

# GIGABYTE™

## Arm-based Server Solutions

Servers / Motherboards / Barebone Servers / Accessories



2025 1H

arm

  
AMPERE®

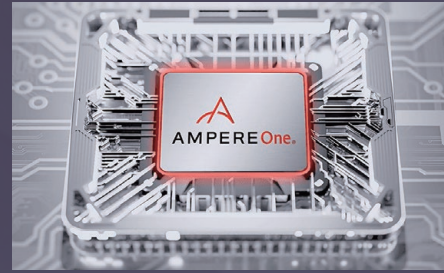
# Cloud Native Server Processors



## Ampere® Altra® Family

The most efficient product family for modern compute environments from the edge to the cloud.

- 32 to 128 Cores
- 1MB Private L2 Cache per Core
- 8 channel DDR4
- 128 lanes PCIe Gen4
- 40 to 180W Usage Power

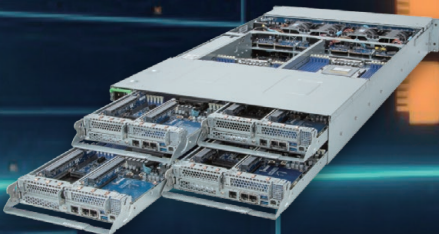


## AmpereOne® Family

For compute environments requiring the highest level of consistent and predictable performance at scale.

- 96 to 192 Cores
- 2MB Private L2 Cache per Core
- 8 channel DDR5
- 128 lanes PCIe Gen5
- 200 to 400W Usage Power

### High-density Server (P. 3)



Combining four hot-swappable nodes in a 2U chassis, offering extreme CPU compute density excellent for HPC, HCI, and edge computing

### GPU Server (P. 4)



Offering industry leading GPU density due to excellent thermal and mechanical design, and built for HPC, AI, and high-performance parallel processing

### Storage Server



Designed to accommodate an incredible volume of hard drives and to be compatible with modern storage software

### Rack Server (P. 6)



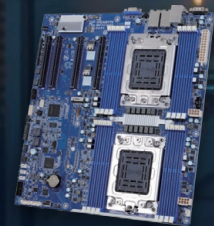
1U and 2U general-purpose systems, offering the best balance of compute, memory, storage, and expandability

### Edge Server (P. 12)



1U and 2U short depth servers, moving data collection away from data centers and improving latency

### Motherboard (P. 13)



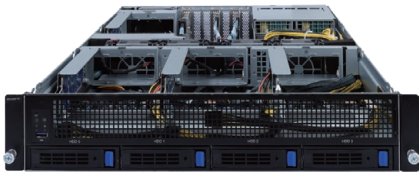
Single and dual socket options supporting NVMe drives and PCIe 4.0 and/or 5.0 lanes

# High Density Server



Model	H262-P60	H262-P61
<b>Motherboard</b>	MP62-HD0	MP62-HD0
<b>Form Factor</b>	2U 4-node rear access server (W440 x H87.5 x D840 mm)	2U 4-node rear access server (W440 x H87.5 x D840 mm)
<b>CPU</b>	Ampere® Altra® Family Dual socket per node (LGA 4926) TDP up to 190W	Ampere® Altra® Family Dual socket per node (LGA 4926) TDP up to 250W
<b>Chipset</b>	System on Chip	System on Chip
<b>Memory</b>	64 x DDR4 DIMMs 8-Channel RDIMM/LRDIMM Up to 3200 MT/s	64 x DDR4 DIMMs 8-Channel RDIMM/LRDIMM Up to 3200 MT/s
<b>LAN</b>	8 x 1Gb/s LAN 4 x MLAN 1 x CMC	8 x 1Gb/s LAN 4 x MLAN 1 x CMC
<b>Storage</b>	Front hot-swap: 24 x 2.5" SATA  Internal M.2: 4 x M.2 (PCIe 4.0 x4)	Front hot-swap: 8 x 2.5" SATA  Internal M.2: 4 x M.2 (PCIe 4.0 x4)
<b>Expansion Slots</b>	8 x PCIe 4.0 x16 LP 4 x OCP 3.0 Gen4 x8 or x16* *Gen4 x16 available for Ampere Altra Max only	8 x PCIe 4.0 x16 LP 4 x OCP 3.0 Gen4 x8 or x16* *Gen4 x16 available for Ampere Altra Max only
<b>I/O Ports</b>	Front: N/A Rear: 8 x USB 3.2 Gen1 4 x Mini-DP 8 x RJ45 4 x MLAN 1 x CMC	Front: N/A Rear: 8 x USB 3.2 Gen1 4 x Mini-DP 8 x RJ45 4 x MLAN 1 x CMC
<b>Security</b>	Hardware-level Root of Trust (RoT) Optional TPM 2.0 module: CTM010	Hardware-level Root of Trust (RoT) Optional TPM 2.0 module: CTM010
<b>Power Supply</b>	Dual 2200W redundant PSUs 80 PLUS Platinum/Titanium	Dual 2200W redundant PSUs 80 PLUS Platinum/Titanium
<b>System Management</b>	ASPEED® AST2600 BMC ASPEED® AST2520 CMC GIGABYTE Management Console	ASPEED® AST2600 BMC ASPEED® AST2520 CMC GIGABYTE Management Console
<b>Other Features</b>	Ring topology management (optional)	Ring topology management (optional)

