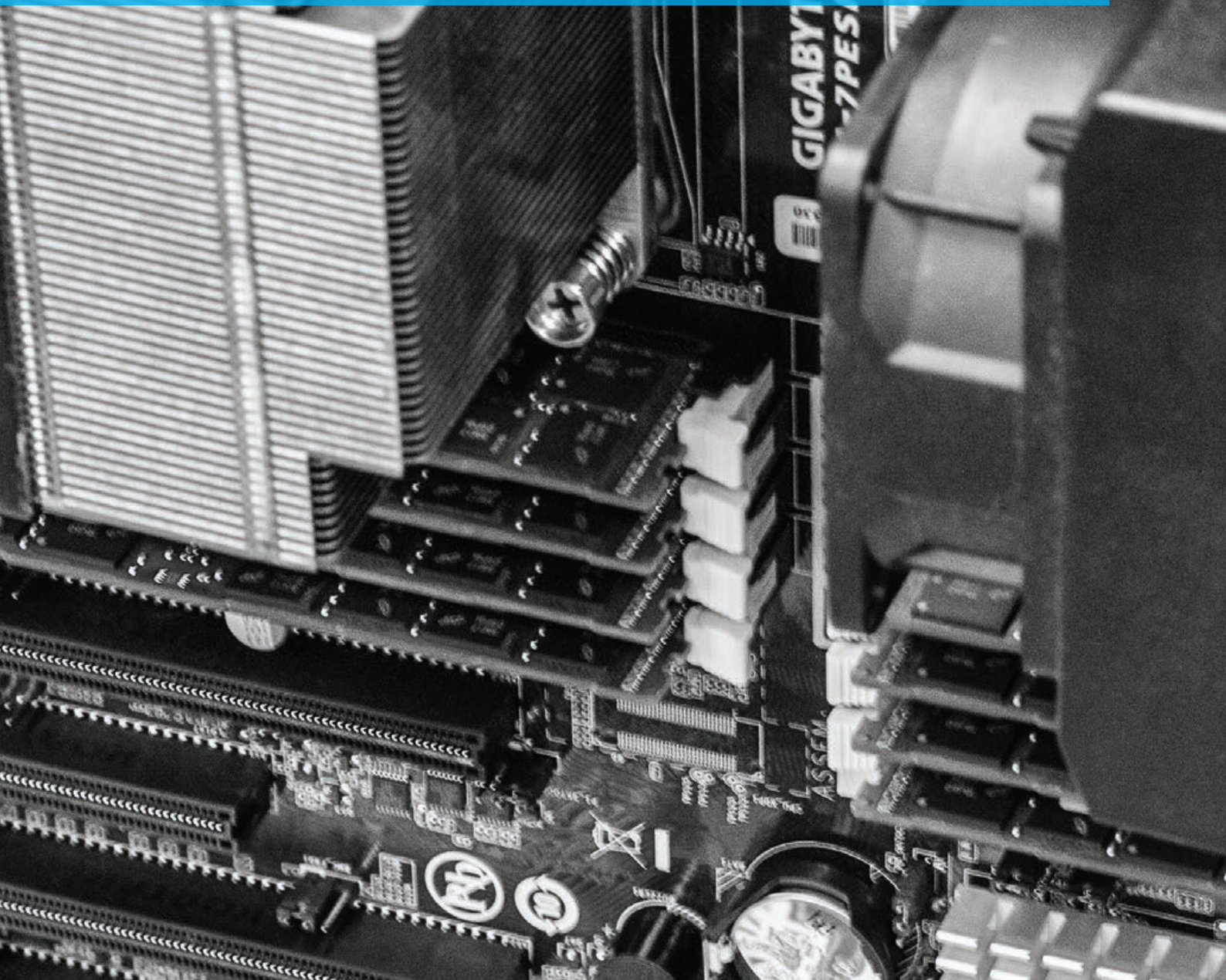
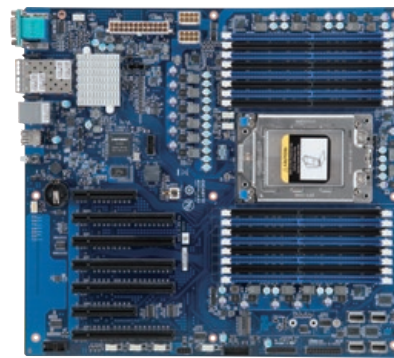


Server Motherboard

We put our three decades of know-how in motherboard design at the service of cutting-edge server motherboards. Always built with the best and most durable components, we make products suitable for both tower and rackmount servers with features for a wide range of professional applications:

- **Standard Web, Storage, Database Servers, etc.**
- **High Performance Computing**
- **Parallel Computing**
- **Virtual RAM Drives**
- **Mass Storage**
- **Virtualized Applications**





