

# MA34-CP0 (Rev. 1.x)

Motherboard - Intel® Xeon® 6900-Series Processors - E-ATX UP



## Key Features

- Single Intel® Xeon® 6900-Series Processors
- 12-Channel DDR5 RDIMM/MRDIMM per CPU with 12 x DIMMs
- 2 x 1 Gb/s LAN ports via Intel® I210-AT
- 2 x MCIO 8i connectors supporting PCIe Gen5 x8
- 3 x SlimSAS 4i connectors supporting SATA
- 2 x M.2 slots with PCIe Gen5 x2
- 4 x PCIe x16 slots with Gen5 x16 and x8 lanes
- 1 x OCP NIC 3.0 PCIe Gen5 x16 slot

## Specification

|                             |  |                                 |   |
|-----------------------------|--|---------------------------------|---|
| <b>Form Factor</b>          | E-ATX (W304.8 x D335.2 mm)   | <b>Internal I/O</b>             | 1 x 24-pin ATX main power connector<br>3 x 8-pin ATX 12V power connectors<br>1 x 4-pin 12V standby power connector<br>1 x CPU fan header / 6 x System fan headers<br>1 x USB 3.2 Gen1 x2 header / 1 x USB 2.0 header for BMC<br>2 x M.2 slots / 2 x MCIO 8i connectors<br>3 x SlimSAS 4i connectors / 1 x VROC connector<br>1 x NCSI connector / 1 x Front panel header<br>1 x Backplane board header / 1 x COM header<br>1 x PMBus header / 1 x IPMB header<br>1 x TPM header / 1 x PROT connector (only enabled on RoT SKU) |
| <b>CPU</b>                  | Intel® Xeon® 6 Processors<br>- Intel® Xeon® 6900-Series Processors<br>Single processor, TDP up to 500 W  | <b>Rear I/O</b>                 | 2 x USB 3.2 Gen1 ports (Type-A)<br>1 x Mini-DP<br>2 x RJ45 ports<br>1 x MLAN port<br>1 x ID button with LED   |
| <b>Socket</b>               | 1 x LGA 7529 (Socket BR)   | <b>Security Modules</b>         | 1 x TPM header (SPI), Optional TPM 2.0 kit: CTM012<br>1 x PROT connector (only enabled on RoT SKU)  |
| <b>Chipset</b>              | System on Chip   | <b>Board Management</b>         | ASPEED® AST2600 Baseboard Management Controller<br>GIGABYTE Management Console web interface  |
| <b>Memory</b>               | 12-Channel DDR5 RDIMM/MRDIMM, 12 x DIMMs<br>[RDIMM] Up to 6400 MT/s<br>[MRDIMM] Up to 8800 MT/s [1]<br><br>[1] MRDIMMs are supported only on select Intel® Xeon® 6 processors with P-cores.  | <b>PSU Connectors</b>           | 1 x 24-pin ATX main power connector<br>3 x 8-pin ATX 12V power connectors<br>1 x 4-pin 12V standby power connector  |
| <b>OS Compatibility</b>     | <a href="#">OS Support List</a>  | <b>Operating Properties</b>     | Operating: 10°C to 40°C, 8% to 80% (non-condensing)<br>Non-operating: -40°C to 60°C, 20% to 95% (non-condensing)  |
| <b>LAN</b>                  | 2 x 1 Gb/s LAN (2 x Intel® I210-AT), Support NCSI<br>1 x 10/100/1000 Mb/s Management LAN   | <b>Retail Packaging Content</b> | 1 x MA34-CP0<br>1 x I/O shield<br>1 x Quick start guide<br>1 x Carrier<br>1 x SlimSAS 4i to 4 x SATA cable (600mm)<br><br>Quantity: 10 x single boxes in one carton   |
| <b>Video</b>                | Integrated in ASPEED® AST2600<br>- 1 x Mini-DP   | <b>Bulk Packaging Content</b>   | 10 x MA34-CP0<br>10 x I/O shields<br>30 x Carriers  |
| <b>Audio</b>                | N/A  | <b>Ordering Part Numbers</b>    | Retail: 9MA34CP0MR-000-1*<br>Bulk: 9MA34CP0NR-000-1*  |
| <b>Storage Interface</b>    | <b>MCIO:</b><br>2 x MCIO 8i for 4 x Gen5 NVMe<br><b>SlimSAS:</b><br>3 x SlimSAS 4i for 12 x SATA<br><b>M.2:</b><br>2 x M.2 (2280/22110), PCIe Gen5 x2  |                                 |   |
| <b>RAID</b>                 | Onboard VROC key header  |                                 |   |
| <b>PCIe Expansion Slots</b> | Slot_6: PCIe x16 (Gen5 x16)<br>Slot_4: PCIe x16 (Gen5 x16)<br>Slot_2: PCIe x16 (Gen5 x16 or x8), <b>shared with Slot_1</b><br>Slot_1: PCIe x16 (Gen5 x0 or x8), <b>shared with Slot_2</b><br><br>1 x OCP NIC 3.0 (Gen5 x16), Support NCSI<br><br>2 x MCIO 8i (Gen5 x8) |                                 |   |



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

\* All specifications are subject to change without notice. Please visit our website for the latest information.

\* All trademarks and logos are the properties of their respective holders.

© 2026 Giga Computing Technology Co., Ltd. All rights reserved.

Last updated: May 28, 2026

Designed by