# GPU Server



Model	G242-P33	G242-P34
<b>Motherboard</b>	MP32-AR2	MP32-AR2
<b>Form Factor</b>	2U GPU server (W438 x H87.5 x D820 mm)	2U GPU server (W438 x H87.5 x D820 mm)
<b>CPU</b>	Ampere® Altra® Family Single socket (LGA 4926) TDP up to 250W	Ampere® Altra® Family Single socket (LGA 4926) TDP up to 250W
<b>Chipset</b>	System on Chip	System on Chip
<b>Memory</b>	16 x DDR4 DIMMs 8-Channel RDIMM/LRDIMM Up to 3200 MT/s	16 x DDR4 DIMMs 8-Channel RDIMM/LRDIMM Up to 3200 MT/s
<b>LAN</b>	2 x 1Gb/s LAN 1 x MLAN	2 x 1Gb/s LAN 1 x MLAN
<b>Storage</b>	Front hot-swap: 4 x 3.5"/2.5" SATA  Internal M.2: 2 x M.2 (PCIe 4.0 x4)	Front hot-swap: 4 x 3.5"/2.5" SATA  Internal M.2: 2 x M.2 (PCIe 4.0 x4)
<b>Expansion Slots</b>	4 x PCIe 4.0 x16 FHFL for GPUs 3 x PCIe 4.0 x8 LP	2 x PCIe 4.0 x16 FHFL for GPUs 2 x PCIe 4.0 x16 LP for DPUs 3 x PCIe 4.0 x8 LP
<b>I/O Ports</b>	Front: 1 x USB 3.2 Gen1 Rear: 3 x USB 3.2 Gen1 1 x VGA 1 x Debug port 2 x RJ45 1 x MLAN	Front: 1 x USB 3.2 Gen1 Rear: 3 x USB 3.2 Gen1 1 x VGA 1 x Debug port 2 x RJ45 1 x MLAN
<b>Security</b>	Hardware-level Root of Trust (RoT) Optional TPM 2.0 module: CTM010	Hardware-level Root of Trust (RoT) Optional TPM 2.0 module: CTM010
<b>Power Supply</b>	Dual 1600W redundant PSUs 80 PLUS Platinum/Titanium	1+1 1600W redundant PSUs 80 PLUS Platinum/Titanium
<b>System Management</b>	ASPEED® AST2500 BMC GIGABYTE Management Console	ASPEED® AST2500 BMC GIGABYTE Management Console
<b>Other Features</b>	Up to 4 x NVIDIA H100 PCIe GPUs NVIDIA-Certified Systems™	Up to 2 x NVIDIA H100 PCIe GPUs Up to 2 x NVIDIA BlueField-2 DPUs

# GPU Server



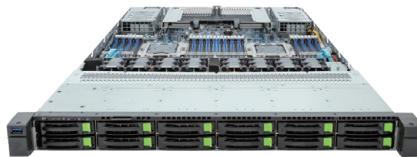
Model	G242-P35	G242-P36
<b>Motherboard</b>	MP32-AR2	MP32-AR2
<b>Form Factor</b>	2U GPU server (W438 x H87.5 x D820 mm)	2U GPU server (W438 x H87.5 x D820 mm)
<b>CPU</b>	Ampere® Altra® Family Single socket (LGA 4926) TDP up to 250W	Ampere® Altra® Family Single socket (LGA 4926) TDP up to 250W
<b>Chipset</b>	System on Chip	System on Chip
<b>Memory</b>	16 x DDR4 DIMMs 8-Channel RDIMM/LRDIMM Up to 3200 MT/s	16 x DDR4 DIMMs 8-Channel RDIMM/LRDIMM Up to 3200 MT/s
<b>LAN</b>	2 x 1Gb/s LAN 1 x MLAN	2 x 1Gb/s LAN 1 x MLAN
<b>Storage</b>	Front hot-swap: 4 x 3.5"/2.5" Gen4 NVMe  Internal M.2: 2 x M.2 (PCIe 4.0 x4)	Front hot-swap: 4 x 3.5"/2.5" Gen4 NVMe  Internal M.2: 2 x M.2 (PCIe 4.0 x4)
<b>Expansion Slots</b>	4 x PCIe 4.0 x16 FHFL for GPUs 2 x PCIe 4.0 x8 LP	2 x PCIe 4.0 x16 FHFL for GPUs 2 x PCIe 4.0 x16 LP for DPUs 2 x PCIe 4.0 x8 LP
<b>I/O Ports</b>	Front: 1 x USB 3.2 Gen1 Rear: 3 x USB 3.2 Gen1 1 x VGA 1 x Debug port 2 x RJ45 1 x MLAN	Front: 1 x USB 3.2 Gen1 Rear: 3 x USB 3.2 Gen1 1 x VGA 1 x Debug port 2 x RJ45 1 x MLAN
<b>Security</b>	Hardware-level Root of Trust (RoT) Optional TPM 2.0 module: CTM010	Hardware-level Root of Trust (RoT) Optional TPM 2.0 module: CTM010
<b>Power Supply</b>	Dual 1600W redundant PSUs 80 PLUS Platinum/Titanium	1+1 1600W redundant PSUs 80 PLUS Platinum/Titanium
<b>System Management</b>	ASPEED® AST2500 BMC GIGABYTE Management Console	ASPEED® AST2500 BMC GIGABYTE Management Console
<b>Other Features</b>	Up to 4 x NVIDIA H100 PCIe GPUs	Up to 2 x NVIDIA H100 PCIe GPUs Up to 2 x NVIDIA BlueField-2 DPUs