MZ01-CE0

MZ01-CE1

MZ31-AR0

Form Factor	ATX (305 x 244mm)	ATX (305 x 244mm)	E-ATX (305 x 330 mm)
CPU	AMD EPYC 7000 Series Processor Family 1 x Socket SP3 (LGA 4094) TDP up to 180W	AMD EPYC 7000 Series Processor Family 1 x Socket SP3 (LGA 4094) TDP up to 180W	AMD EPYC 7000 Series Processor Family 1 x Socket SP3 (LGA 4094) TDP up to 180W
Memory	8-Channel DDR4 memory, 8 x DIMMs RDIMM up to 64GB, LRDIMM up to 128GB 2666/ 2400/ 2133 MHz	8-Channel DDR4 memory, 8 x DIMMs RDIMM up to 64GB, LRDIMM up to 128GB 2666/ 2400/ 2133 MHz	8-Channel DDR4 memory, 16 x DIMMs RDIMM up to 64GB , LRDIMM up to 128GB 2666(1DPC)/ 2400/ 2133 MHz
LAN	2 x 10GbE BASE-T LAN (Intel X550-AT2) 2 x GbE LAN (Intel I210-AT) 1 x GbE MLAN	2 x GbE LAN (Intel I210-AT) 1 x GbE MLAN	2 x SFP+ 10GbE LAN (Broadcom BCM 57810S) 1 x GbE MLAN
Storage	4 x SlimSAS for 16 x SATA III 1 x M.2 (3.0 x4, M-key)	4 x SlimSAS for 16 x SATA III 1 x M.2 (3.0 x4, M-key)	4 x SlimSAS for 16 x SATA III 1 x M.2 (3.0 x4, M-key)
Expansion Slots	4 x PCIe x16 (3.0 x16) 1 x PCIe x8 (3.0 x8)	4 x PCIe x16 (3.0 x16) 1 x PCIe x8 (3.0 x8)	2 x PCIe x8 (3.0 x8) 1 x PCIe x16 (3.0 x8) 4 x PCIe x16 (3.0 x16)
Rear I/O	2 x USB 3.0 1 x VGA 4 x RJ45 1 x MLAN 1 x ID switch with LED 1 x Power switch with LED	2 x USB 3.0 1 x VGA 2 x RJ45 1 x MLAN 1 x ID switch with LED 1 x Power switch with LED	2 x USB 3.0 2 x USB 2.0 1 x VGA 1 x COM_1 2 x SFP+ 1 x MLAN 1 x ID button with LED
TPM	1 x TPM header	1 x TPM header	1 x TPM header
OS Supported	Windows Server 2012 R2 (x64) Windows Server 2016 RHEL 7.4 SLES 11.4/ 12 .2 Ubuntu 16.04/ 17.04 VMware ESXi 6.5	Windows Server 2012 R2 (x64) Windows Server 2016 RHEL 7.4 SLES 11.4/ 12 .2 Ubuntu 16.04/ 17.04 VMware ESXi 6.5	Windows Server 2012 R2 (x64) Windows Server 2016 RHEL 7.4 SLES 11.4/ 12 .2 Ubuntu 16.04/ 17.04 VMware ESXi 6.5
Board Management	Aspeed AST2500 management controller AMI MegaRAC SP-X Solution Web interface	Aspeed AST2500 management controller AMI MegaRAC SP-X Solution Web interface	Aspeed AST2500 management controller Avocent MergePoint IPMI 2.0 web interface
Part Numbers	Retail: 9MZ01CE0MR-00 Bulk: 9MZ01CE0NR-00	Retail: 9MZ01CE0MR-00 Bulk: 9MZ01CE0NR-00	Retail: 9MZ31AR0MR-00 Bulk: 9MZ31AR0NR-00

Rack Server

GIGABYTE offers rack-mounted solutions based on its server motherboards. Equipped with the best power supplies and cooling fans, they are ready-to-integrate solutions combining a high level of performance, energy efficiency, and overall reliability for the most demanding server applications:

- **Web Hosting**
- **Virtualized Infrastructures**
- **Databases & Analytics**





R271-Z31

R271-Z00

Form Factor	2U (430 x 87 x 710 mm)	2U (430 x 87 x 710 mm)
CPU	AMD EPYC 7000 Series Processor Family 1 x Socket SP3 (LGA 4094) TDP up to 180W	AMD EPYC 7000 Series Processor Family 1 x Socket SP3 (LGA 4094) TDP up to 180W
Memory	8-Channel DDR4 memory, 16 x DIMMs RDIMM up to 64GB, LRDIMM up to 128GB 2666(1DPC)/ 2400/ 2133 MHz	8-Channel DDR4 memory, 8 x DIMMs RDIMM up to 64GB, LRDIMM up to 128GB 2666/ 2400/ 2133 MHz
LAN	2 x SFP+ 10GbE LAN (BCM 57810S) 1 x GbE MLAN	2 x GbE LAN (Intel I210-AT) 1 x GbE MLAN
Storage	16 x 2.5" SATA/SAS hot-swap HDD - SAS card is required for SAS devices support 1 x M.2 (3.0 x4, M-key)	12 x 3.5" + 2 x 2.5" SATA/SAS hot-swap HDD - 2.5" HDD supported - SAS card is required for SAS devices support 1 x M.2 (3.0 x4, M-key)
Expansion Slots	2 x PCIe x8 (3.0 x8), LP 1 x PCIe x16 (3.0 x8), LP 4 x PCIe x16 (3.0 x16), LP	4 x PCIe x16 (3.0 x16), LP 1 x PCIe x8 (3.0 x8), LP
Rear I/O	2 x USB 3.0 2 x USB 2.0 1 x VGA 1 x COM_1 2 x SFP+ 1 x MLAN 1 x ID button with LED	2 x USB 3.0 1 x VGA 2 x RJ45 1 x MLAN 1 x ID switch with LED 1 x Power switch with LED
TPM	1 x TPM header	1 x TPM header
Power Supply	2 x 800W redundant PSUs 80 PLUS Platinum, 100~240V AC	2 x 550W redundant PSUs 80 PLUS Platinum, 100~240V AC
OS Supported	Windows Server 2012 R2 Windows Server 2016 RHEL 7.4 SLES 11.4/ 12.2 Ubuntu 16.04 / 17.04 VMware ESXi 6.5	Windows Server 2012 R2 (x64) Windows Server 2016 RHEL 7.4 SLES 11.4/ 12.2 Ubuntu 16.04/ 17.04 VMware ESXi 6.5
Board Management	Aspeed AST2500 management controller Avocent MergePoint IPMI 2.0 web interface	Aspeed AST2500 management controller AMI MegaRAC SP-X Solution Web interface
Part Numbers	6NR271Z31MR-00	6NR271Z00MR-00



