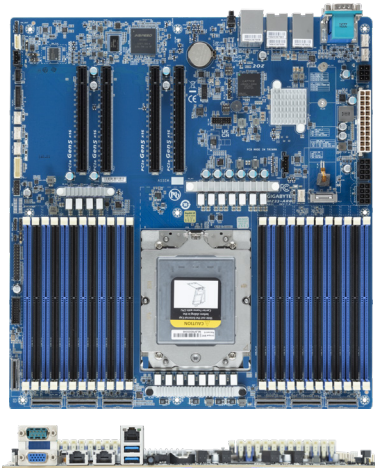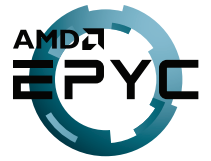# GIGABYTE™

MZ33-AR0

AMD EPYC 9004 UP Server Motherboard

AMD EPYC

Features

- AMD EPYC™ 9004 series processor family
- Single processor, 5nm technology
- 12-Channel RDIMM DDR5, 24 x DIMMs
- 2 x 10Gb/s BASE-T LAN ports (Broadcom® BCM57416)
- 1 x Dedicated management port
- 7 x MCIO 8i with NVMe Gen5/Gen4 and SATA ports
- Max. 16 x SATA 6Gb/s devices supported
- Ultra-Fast M.2 with PCIe Gen4 x4 interface
- 4 x PCIe Gen5 x16 expansion slots

Specification

Form Factor	E-ATX (305W x 330D mm)	**Rear I/O**	2 x USB 3.2 Gen1, 1 x VGA, 1 x COM, 2 x RJ45, 1 x MLAN
CPU	AMD EPYC™ 9004 series processor family Single processor, 5nm technology, cTDP up to 400W Up to 96-core, 192 threads per processor 1 x LGA 6096, Socket SP5	**Internal I/O**	7 x MCIO 8i connectors, 1 x TPM header, 1 x CPU fan header, 5 x System fan headers, 1 x USB 3.2 Gen1 header, 1 x Front panel header, 1 x HDD back plane board header, 1 x PMBus connector, 1 x IPMB connector, 1 x Clear CMOS jumper, 1 x BIOS recovery jumper, 1 x Buzzer
Chipset	System on Chip		
Memory	12-Channel DDR5 memory, 24 x DIMM slots RDIMM modules up to 128GB supported 3DS RDIMM modules up to 256GB supported Memory speed: Up to 4800 MHz	**OS Compatibility**	Windows Server 2019 / 2022 RHEL 8.6 / 8.7 / 9 / 9.1 (x64) SLES 15 SP4 Ubuntu 20.04.5 LTS / 22.04 LTS / 22.04.1 LTS (x64) VMware ESXi 7.0 Update 3i / 8.0 Citrix Hypervisor 8.2.1
LAN	2 x 10Gb/s BASE-T LAN ports (1 x Broadcom® BCM57416) NCSI function supported 1 x 10/100/1000 management LAN		
		Board Management	Aspeed® AST2600 management controller GIGABYTE Management Console (AMI MegaRAC SP-X)
Video	Integrated in Aspeed® AST2600 2D Video Graphic Adapter with PCIe bus interface 1920x1200@60Hz 32bpp, DDR4 SDRAM	**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
SATA	2 x MCIO 8i with 16 x SATA ports	**Operating Properties**	Operating temperature: 10°C to 40°C Operating humidity: 8-80% (non-condensing) Non-operating temperature: -40°C to 60°C Non-operating humidity: 20%-95% (non-condensing)
Expansion Slots	4 x PCIe x16 (Gen5 x16) slots 1 x M.2 slot: - M-key, PCIe Gen4 x4, supports NGFF-2280/22110 cards Total 7 x MCIO 8i connectors ports: - 1 x MCIO 8i for 2 x NVMe @PCIe Gen5 - 1 x MCIO 8i for 2 x NVMe @PCIe Gen5 or 8 x SATA 6Gb/s - 1 x MCIO 8i for 2 x NVMe @PCIe Gen4 or 8 x SATA 6Gb/s - 4 x MCIO 8i for 8 x NVMe @PCIe Gen4		
		Retail Packaging Content	1 x MZ33-AR0, 1 x I/O shield, 1 x Quick start guide, 1 x MCIO 8i to 8 x SATA 6Gb/s cable Single Box dimensions: 409 x 355 x 78 mm
		Bulk Packaging Content	10 x MZ33-AR0, 10 x I/O shields Carton dimensions: 600 x 473 x 517 mm
TPM	1 x TPM header with SPI interface Optional TPM2.0 kit: CTM010	**Reference Numbers**	Retail: 9MZ33AR0MR-000 Bulk: 9MZ33AR0NR-000

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