# Rack Server



Model	R283-P90-AAJ1	R283-P92-AAF1/AAL1	R263-P30-AAH1
<b>Motherboard</b>	MP93-F50	MP93-F50	MP33-DC0
<b>Form Factor</b>	2U Rack server (W438 x H87.5 x D815 mm)	2U Rack server (W438 x H87.5 x D815 mm)	2U Rack server (W438 x H87.5 x D710 mm)
<b>CPU</b>	AmpereOne® Family Dual socket (LGA 5964) TDP up to 400W	AmpereOne® Family Dual socket (LGA 5964) TDP up to 400W	AmpereOne® Family Single socket (LGA 5964) TDP up to 400W
<b>Chipset</b>	System on Chip	System on Chip	System on Chip
<b>Memory</b>	32 x DDR5 DIMMs 8-Channel RDIMM Up to 5200 MT/s, 4400 MT/s (2R 2DPC)	32 x DDR5 DIMMs 8-Channel RDIMM Up to 5200 MT/s, 4400 MT/s (2R 2DPC)	16 x DDR5 DIMMs 8-Channel RDIMM Up to 5200 MT/s, 4400 MT/s (2R 2DPC)
<b>LAN</b>	2 x 1Gb/s LAN 1 x MLAN	2 x 1Gb/s LAN 1 x MLAN	1 x 1Gb/s LAN 1 x MLAN
<b>Storage</b>	Front hot-swap: 12 x 3.5"/2.5" Gen5 NVMe/SATA/SAS4 *SAS card is required to support SAS drives.  Internal M.2: 1 x M.2 (PCIe 5.0 x4)	Front hot-swap: 12 x 2.5" Gen5 NVMe/SATA/SAS4 12 x 2.5" Gen5 NVMe *SAS card is required to support SAS drives.  Internal M.2: 1 x M.2 (PCIe 5.0 x4)	Front hot-swap: 4 x 3.5"/2.5" Gen5 NVMe/SATA/SAS4 8 x 3.5"/2.5" SATA/SAS4 *SAS card is required to support SAS drives.  Internal M.2: 1 x M.2 (PCIe 5.0 x4)
<b>Expansion Slots</b>	5 x PCIe 5.0 x16 FHHL 1 x PCIe 5.0 x8 LP 2 x OCP 3.0 Gen5 x16	3 x PCIe 5.0 x16 FHHL 1 x PCIe 5.0 x8 FHHL 1 x OCP 3.0 Gen5 x16	3 x PCIe 5.0 x16 FHHL 1 x PCIe 5.0 x8 FHHL 2 x OCP 3.0 Gen5 x16
<b>I/O Ports</b>	Front: 2 x USB 3.2 Gen1 Rear: 2 x USB 3.2 Gen1 1 x Mini-DP 2 x RJ45 1 x MLAN	Front: 2 x USB 3.2 Gen1 Rear: 2 x USB 3.2 Gen1 1 x Mini-DP 2 x RJ45 1 x MLAN	Front: 2 x USB 3.2 Gen1 Rear: 2 x USB 3.2 Gen1 1 x Mini-DP 1 x RJ45 1 x MLAN
<b>Security</b>	Optional TPM 2.0 module: CTM010	Optional TPM 2.0 module: CTM010	Optional TPM 2.0 module: CTM010
<b>Power Supply</b>	Dual 2000W redundant PSUs 80 PLUS Platinum	Dual redundant PSUs [AAF1] 2400W 80 PLUS Platinum [AAL1] 2700W 80 PLUS Titanium	Dual 1300W redundant PSUs 80 PLUS Titanium
<b>System Management</b>	ASPEED® AST2600 BMC GIGABYTE Management Console	ASPEED® AST2600 BMC GIGABYTE Management Console	ASPEED® AST2600 BMC GIGABYTE Management Console
<b>Other Features</b>	Dual ROM architecture	Dual ROM architecture	Dual ROM architecture

# Rack Server



Model	R183-P90-AAJ1	R183-P92-AAJ1	R163-P30-AAG1
<b>Motherboard</b>	MP93-F50	MP93-F50	MP33-DC0
<b>Form Factor</b>	1U Rack server (W438 x H43.5 x D815 mm)	1U Rack server (W438 x H43.5 x D815 mm)	1U Rack server (W438 x H43.5 x D710 mm)
<b>CPU</b>	AmpereOne® Family Dual socket (LGA 5964) TDP up to 400W	AmpereOne® Family Dual socket (LGA 5964) TDP up to 400W	AmpereOne® Family Single socket (LGA 5964) TDP up to 400W
<b>Chipset</b>	System on Chip	System on Chip	System on Chip
<b>Memory</b>	32 x DDR5 DIMMs 8-Channel RDIMM Up to 5200 MT/s, 4400 MT/s (2R 2DPC)	32 x DDR5 DIMMs 8-Channel RDIMM Up to 5200 MT/s, 4400 MT/s (2R 2DPC)	16 x DDR5 DIMMs 8-Channel RDIMM Up to 5200 MT/s, 4400 MT/s (2R 2DPC)
<b>LAN</b>	2 x 1Gb/s LAN 1 x MLAN	2 x 1Gb/s LAN 1 x MLAN	1 x 1Gb/s LAN 1 x MLAN
<b>Storage</b>	Front hot-swap: 4 x 3.5"/2.5" Gen5 NVMe/SATA/SAS4 *SAS card is required to support SAS drives.  Internal M.2: 1 x M.2 (PCIe 5.0 x4)	Front hot-swap: 12 x 2.5" Gen5 NVMe/SATA/SAS4 *SAS card is required to support SAS drives.  Internal M.2: 1 x M.2 (PCIe 5.0 x4)	Front hot-swap: 4 x 3.5"/2.5" Gen5 NVMe/SATA/SAS4 *SAS card is required to support SAS drives.  Internal M.2: 1 x M.2 (PCIe 5.0 x4)
<b>Expansion Slots</b>	2 x PCIe 5.0 x16 FHHL 2 x OCP 3.0 Gen5 x16	2 x PCIe 5.0 x16 FHHL 2 x OCP 3.0 Gen5 x16	2 x PCIe 5.0 x16 FHHL 2 x OCP 3.0 Gen5 x16
<b>I/O Ports</b>	Front: 2 x USB 3.2 Gen1 Rear: 2 x USB 3.2 Gen1 1 x Mini-DP 2 x RJ45 1 x MLAN	Front: 1 x USB 3.2 Gen1 Rear: 2 x USB 3.2 Gen1 1 x Mini-DP 2 x RJ45 1 x MLAN	Front: 2 x USB 3.2 Gen1 Rear: 2 x USB 3.2 Gen1 1 x Mini-DP 1 x RJ45 1 x MLAN
<b>Security</b>	Optional TPM 2.0 module: CTM010	Optional TPM 2.0 module: CTM010	Optional TPM 2.0 module: CTM010
<b>Power Supply</b>	Dual 2000W redundant PSUs 80 PLUS Titanium	Dual 2000W redundant PSUs 80 PLUS Titanium	Dual 800W redundant PSUs 80 PLUS Titanium
<b>System Management</b>	ASPEED® AST2600 BMC GIGABYTE Management Console	ASPEED® AST2600 BMC GIGABYTE Management Console	ASPEED® AST2600 BMC GIGABYTE Management Console
<b>Other Features</b>	Dual ROM architecture	Dual ROM architecture	Dual ROM architecture