R181-Z90

R181-Z91

R181-Z92

Form Factor	1U (438 x 43.5 x 710 mm)	1U (438 x 43.5 x 710 mm)	1U (438 x 43.5 x 710 mm)
CPU	AMD EPYC 7000 Series Processor Family 2 x Socket SP3 (LGA 4094) TDP up to 180W	AMD EPYC 7000 Series Processor Family 2 x Socket SP3 (LGA 4094) TDP up to 180W	AMD EPYC 7000 Series Processor Family 2 x Socket SP3 (LGA 4094) TDP up to 180W
Memory	8-Channel DDR4 memory, 32 x DIMMs RDIMM up to 64GB , LRDIMM up to 128GB 2666(1DPC)/ 2400/ 2133 MHz	8-Channel DDR4 memory, 32 x DIMMs RDIMM up to 64GB , LRDIMM up to 128GB 2666(1DPC)/ 2400/ 2133 MHz	8-Channel DDR4 memory, 32 x DIMMs RDIMM up to 64GB , LRDIMM up to 128GB 2666(1DPC)/ 2400/ 2133 MHz
LAN	2 x GbE LAN (1 x Intel I350-AT2) 1 x GbE MLAN	2 x GbE LAN (1 x Intel I350-AT2) 1 x GbE MLAN	2 x GbE LAN (1 x Intel I350-AT2) 1 x GbE MLAN
Storage	4 x 3.5" SATA/ SAS hot-swap HDD - 2.5" HDD supported - SAS card is required for SAS devices support 1 x Slim type ODD in option 1 x M.2 (3.0 x4, M-key)	8 x SATA/ SAS, 2 x NVMe 2.5" hot-swap HDD - SAS card is required for SAS devices support 1 x M.2 (3.0 x4, M-key)	10 x 2.5" NVMe hot-swap HDD 1 x M.2 (3.0 x4, M-key)
Expansion Slots	2 x PCIe x8 (3.0 x8), LP 1 x PCIe x16 (3.0 x16), LP 2 x OCP mezzanine (3.0 x16)	2 x PCIe x8 (3.0 x8), LP 1 x PCIe x16 (3.0 x16), LP 2 x OCP mezzanine (3.0 x16)	1x PCIe x8 (3.0 x8), LP 1 x PCIe x16 (3.0 x16), LP 2 x OCP mezzanine (3.0 x16)
Rear I/O	2 x USB 3.0 1 x VGA 1 x COM (RJ45 type) 2 x RJ45 1 x MLAN 1 x ID button with LED	2 x USB 3.0 1 x VGA 1 x COM (RJ45 type) 2 x RJ45 1 x MLAN 1 x ID button with LED	2 x USB 3.0 1 x VGA 1 x COM (RJ45 type) 2 x RJ45 1 x MLAN 1 x ID button with LED
TPM	1 x TPM header	1 x TPM header	1 x TPM header
Power Supply	2 x 1200W redundant PSUs 80 PLUS Platinum, 100~240V AC	2 x 1200W redundant PSUs 80 PLUS Platinum, 100~240V AC	2 x 1200W redundant PSUs 80 PLUS Platinum, 100~240V AC
OS Supported	Windows Server 2012 R2 Windows Server 2016 RHEL 7.4 SLES 11.4/ 12.2 Ubuntu 16.04 / 17.04 VMware ESXi 6.5	Windows Server 2012 R2 Windows Server 2016 RHEL 7.4 SLES 11.4/ 12.2 Ubuntu 16.04 / 17.04 VMware ESXi 6.5	Windows Server 2012 R2 Windows Server 2016 RHEL 7.4 SLES 11.4/ 12.2 Ubuntu 16.04 / 17.04 VMware ESXi 6.5
Board Management	Aspeed AST2500 management controller Avocent MergePoint IPMI 2.0 web interface	Aspeed AST2500 management controller Avocent MergePoint IPMI 2.0 web interface	Aspeed AST2500 management controller Avocent MergePoint IPMI 2.0 web interface
Part Numbers	6NR181Z90MR-00	6NR181Z91MR-00	6NR181Z92MR-00



