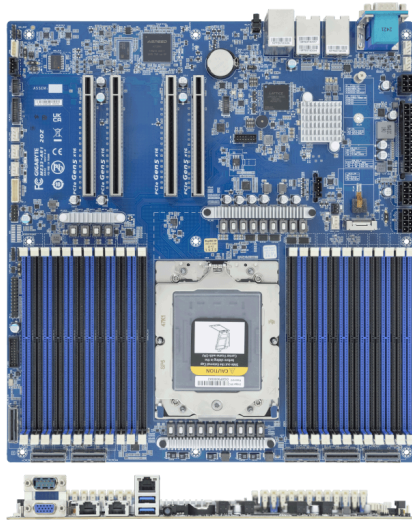


MZ33-AR1 (Rev. 3.x)

Motherboard - AMD EPYC™ 9005/9004 Server Processors - E-ATX, UP

AMD
EPYC

Windows
Server
2025
Certified



Key Features

- Single AMD EPYC™ 9005/9004 Server processors
- 12-Channel DDR5 RDIMM per CPU with 24 x DIMMs
- 2 x 10 Gb/s LAN ports via Broadcom® BCM57416
- 2 x MCIO 8i connectors supporting PCIe Gen5 x8 or SATA
- 3 x MCIO 8i connectors supporting PCIe Gen5 x8
- 1 x MCIO 8i connector supporting PCIe Gen4 x8
- 1 x M.2 slot with PCIe Gen4 x4
- 4 x PCIe x16 slots with Gen5 x16 lanes

Specification

Form Factor	E-ATX (W304.8 x D330.2 mm)	Internal I/O	1 x 24-pin ATX main power connector 2 x 8-pin ATX 12V power connectors 1 x 6-pin ATX 12V power connector 1 x CPU fan header / 5 x System fan headers 1 x USB 3.2 Gen1 x2 header / 1 x USB 2.0 header 1 x M.2 slot / 6 x MCIO 8i connectors 1 x Front panel header / 1 x Backplane board header 1 x PMBus connector / 1 x IPMB connector 1 x TPM header
CPU	AMD EPYC™ 9005 Server processors AMD EPYC™ 9004 Server processors Single processor, cTDP up to 500 W	Rear I/O	2 x USB 3.2 Gen1 ports (Type-A) 1 x VGA port 1 x Serial port 2 x RJ45 ports 1 x MLAN port 1 x ID button with LED
Socket	1 x LGA 6096 (Socket SP5)	Security Modules	1 x TPM header (SPI), Optional TPM 2.0 kit: CTM012
Chipset	System on Chip	Board Management	ASPEED® AST2600 Baseboard Management Controller GIGABYTE Management Console web interface
Memory	12-Channel DDR5 RDIMM, 24 x DIMMs [EPYC 9005] Up to 5200 MT/s (1DPC) Up to 4400 MT/s (1R 2DPC), 4000 MT/s (2R 2DPC) [EPYC 9004] Up to 4800 MT/s (1DPC), 3600 MT/s (2DPC)	PSU Connectors	1 x 24-pin ATX main power connector 2 x 8-pin ATX 12V power connectors 1 x 6-pin ATX 12V power connector
OS Compatibility	OS Support List	Operating Properties	Operating: 10°C to 40°C, 8% to 80% (non-condensing) Non-operating: -40°C to 60°C, 20% to 95% (non-condensing)
LAN	2 x 10 Gb/s LAN (1 x Broadcom® BCM57416), Support NCSI 1 x 10/100/1000 Mb/s Management LAN	Retail Packaging Content	1 x MZ33-AR1 1 x I/O shield 1 x Quick start guide 1 x MCIO 8i to 8 x SATA cable (600 mm) Quantity: 10 x single boxes in one carton
Video	Integrated in ASPEED® AST2600 - 1 x VGA port	Bulk Packaging Content	10 x MZ33-AR1 10 x I/O shields
Storage Interface	MCIO: 2 x MCIO 8i for 4 x Gen5 NVMe or 16 x SATA 3 x MCIO 8i for 6 x Gen5 NVMe 1 x MCIO 8i for 2 x Gen4 NVMe M.2: 1 x M.2 (2280/22110), PCIe Gen4 x4	Ordering Part Numbers	Retail: 9MZ33AR1MR-000-3* Bulk: 9MZ33AR1NR-000-3*
PCIe Expansion Slots	Slot_7: PCIe x16 (Gen5 x16) Slot_6: PCIe x16 (Gen5 x16) Slot_4: PCIe x16 (Gen5 x16) Slot_3: PCIe x16 (Gen5 x16) 2 x MCIO 8i (Gen5 x8 or SATA) 3 x MCIO 8i (Gen5 x8) 1 x MCIO 8i (Gen4 x8)	Optional Parts	- MCIO 8i to 2 x MCIO 4i cable (550 mm): 25CF9-550700-A4R



Learn more at: <https://www.gigabyte.com/Enterprise>

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