# Rack Server



Model	R163-P32-AAH1	R163-P32-AAG1	R182-P91
<b>Motherboard</b>	MP33-DC0	MP33-DC0	MP92-F50
<b>Form Factor</b>	1U Rack server (W438 x H43.5 x D710 mm)	1U Rack server (W438 x H43.5 x D710 mm)	1U Rack server (W438 x H43.5 x D815 mm)
<b>CPU</b>	AmpereOne® Family Single socket (LGA 5964) TDP up to 400W	AmpereOne® Family Single socket (LGA 5964) TDP up to 400W	Ampere® Altra® Max Dual socket (LGA 4926) TDP up to 250W
<b>Chipset</b>	System on Chip	System on Chip	System on Chip
<b>Memory</b>	16 x DDR5 DIMMs 8-Channel RDIMM Up to 5200 MT/s	16 x DDR5 DIMMs 8-Channel RDIMM Up to 5200 MT/s	32 x DDR4 DIMMs 8-Channel RDIMM/LRDIMM Up to 3200 MT/s
<b>LAN</b>	1 x 1Gb/s LAN 1 x MLAN	1 x 1Gb/s LAN 1 x MLAN	2 x 1Gb/s LAN 1 x MLAN
<b>Storage</b>	Front hot-swap: 12 x 2.5" Gen5 NVMe/SATA/SAS4 <small>*SAS card is required to support SAS drives.</small>  Internal M.2: 1 x M.2 (PCIe 5.0 x4)	Front hot-swap: 12 x 2.5" SATA/SAS4 <small>*SAS card is required to support SAS drives.</small>  Internal M.2: 1 x M.2 (PCIe 5.0 x4)	Front hot-swap: 6 x 2.5" Gen4 NVMe/SATA 6 x 2.5" Gen4 NVMe  Internal M.2: 1 x M.2 (PCIe 4.0 x4)
<b>Expansion Slots</b>	2 x PCIe 5.0 x16 FHHL 1 x OCP 3.0 Gen5 x16	2 x PCIe 5.0 x16 FHHL 2 x OCP 3.0 Gen5 x16	2 x PCIe 4.0 x16 FHHL 2 x OCP 3.0 Gen4 x16
<b>I/O Ports</b>	Front: 1 x USB 3.2 Gen1 Rear: 2 x USB 3.2 Gen1 1 x Mini-DP 1 x RJ45 1 x MLAN	Front: 1 x USB 3.2 Gen1 Rear: 2 x USB 3.2 Gen1 1 x Mini-DP 1 x RJ45 1 x MLAN	Front: 1 x USB 3.2 Gen1 Rear: 2 x USB 3.2 Gen1 1 x Mini-DP 2 x RJ45 1 x MLAN
<b>Security</b>	Optional TPM 2.0 module: CTM010	Optional TPM 2.0 module: CTM010	Optional TPM 2.0 module: CTM010
<b>Power Supply</b>	Dual 800W redundant PSUs 80 PLUS Titanium	Dual 800W redundant PSUs 80 PLUS Titanium	Dual 1300W redundant PSUs 80 PLUS Platinum/Titanium
<b>System Management</b>	ASPEED® AST2600 BMC GIGABYTE Management Console	ASPEED® AST2600 BMC GIGABYTE Management Console	ASPEED® AST2600 BMC GIGABYTE Management Console
<b>Other Features</b>	Dual ROM architecture	Dual ROM architecture	Dual ROM architecture



# Rack Server



Model	R282-P91	R282-P92	R272-P30
<b>Motherboard</b>	MP92-F50	MP92-F50	MP32-AR1
<b>Form Factor</b>	2U Rack server (W438 x H87 x D815 mm)	2U Rack server (W438 x H87 x D815 mm)	2U Rack server (W438 x H87.5 x D660 mm)
<b>CPU</b>	Ampere® Altra® Max Dual socket (LGA 4926) TDP up to 250W	Ampere® Altra® Max Dual socket (LGA 4926) TDP up to 250W	Ampere® Altra® Family Single socket (LGA 4926) TDP up to 250W
<b>Chipset</b>	System on Chip	System on Chip	System on Chip
<b>Memory</b>	32 x DDR4 DIMMs 8-Channel RDIMM/LRDIMM Up to 3200 MT/s	32 x DDR4 DIMMs 8-Channel RDIMM/LRDIMM Up to 3200 MT/s	16 x DDR4 DIMMs 8-Channel RDIMM/LRDIMM Up to 3200 MT/s
<b>LAN</b>	2 x 1Gb/s LAN 1 x MLAN	2 x 1Gb/s LAN 1 x MLAN	2 x 1Gb/s LAN 1 x MLAN
<b>Storage</b>	Front hot-swap: 24 x 2.5" Gen4 NVMe Rear hot-swap: 4 x 2.5" SATA Internal M.2: 1 x M.2 (PCIe 4.0 x4)	Front hot-swap: 6 x 3.5"/2.5" Gen4 NVMe 6 x 3.5"/2.5" SATA Internal M.2: 1 x M.2 (PCIe 4.0 x4)	Front hot-swap: 8 x 2.5" SATA/SAS Internal M.2: 2 x M.2 (PCIe 4.0 x4)
<b>Expansion Slots</b>	4 x PCIe 4.0 x16 FHHL	2 x PCIe 4.0 x16 FHFL for GPUs 2 x PCIe 4.0 x16 FHHL 4 x PCIe 4.0 x8 LP 2 x OCP 3.0 Gen4 x16	2 x PCIe 4.0 x16 LP 4 x PCIe 4.0 x8 LP
<b>I/O Ports</b>	Front: 2 x USB 3.2 Gen1 Rear: 2 x USB 3.2 Gen1 1 x Mini-DP 2 x RJ45 1 x MLAN	Front: 2 x USB 3.2 Gen1 Rear: 2 x USB 3.2 Gen1 1 x Mini-DP 2 x RJ45 1 x MLAN	Front: 2 x USB 3.2 Gen1 Rear: 3 x USB 3.2 Gen1 1 x Debug port 1 x VGA 2 x RJ45 1 x MLAN
<b>Security</b>	Optional TPM 2.0 module: CTM010	Optional TPM 2.0 module: CTM010	Hardware-level Root of Trust (RoT) Optional TPM 2.0 module: CTM010
<b>Power Supply</b>	Dual 1600W redundant PSUs 80 PLUS Platinum/Titanium	Dual 2000W redundant PSUs 80 PLUS Platinum/Titanium	Dual 800W redundant PSUs 80 PLUS Platinum/Titanium
<b>System Management</b>	ASPEED® AST2600 BMC GIGABYTE Management Console	ASPEED® AST2600 BMC GIGABYTE Management Console	ASPEED® AST2500 BMC GIGABYTE Management Console
<b>Other Features</b>	Dual ROM architecture	Dual ROM architecture Supports 2 x dual-slot GPU cards	N/A