R281-Z91

R281-Z92

R281-Z94

Form Factor	2U (438 x 87 x 710 mm)	2U (438 x 43.5 x 710 mm)	2U (438 x 43.5 x 710 mm) 3 x PCIe GPUs supported
CPU	AMD EPYC 7000 Series Processor Family 2 x Socket SP3 (LGA 4094) TDP up to 180W	AMD EPYC 7000 Series Processor Family 2 x Socket SP3 (LGA 4094) TDP up to 180W	AMD EPYC 7000 Series Processor Family 2 x Socket SP3 (LGA 4094) TDP up to 180W
Memory	8-Channel DDR4 memory, 32 x DIMMs RDIMM up to 64GB , LRDIMM up to 128GB 2666(1DPC)/ 2400/ 2133 MHz	8-Channel DDR4 memory, 32 x DIMMs RDIMM up to 64GB , LRDIMM up to 128GB 2666(1DPC)/ 2400/ 2133 MHz	8-Channel DDR4 memory, 32 x DIMMs RDIMM up to 64GB , LRDIMM up to 128GB 2666(1DPC)/ 2400/ 2133 MHz
LAN	2 x GbE LAN (1 x Intel I350-AT2) 1 x GbE MLAN	2 x GbE LAN (1 x Intel I350-AT2) 1 x GbE MLAN	2 x GbE LAN (1 x Intel I350-AT2) 1 x GbE MLAN
Storage	6 x 2.5" NVMe & 18 x 2.5" + 2 x 2.5" SATA/ SAS hot-swap HDD - Default supports 6 x NVMe drives - SAS card is required to enable the drive bays 1 x M.2 (3.0 x4, M-key)	24 x 2.5" NVMe + 2 x 2.5" SATA/ SAS hot-swap HDD - SAS card is required for SAS devices support 1 x M.2 (3.0 x4, M-key)	12 x 3.5" SATA/ SAS hot-swap HDD - 2.5" HDD supported - Default supports 4 x SATA drives - SAS card is required for SAS devices support 1 x M.2 (3.0 x4, M-key)
Expansion Slots	2 x PCIe x16 (3.0 x16 or x8), FHHL 2 x PCIe x8 (3.0 x0 or x8), FHHL 1 x PCIe x8 (3.0 x8), FHHL 1 x PCIe x16 (3.0 x16 or x8), LP 1 x PCIe x8 (3.0 x0 or x8), LP 2 x OCP mezzanine (3.0 x16)	2 x PCIe x16 (3.0 x16 or x8), FHHL 2 x PCIe x8 (3.0 x0 or x8), FHHL 1 x PCIe x8 (3.0 x8), FHHL 2 x OCP mezzanine (3.0 x16)	3 x PCIe x16 (3.0 x16 or x8), FHHL 3 x PCIe x8 (3.0 x0 or x8), FHHL 2 x PCIe x8 (3.0 x8), FHHL 2 x OCP mezzanine (3.0 x16)
Rear I/O	2 x USB 3.0 1 x VGA 1 x COM (RJ45 type) 2 x RJ45 1 x MLAN 1 x ID button with LED	2 x USB 3.0 1 x VGA 1 x COM (RJ45 type) 2 x RJ45 1 x MLAN 1 x ID button with LED	2 x USB 3.0 1 x VGA 1 x COM (RJ45 type) 2 x RJ45 1 x MLAN 1 x ID button with LED
TPM	1 x TPM header	1 x TPM header	1 x TPM header
Power Supply	2 x 1200W redundant PSUs 80 PLUS Platinum, 100~240V AC	2 x 1600W redundant PSUs 80 PLUS Platinum, 100~240V AC	2 x 2000W redundant PSUs 80 PLUS Platinum, 100~240V AC
OS Supported	Windows Server 2012 R2 Windows Server 2016 RHEL 7.4 SLES 11.4/ 12.2 Ubuntu 16.04 / 17.04 VMware ESXi 6.5	Windows Server 2012 R2 Windows Server 2016 RHEL 7.4 SLES 11.4/ 12.2 Ubuntu 16.04 / 17.04 VMware ESXi 6.5	Windows Server 2012 R2 Windows Server 2016 RHEL 7.4 SLES 11.4/ 12.2 Ubuntu 16.04 / 17.04 VMware ESXi 6.5
Board Management	Aspeed AST2500 management controller Avocent MergePoint IPMI 2.0 web interface	Aspeed AST2500 management controller Avocent MergePoint IPMI 2.0 web interface	Aspeed AST2500 management controller Avocent MergePoint IPMI 2.0 web interface
Part Numbers	6NR281Z91MR-00	6NR281Z92MR-00	6NR281Z94MR-00

Tower Server

GIGABYTE's tower servers are ideal for SOHO, SMB, SME, and enterprise environments with heavy-duty workloads. Engineered to support the latest generation processors and high-end GPU expansion cards, end users are able to fully exploit extremely high I/O, configuration flexibility, ease of management, and rock-solid reliability in addition to an abundance of expansion options.

- Professional workstations
- Data modelling
- High density hot storage
- Media transcoding, editing, and rendering





W291-Z00

Form Factor	Pedestal (200 x 450.2 x 642.2 mm)
CPU	AMD EPYC 7000 Series Processor Family 1 x Socket SP3 (LGA 4094) TDP up to 180W
Memory	8-Channel DDR4 memory, 8 x DIMMs RDIMM up to 64GB, LRDIMM up to 128GB 2666/ 2400/ 2133 MHz
LAN	2 x GbE LAN (Intel I210-AT) 1 x GbE MLAN
Storage	4 x 3.5" SATAIII hot-swap HDD - Up to 12 x 3.5" SATAIII hot-swap HDD as an option - 2.5" HDD supported - SAS card is required for SAS devices support 1 x 5.25" space reserved for ODD device 1 x M.2 (3.0 x4, M-key)
Expansion Slots	4 x PCIe x16 (3.0 x16) 1 x PCIe x8 (3.0 x8)
Rear I/O	2 x USB 3.0 1 x VGA 2 x RJ45 1 x MLAN 1 x ID switch with LED 1 x Power switch with LED
TPM	1 x TPM header
Power Supply	2 x 1600W redundant PSUs 80 PLUS Platinum, 100~240V AC
OS Supported	Windows Server 2012 R2 (x64) Windows Server 2016 Windows Server 2019 RHEL 7.4 SLES 11.4/ 12 .2 Ubuntu 16.04/ 17.04 VMware ESXi 6.5
Board Management	Aspeed AST2500 management controller AMI MegaRAC SP-X Solution Web interfac
Part Numbers	6NW291Z00MR

High Performance Computing System

GIGABYTE is an industry leader in high performance computing, delivering systems with the highest GPU density available in the market combined with excellent cooling performance, power efficiency and superior networking flexibility. These systems can provide massive parallel computing capabilities to your organization. They are designed for:

- **Artificial Intelligence**
- **Deep Learning**
- **Scientific Analysis & Simulation**