# Rack Server



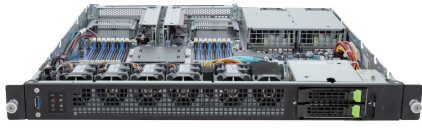
Model	R272-P31	R272-P32	R272-P33
<b>Motherboard</b>	MP32-AR1	MP32-AR1	MP32-AR1
<b>Form Factor</b>	2U Rack server (W438 x H87.5 x D660 mm)	2U Rack server (W438 x H87.5 x D660 mm)	2U Rack server (W438 x H87.5 x D660 mm)
<b>CPU</b>	Ampere® Altra® Family Single socket (LGA 4926) TDP up to 250W	Ampere® Altra® Family Single socket (LGA 4926) TDP up to 250W	Ampere® Altra® Family Single socket (LGA 4926) TDP up to 250W
<b>Chipset</b>	System on Chip	System on Chip	System on Chip
<b>Memory</b>	16 x DDR4 DIMMs 8-Channel RDIMM/LRDIMM Up to 3200 MT/s	16 x DDR4 DIMMs 8-Channel RDIMM/LRDIMM Up to 3200 MT/s	16 x DDR4 DIMMs 8-Channel RDIMM/LRDIMM Up to 3200 MT/s
<b>LAN</b>	2 x 1Gb/s LAN 1 x MLAN	2 x 1Gb/s LAN 1 x MLAN	2 x 1Gb/s LAN 1 x MLAN
<b>Storage</b>	Front hot-swap: 8 x 2.5" SATA  Internal M.2: 2 x M.2 (PCIe 4.0 x4)	Front hot-swap: 8 x 2.5" SATA 4 x 2.5" Gen3 NVMe  Internal M.2: 2 x M.2 (PCIe 4.0 x4)	Front hot-swap: 8 x 2.5" Gen3 NVMe  Internal M.2: 2 x M.2 (PCIe 4.0 x4)
<b>Expansion Slots</b>	2 x PCIe 4.0 x16 LP 4 x PCIe 4.0 x8 LP	2 x PCIe 4.0 x16 LP 2 x PCIe 4.0 x8 LP	2 x PCIe 4.0 x16 LP 2 x PCIe 4.0 x8 LP 1 x OCP 3.0 Gen4 x16
<b>I/O Ports</b>	Front: 2 x USB 3.2 Gen1 Rear: 3 x USB 3.2 Gen1 1 x Debug port 1 x VGA 2 x RJ45 1 x MLAN	Front: 2 x USB 3.2 Gen1 Rear: 3 x USB 3.2 Gen1 1 x Debug port 1 x VGA 2 x RJ45 1 x MLAN	Front: 2 x USB 3.2 Gen1 Rear: 3 x USB 3.2 Gen1 1 x Debug port 1 x VGA 2 x RJ45 1 x MLAN
<b>Security</b>	Hardware-level Root of Trust (RoT) Optional TPM 2.0 module: CTM010	Hardware-level Root of Trust (RoT) Optional TPM 2.0 module: CTM010	Hardware-level Root of Trust (RoT) Optional TPM 2.0 module: CTM010
<b>Power Supply</b>	1+1 800W redundant PSUs 80 PLUS Platinum/Titanium	1+1 800W redundant PSUs 80 PLUS Platinum/Titanium	1+1 1300W redundant PSUs 80 PLUS Platinum/Titanium
<b>System Management</b>	ASPEED® AST2500 BMC GIGABYTE Management Console	ASPEED® AST2500 BMC GIGABYTE Management Console	ASPEED® AST2500 BMC GIGABYTE Management Console
<b>Other Features</b>	N/A	N/A	N/A

# Rack Server



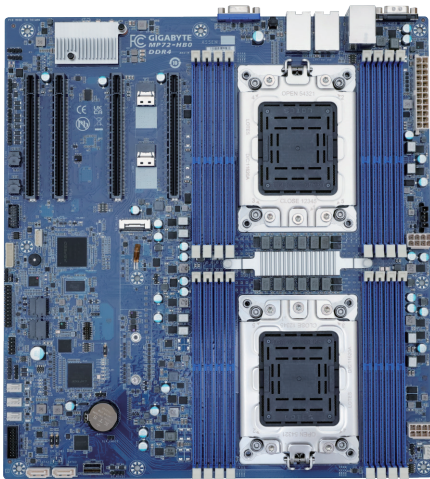
Model	R152-P30/P31	R152-P32	R152-P33
<b>Motherboard</b>	MP32-AR1	MP32-AR1	MP32-AR2
<b>Form Factor</b>	1U Rack server (W438 x H43.5 x D660 mm)	1U Rack server (W438 x H43.5 x D660 mm)	1U Rack server (W438 x H43.5 x D660 mm)
<b>CPU</b>	Ampere® Altra® Family Single socket (LGA 4926) TDP up to 250W	Ampere® Altra® Family Single socket (LGA 4926) TDP up to 250W	Ampere® Altra® Family Single socket (LGA 4926) TDP up to 250W
<b>Chipset</b>	System on Chip	System on Chip	System on Chip
<b>Memory</b>	16 x DDR4 DIMMs 8-Channel RDIMM/LRDIMM Up to 3200 MT/s	16 x DDR4 DIMMs 8-Channel RDIMM/LRDIMM Up to 3200 MT/s	16 x DDR4 DIMMs 8-Channel RDIMM/LRDIMM Up to 3200 MT/s
<b>LAN</b>	2 x 1Gb/s LAN 1 x MLAN	2 x 1Gb/s LAN 1 x MLAN	2 x 1Gb/s LAN 1 x MLAN
<b>Storage</b>	Front hot-swap: [P30] 6 x 2.5" SATA/SAS + 4 x Gen3 NVMe [P31] 6 x 2.5" SATA + 4 x Gen3 NVMe  Internal M.2: 2 x M.2 (PCIe 4.0 x4)	Front hot-swap: 2 x 2.5" SATA 8 x 2.5" Gen3 NVMe  Internal M.2: 2 x M.2 (PCIe 4.0 x4)	Front hot-swap: 8 x 2.5" Gen4 NVMe  Internal M.2: 2 x M.2 (PCIe 4.0 x4)
<b>Expansion Slots</b>	1 x PCIe 4.0 x16 FHHL	-	1 x PCIe 4.0 x16 FHHL
<b>I/O Ports</b>	Front: 1 x USB 3.2 Gen1 Rear: 3 x USB 3.2 Gen1 1 x Debug port 1 x VGA 2 x RJ45 1 x MLAN	Front: 1 x USB 3.2 Gen1 Rear: 3 x USB 3.2 Gen1 1 x Debug port 1 x VGA 2 x RJ45 1 x MLAN	Front: 1 x USB 3.2 Gen1 Rear: 3 x USB 3.2 Gen1 1 x Debug port 1 x VGA 2 x RJ45 1 x MLAN
<b>Security</b>	Hardware-level Root of Trust (RoT) Optional TPM 2.0 module: CTM010	Hardware-level Root of Trust (RoT) Optional TPM 2.0 module: CTM010	Hardware-level Root of Trust (RoT) Optional TPM 2.0 module: CTM010
<b>Power Supply</b>	Dual 650W redundant PSUs 80 PLUS Platinum	Dual 1100W redundant PSUs 80 PLUS Platinum	Dual 1100W redundant PSUs 80 PLUS Platinum
<b>System Management</b>	ASPEED® AST2500 BMC GIGABYTE Management Console	ASPEED® AST2500 BMC GIGABYTE Management Console	ASPEED® AST2500 BMC GIGABYTE Management Console
<b>Other Features</b>	N/A	N/A	N/A

# Edge Server



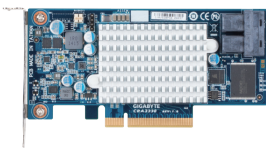
Model	E163-P30-AAG1	E252-P30	E252-P31
<b>Motherboard</b>	MP33-DC0	MP32-AR1	MP32-AR1
<b>Form Factor</b>	1U Edge server (W438 x H43.5 x D520 mm)	2U Edge server (W439 x H86 x D449 mm)	2U Edge server (W439 x H86 x D449 mm)
<b>CPU</b>	AmpereOne® Family Single socket (LGA 5964) TDP up to 400W	Ampere® Altra® Family Single socket (LGA 4926) TDP up to 250W	Ampere® Altra® Family Single socket (LGA 4926) TDP up to 250W
<b>Chipset</b>	System on Chip	System on Chip	System on Chip
<b>Memory</b>	16 x DDR5 DIMM slots 8-Channel RDIMM Up to 5200 MT/s	16 x DDR4 DIMM slots 8-Channel RDIMM/LRDIMM Up to 3200 MT/s	16 x DDR4 DIMM slots 8-Channel RDIMM/LRDIMM Up to 3200 MT/s
<b>LAN</b>	1 x 1Gb/s LAN 1 x MLAN	2 x 1Gb/s LAN 1 x MLAN	2 x 1Gb/s LAN 1 x MLAN
<b>Storage</b>	Front hot-swap: 2 x 2.5" Gen5 NVMe/SATA/SAS4 <small>*SAS card is required to support SAS drives.</small>  Internal M.2: 1 x M.2 (PCIe 5.0 x4)	Front hot-swap: 6 x 2.5" SATA/SAS  Internal M.2: 2 x M.2 (PCIe 4.0 x4)	Front hot-swap: 6 x 2.5" SATA  Internal M.2: 2 x M.2 (PCIe 4.0 x4)
<b>Expansion Slots</b>	2 x PCIe 5.0 x16 FHHL 2 x OCP 3.0 Gen5 x16	2 x PCIe 4.0 x16 LP 4 x PCIe 4.0 x8 LP	2 x PCIe 4.0 x16 LP 4 x PCIe 4.0 x8 LP
<b>I/O Ports</b>	Front: 1 x USB 3.2 Gen1 Rear: 2 x USB 3.2 Gen1 1 x Mini-DP 1 x RJ45 1 x MLAN	Front: 3 x USB 3.2 Gen1 1 x VGA 1 x Debug port 2 x RJ45 1 x MLAN  Rear: N/A	Front: 3 x USB 3.2 Gen1 1 x VGA 1 x Debug port 2 x RJ45 1 x MLAN  Rear: N/A
<b>Security</b>	Optional TPM 2.0 module: CTM010	Hardware-level Root of Trust (RoT) Optional TPM 2.0 module: CTM010	Hardware-level Root of Trust (RoT) Optional TPM 2.0 module: CTM010
<b>Power Supply</b>	Dual 800W redundant PSUs 80 PLUS Titanium	Dual 800W redundant PSUs 80 PLUS Platinum	Dual 800W redundant PSUs 80 PLUS Platinum
<b>System Management</b>	ASPEED® AST2600 BMC GIGABYTE Management Console	ASPEED® AST2500 BMC GIGABYTE Management Console	ASPEED® AST2500 BMC GIGABYTE Management Console
<b>Other Features</b>	Dual ROM architecture	N/A	N/A

# Server Motherboard

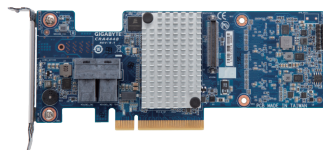


<b>Model</b>	<b>MP72-HB0</b>
<b>Form Factor</b>	E-ATX (W305 x D330 mm)
<b>CPU</b>	Dual Ampere® Altra® Family (2 x LGA 4926)
<b>Memory</b>	8-Channel RDIMM/LRDIMM DDR4, 16 x DIMM slots
<b>LAN</b>	2 x 10Gb/s LAN, 1 x MLAN
<b>Storage</b>	2 x SATA 6Gb/s ports 2 x SlimSAS connectors for 2 x Gen4 NVMe 1 x SlimSAS connectors for 4 x SATA 6Gb/s
<b>Expansion Slots</b>	3 x PCIe 4.0 x16, 1 x PCIe 4.0 x8, 1 x M.2 (PCIe 4.0 x4)
<b>Rear I/O Ports</b>	2 x USB 3.2 Gen1, 1 x VGA, 1 x Debug port, 2 x RJ45, 1 x MLAN
<b>Security</b>	Optional TPM 2.0 module: CTM010
<b>System Management</b>	ASPEED® AST2600 BMC GIGABYTE Management Console
<b>PSU Connectors</b>	1 x 24-pin ATX main power connector 2 x 8-pin ATX 12V power connectors