G291-Z20

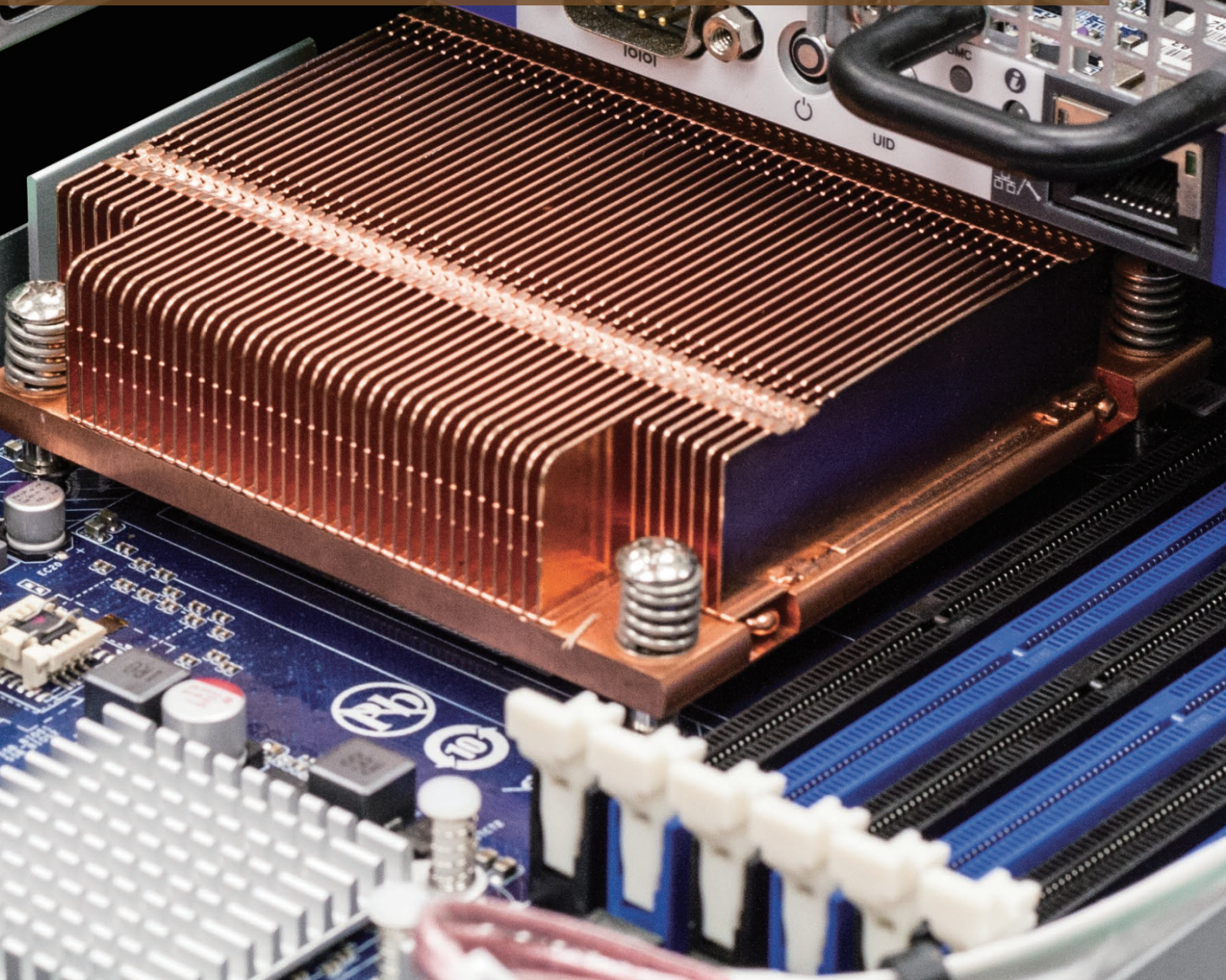
G221-Z30

Form Factor	2U (448 x 87.5 x 800 mm) 8 x PCIe GPUs supported	2U (430 x 87 x 710 mm) 2 x PCIe GPUs supported
CPU	AMD EPYC 7000 Series Processor Family 1 x Socket SP3 (LGA 4094) TDP up to 180W	AMD EPYC 7000 Series Processor Family 1 x Socket SP3 (LGA 4094) TDP up to 180W
Memory	8-Channel DDR4 memory, 8 x DIMMs RDIMM up to 64GB, LRDIMM up to 128GB 2666(1DPC)/ 2400/ 2133 MHz	8-Channel DDR4 memory, 16 x DIMMs RDIMM up to 64GB, LRDIMM up to 128GB 2666(1DPC)/ 2400/ 2133 MHz
LAN	2 x SFP+ 10GbE LAN (Mellanox ConnectX-4) 1 x GbE MLAN	2 x SFP+ 10GbE LAN (Broadcom BCM 57810S) 1 x GbE MLAN
Storage	8 x 2.5" SATA/ SAS hot-swap HDD - SAS card is required for SAS devices support 1 x M.2 (3.0 x2, M-key) 1 x M.2 (3.0 x4, M-key)	16 x 2.5" SATA/SAS hot-swap HDD 1 x M.2 (3.0 x4, M-key)
Expansion Slots	8 x PCIe x16 (3.0 x16) for GPUs 2 x PCIe x16 (3.0 x16), LPHL OCP type add-on card in option	2 x PCIe x16 (3.0 x16 or x8), FHHL 2 x PCIe x8 (3.0 x8 or x0), FHHL
Rear I/O	2 x USB 3.0 1 x VGA 2 x SFP+ 1 x MLAN 1 x Power button with LED 1 x ID button with LED 1 x Reset button 1 x NMI button 1 x System status LED	2 x USB 3.0 2 x USB 2.0 1 x VGA 1 x COM_1 2 x SFP+ 1 x MLAN 1 x ID button with LED
TPM	1 x TPM header	1 x TPM header
Power Supply	2 x 2200W redundant PSUs 80 PLUS Platinum, 100~240V AC	2 x 1200W redundant PSUs 80 PLUS Platinum, 100~240V AC
OS Supported	Windows Server 2012 R2 Windows Server 2016 Windows Server 2019 RHEL 7.4 SLES 11.4/ 12.2 Ubuntu 16.04 / 17.04 VMware ESXi 6.5	Windows Server 2012 R2 Windows Server 2016 RHEL 7.4 SLES 11.4/ 12.2 Ubuntu 16.04 / 17.04 VMware ESXi 6.5
Board Management	Aspeed AST2500 management controller Avocent MergePoint IPMI 2.0 web interface	Aspeed AST2500 management controller Avocent MergePoint IPMI 2.0 web interface
Part Numbers	6NG291Z20MR-00	6NG221Z30MR-00