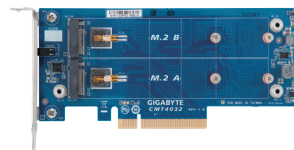
## Storage / LAN Adapter



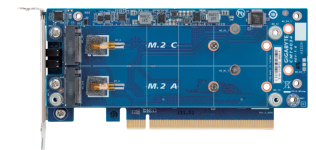
**CRA3338**



**CRA4448**

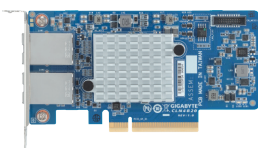


**CMT4032**

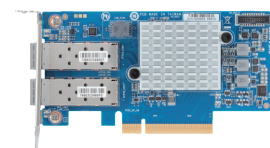


**CMT4034**

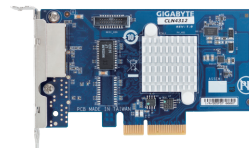
<b>Ports</b>	2 x Mini-SAS HD SFF8643 Up to 8 x SAS 12Gb/s ports Up to 14 x physical devices w/ expander	2 x Internal Mini-SAS HD SFF8643 Up to 8 x SAS 12Gb/s port Up to 32 x physical devices w/ expander	2 x M.2 sockets M key, type 2280/22110 PCIe SSD support only	4 x M.2 sockets M key, type 2280/22110 PCIe SSD support only
<b>Controller</b>	Broadcom® SAS3008	Broadcom® SAS3108	-	-
<b>RAID</b>	RAID 0/1/1E/10	Hardware RAID 0/1/5/6/10/50/60 2GB DDR3 cache memory	-	-
<b>Interface</b>	PCIe x8 (Gen3 x8)	PCIe x8 (Gen3 x8)	PCIe x8 (Gen3 x8)	PCIe x16 (Gen3 x16)
<b>Format</b>	167.6 x 64.4 mm	168 x 68.9 mm	150 x 68.9 mm	150 x 68.9 mm



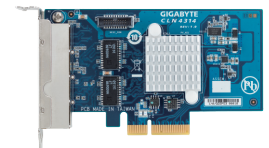
**CLN4B20**



**CLN4D40**



**CLN4312**



**CLN4314**

<b>Ports</b>	2 x 10G BASE-T RJ45 LAN ports Supports 10Gb/s, 1Gb/s	2 x SFP28 LAN ports Supports 25Gb/s, 10Gb/s, 1Gb/s	2 x 1000 BASE-T RJ45 LAN ports Supports 1Gb/s, 100Mb/s	4 x 1000 BASE-T RJ45 LAN ports Supports 1Gb/s, 100Mb/s
<b>Controller</b>	Broadcom® BCM57416	Broadcom® BCM57414	Intel® I350-AM2	Intel® I350-AM4
<b>Interface</b>	PCIe x8 (Gen3 x8)	PCIe x8 (Gen3 x8)	PCIe x4 (Gen2 x4)	PCIe x4 (Gen2 x4)
<b>Format</b>	68.9 x 131 mm	68.9 x 130 mm	68.9 x 120 mm	68.9 x 120 mm

# About Giga Computing

Giga Computing Technology is an industry innovator and leader in the enterprise computing market. Having spun off from GIGABYTE, we maintain hardware expertise in manufacturing and product design, while operating as a standalone business that can drive more investment into core competencies. We offer a complete product portfolio that addresses all workloads from the data center to edge including traditional and emerging workloads in HPC and AI to data analytics, 5G/edge, cloud computing, and more. Our longstanding partnerships with key technology leaders ensure that our new products will be the most advanced and launch with new partner platforms. Our systems embody performance, security, scalability, and sustainability.

## Global After Sales Service & Support

GIGABYTE can provide the following expert services to give our customers total peace of mind:



### Multi-level, multilingual telephone & online technical support

Current services provided:

Country	Service (Optional 24/7 technical support hotline available)
Global	Online support: <a href="https://esupport.gigabyte.com">https://esupport.gigabyte.com</a>
Taiwan	9/5 support hotline: 0800-079-800 (Toll free) or 02-8913-1377 Live online chat: <a href="https://www.gigabyte.com/tw/Support">https://www.gigabyte.com/tw/Support</a>
USA	9/5 support hotline: +1-(626)-854-9338 option 4
Europe	9/5 support hotline: +44 1256 300 809 (English, French, German, Italian, Spanish)