Hyper-Converged System

Our systems designed for HCI (Hyper-Converged Infrastructure) are high-density multi-node rackmounts, utilizing an innovative design to combine compute, storage, networking and even GPU support into a single system. GIGABYTE's HCI systems often lead the market in terms of thermal performance and expansion slot capacity. They are ideal for:

- **Cloud Service Infrastructure**
- **Virtualization**
- **HPC Infrastructure**





H261-Z60

H261-Z61

Form Factor	2U 4-Node rear access (440 x 87 x 820mm)	2U 4-Node rear access (440 x 87 x 820mm)
CPU	AMD EPYC 7000 Series Processor Family 8 x Socket SP3 (LGA 4094) TDP up to 180W	AMD EPYC 7000 Series Processor Family 8 x Socket SP3 (LGA 4094) TDP up to 180W
Memory	8-Channel DDR4 memory, 64 x DIMMs RDIMM up to 64GB , LRDIMM up to 128GB 2666(1DPC)/ 2400/ 2133 MHz	8-Channel DDR4 memory, 64 x DIMMs RDIMM up to 64GB , LRDIMM up to 128GB 2666(1DPC)/ 2400/ 2133 MHz
LAN	8 x GbE LAN (Intel I350) 4 x GbE MLAN 1 x GbE CMC LAN	8 x GbE LAN (Intel I350) 4 x GbE MLAN 1 x GbE CMC LAN
Storage	24 x 2.5" SATA/ SAS hot-swap HDD - SAS card is required for SAS devices support 8 x M.2 (3.0 x4, M-key)	8 x NVMe + 16 x SATA/ SAS 2.5" hot-swap HDD - SAS card is required for SAS devices support 2 x M.2 (3.0 x4, M-key)
Expansion Slots	8 x PCIe x16 (3.0 x16), LP 4 x OCP mezzanine (3.0 x16)	8 x PCIe x16 (3.0 x16), LP 4 x OCP mezzanine (3.0 x16)
Rear I/O	8 x USB 3.0 4 x VGA 8 x RJ45 4 x RJ45 MLAN 4 x ID LEDs 1 x CMC LAN	8 x USB 3.0 4 x VGA 8 x RJ45 4 x RJ45 MLAN 4 x ID LEDs 1 x CMC LAN
TPM	1 x TPM header per node	1 x TPM header per node
Power Supply	2 x 2200W redundant PSUs 80 PLUS Platinum, 100~240V AC	2 x 2200W redundant PSUs 80 PLUS Platinum, 100~240V AC
OS Supported	Windows Server 2012 R2 Windows Server 2016 RHEL 7.4 SLES 11.4/ 12.2 Ubuntu 16.04 / 17.04 VMware ESXi 6.5	Windows Server 2012 R2 Windows Server 2016 RHEL 7.4 SLES 11.4/ 12.2 Ubuntu 16.04 / 17.04 VMware ESXi 6.5
Board Management	Aspeed AST2500 management controller AMI MegaRAC SP-X Solution Web interface	Aspeed AST2500 management controller AMI MegaRAC SP-X Solution Web interface
Part Numbers	6NH261Z60MR-00	6NH261Z61MR-00

Storage Server

GIGABYTE's storage servers are designed to offer excellent storage density, configuration flexibility, high availability and reliability features to guarantee data integrity, and user friendly design features for easy deployment and maintenance. They are extremely suitable for:

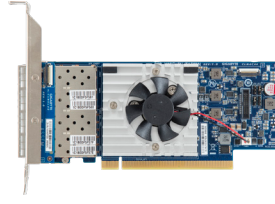
- **Scale-out software defined storage**
- **Big Data and cloud hosting workloads**
- **Rich media & content storage**



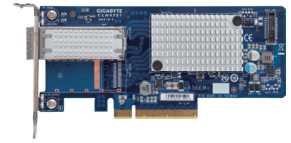
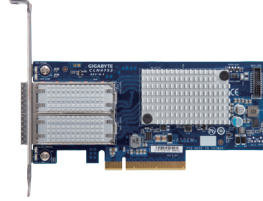
S451-Z30

Form Factor	4U (482.6 x 177 x 625 mm)
CPU	AMD EPYC 7000 Series Processor Family 1 x Socket SP3 (LGA 4094) TDP up to 180W
Memory	8-Channel DDR4 memory, 16 x DIMMs RDIMM up to 64GB , LRDIMM up to 128GB 2666(1DPC)/ 2400/ 2133 MHz
LAN	2 x SFP+ 10GbE LAN ports (Broadcom BCM 57810S) 1 x GbE MLAN
Storage	36 x 3.5" SATA/SAS hot-swap HDD 2 x 2.5" SATA hot-swap HDD for booting device - Default supports 0 x SAS/SATA drives - SAS card is required for SAS devices support - SAS expander with 12Gb/s transfer speed 1 x M.2 (3.0 x4, M-key)
Expansion Slots	2 x PCIe x8 (3.0 x8), LP 1 x PCIe x16 (3.0 x8), LP 4 x PCIe x16 (3.0 x16), LP
Rear I/O	2 x USB 3.0 1 x VGA 2 x SFP+ 2 x RJ45 1 x MLAN 1 x ID button with LED 2 x LAN activity LEDs
TPM	1 x TPM header
Power Supply	2 x 1200W redundant PSUs 80 PLUS Platinum, 100~240V AC
OS Supported	Windows Server 2012 R2 Windows Server 2016 RHEL 7.4 SLES 11.4/ 12.2 Ubuntu 16.04 / 17.04 VMware ESXi 6.5
Board Management	Aspeed AST2500 management controller Avocent MergePoint IPMI 2.0 web interface
Part Numbers	6NS451Z30MR-00

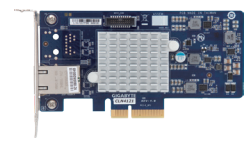
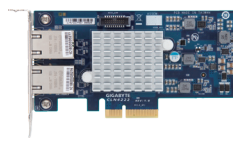
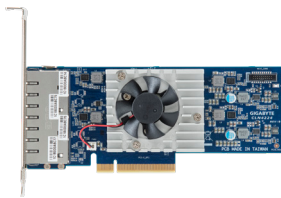
LAN Adapter



	CLNO832	CLN4C44	CLN4C42
I/O	2 x SFP+ LAN ports Supports 10Gb/s per port	4 x SFP28 LAN Supports 25Gb/s per port	2 x SFP28 LAN ports Supports 25Gb/s per port
Controller	Intel 82599ES	Mellanox ConnectX-4	Mellanox ConnectX-4
Interface	PCIe 2.0 x8	PCIe 3.0 x16	PCIe 3.0 x16
Format	OCP mezzanine (Type1)	MD2 low profile type	MD2 low profile type
Dimension	115 x 67 mm	160 x 68.9 mm	160 x 68.9 mm
Part Numbers	9CLNO832NR-00	9ALN4C44NR-00	9CLN4C42NR-00

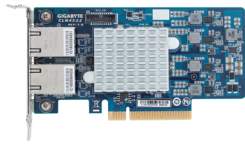


	CLN4M34	CLN4752	CLN4751
I/O	4 x SFP28 LAN ports Supports 10Gb/s per port	2 x QSFP+ LAN Supports 40Gb/s, 10Gb/s, 1Gb/s per port	1 x QSFP+ LAN Supports 40Gb/s, 10Gb/s, 1Gb/s per port
Controller	2 x Mellanox ConnectX-4	Intel XL710-BM2	Intel XL710-BM1
Interface	PCIe 3.0 x16	PCIe 3.0 x8	PCIe 3.0 x8
Format	MD2 low profile type	Half-length low-profile	Half-length low profile
Dimension	160 x 68.9 mm	148.5 x 68.9 mm	148.5 x 68.9 mm
Part Numbers	9ALN4M34NR-00	9CLN4752NR-00	9CLN4751NR-00



	CLN4224	CLN4222	CLN4121
I/O	4 x 10G BASE-T RJ45 LAN Supports 10Gb/s, 1Gb/s per port	2 x 10G BASE-T RJ45 LAN Supports 10Gb/s, 1Gb/s per port	1 x 10GBASE-T RJ45 LAN Supports 10Gb/s, 1Gb/s per port
Controller	2 x Intel X550-AT2	Intel X550-AT2	Intel X550-AT
Interface	PCIe 3.0 x8	PCIe 3.0 x4	PCIe 3.0 x4
Format	Half-length low profile	Half-length low-profile	Half-length low profile
Dimension	168 x 68.9 mm	131 x 68.9 mm	131 x 68.9 mm
Part Numbers	9CLN4224NR-00	9CLN4222NR-00	9CLN4121NR-00