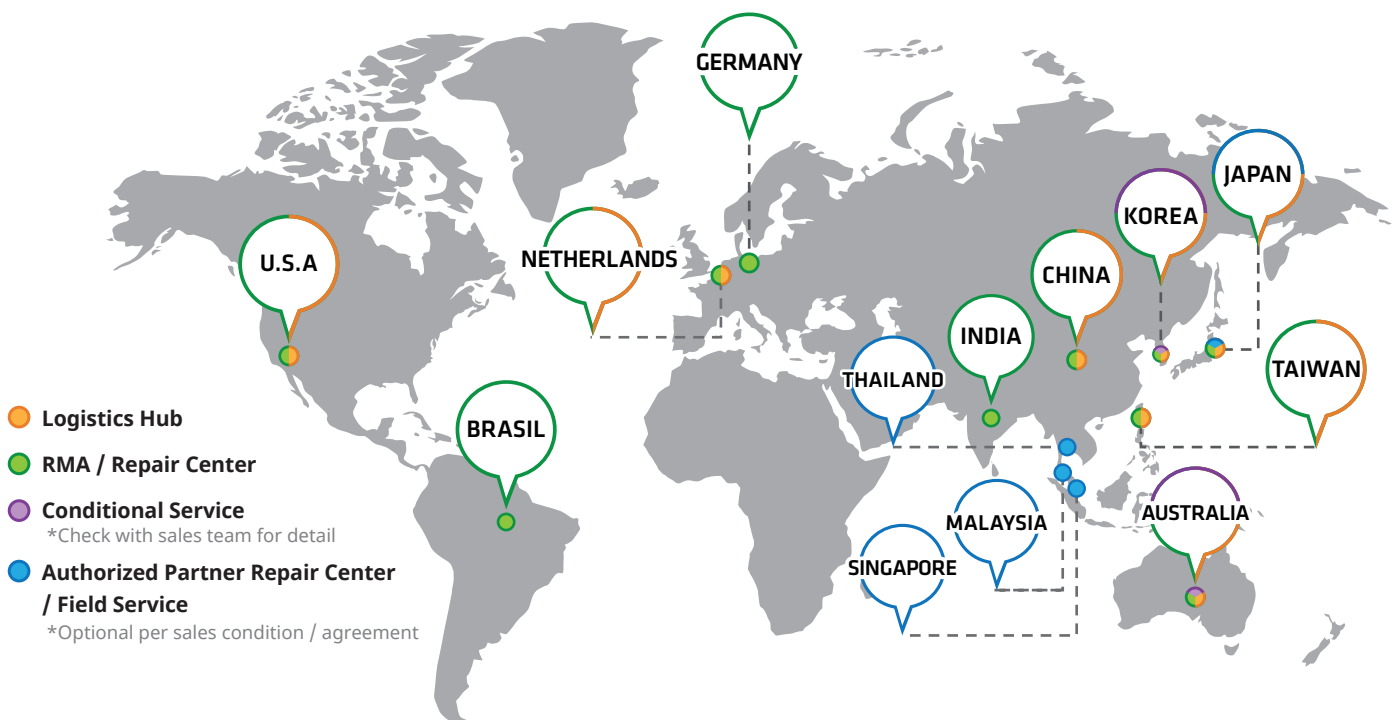


### Globally located RMA & repair centers, onsite technical support services

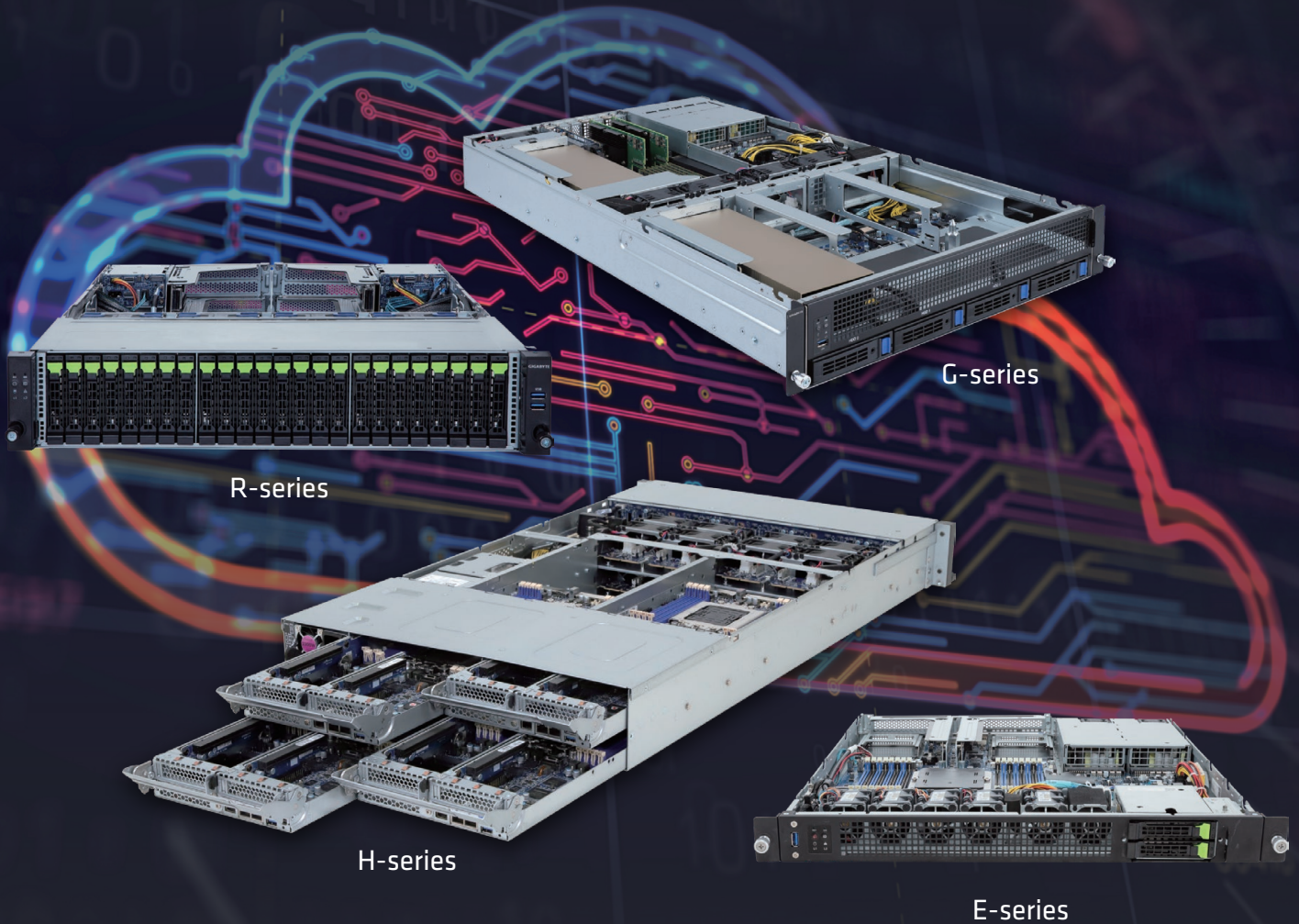


### Reverse logistics, product warehousing and component storage solutions

There is also the potential to utilize GIGABYTE's existing service and support network by request, which includes an additional 60 physical repair & support centers located in 12 additional countries.



# GIGABYTE™



R-series

G-series

H-series

E-series

# Amped for the Cloud

Supporting Ampere® Altra® & AmpereOne® Family Processors





[gigacomputing.com](https://gigacomputing.com)

 Giga Computing

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 GIGABYTEChannel



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