LAN Adapter



CLN4522

I/O 2 x 10GBASE-T RJ45 LAN
Supports 10Gb/s, 1Gb/s per port

Controller Intel X540-BT2

Interface PCIe 2.0 x8

Format Half-length low profile

Dimension 131 x 68.9 mm

Part Numbers 9CLN4522NR-00



CLN4832

I/O 2 x SFP+ LAN
Supports 10Gb/s per port

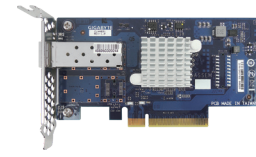
Controller Intel 82599ES

Interface PCIe 2.0 x8

Format Half-length low profile

Dimension 143 x 68.9 mm

Part Numbers 9CLN4832NR-00



CLN4831

I/O 1 x SFP+ LAN
Supports 10Gb/s per port

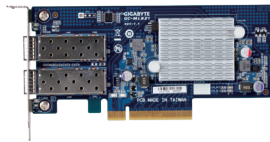
Controller Intel 82599EN

Interface PCIe 2.0 x8

Format Half-length low profile

Dimension 143 x 68.9 mm

Part Numbers 9CLN4831NR-00



GC-MLBZ1

I/O 2 x 10GbE SFP+ LAN

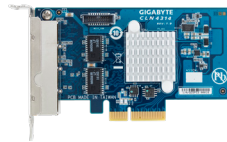
Controller QLogic BCM57810S

Interface PCIe 2.0 x8

Format Half-length

Dimension 145 x 68.9 mm

Part Numbers 9CMLBZ1NR-00



CLN4314

I/O 4 x 1000BASE-T RJ45 LAN
Supports 1Gb/s, 100Mb/s per port

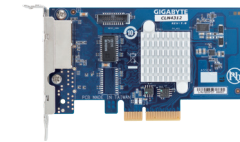
Controller Intel I350-AM4

Interface PCIe 2.0 x4

Format Half-length low-profile

Dimension 120 x 68.9 mm

Part Numbers 9CLN4314NR-00



CLN4312

I/O 2 x 1000BASE-T RJ45 LAN
Supports 1Gb/s, 100Mb/s per port

Controller Intel I350-AM2

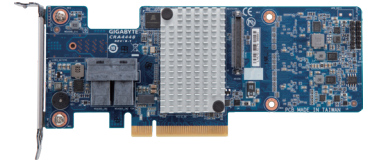
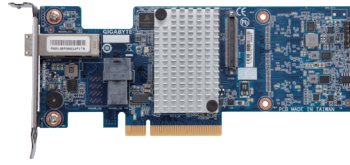
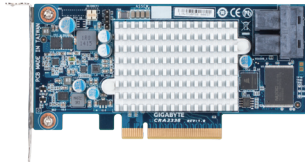
Interface PCIe 2.0 x4

Format Half-length low profile

Dimension 120 x 68.9 mm

Part Numbers 9CLN4312NR-00

Storage Adapter



CSA4648

I/O 2 x internal Mini-SAS HD SFF8643 connectors for up to 8 x SAS 12Gb/s

Controller LSI SAS3008

RAID IT mode firmware; up to 1024 x physical devices supported via SAS expander

Interface PCIe 3.0 x8

Format Half-length card

Dimension 167.6 x 64.4 mm

Part Numbers 9CSA4648NR-00

CRA4548

1 x internal Mini-SAS HD SFF8643 connector for up to 4 x SAS 12Gb/s
1 x external Mini-SAS HD SFF8644 connector
Up to 240 x physical devices supported via expander

Controller LSI SAS3108

RAID HW RAID 0/ 1/ 5/ 6/ 10/ 50/ 60
2GB DDR3 cache memory

Interface PCIe 3.0 x8

Format Half-length low profile card

Dimension 168 x 68.9 mm

Part Numbers 9CRA4548NR-00

CRA4448

2 x internal Mini-SAS HD SFF8643 connectors for up to 8 x SAS 12Gb/s
Up to 32 x physical devices supported via expander

Controller LSI SAS3108

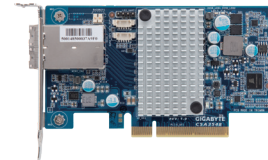
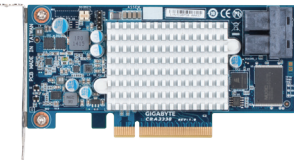
RAID HWRAID 0/ 1/ 5/ 6/ 10/ 50/ 60
2GB DDR3 cache memory

Interface PCIe 3.0 x8

Format Half-length low profile card

Dimension 168 x 68.9 mm

Part Numbers 9CRA4448NR-00



CRA3338

I/O 2 x internal Mini-SAS HD SFF8643 connectors for up to 8 x SAS 12Gb/s

Controller LSI SAS3008

RAID RAID 0/1/1E/10
IR RAID

Interface PCIe 3.0 x8

Format Half-length card

Dimension 167.6 x 64.4 mm

Part Numbers 9CRA3338NR-00

CSA3548

2 x external Mini-SAS HD SFF8644 connectors
Up to 1024 physical devices supported via expander

Controller LSI SAS3008

RAID SW RAID 0/ 1/ 1E/ 10
IR RAID

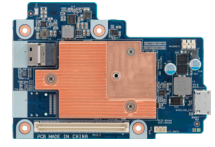
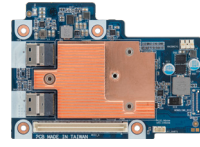
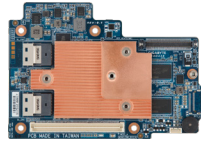
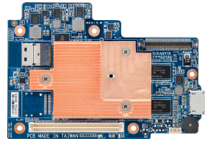
Interface PCIe 3.0 x8

Format Half-length low profile card

Dimension 120 x 64.4 mm

Part Numbers 9CSA3548MR-00

Storage Adapter



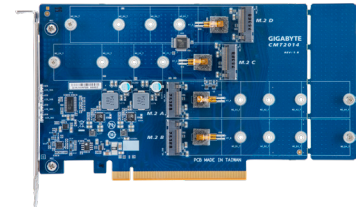
CRAO558

CRAO438

CRAO338

CRAO358

I/O	1 x internal SlimSAS for up to 4 x SAS 12Gb/s 1 x external OCUlink for JBOD Up to 240 x physical devices supported via SAS expander	2 x internal SlimSAS for up to 8 x SAS 12Gb/s Up to 32 x physical devices supported via expander	2 x internal SlimSAS for up to 8 x SAS 12Gb/s Up to 1024 x physical devices supported via expander	1 x internal SlimSAS for up to 4 x SAS 12Gb/s 1 x external OCUlink for JBOD up to 1024 SAS/ SATA deices
Controller	LSI SAS3108	LSI SAS3108	LSI SAS3008	LSI SAS3008
RAID	HW RAID 0/ 1/ 5/ 6/ 10/ 50/ 60 2GB DDR3 1866 cache memory	HW RAID 0/ 1/ 5/ 6/ 10/ 50/ 60 2GB DDR3 cache memory	SW RAID 0/ 1/ 1E/ 10 IR RAID	SW RAID 0/ 1/ 1E/ 10 IR RAID
Interface	PCIe 3.0 x8	PCIe 3.0 x8	PCIe 3.0 x8	PCIe 3.0 x8
Format	OCP mezzanine (Type1)	OCP mezzanine (Type1)	OCP mezzanine (Type1)	OCP mezzanine (Type1)
Dimension	110.85 x 78 mm	110.85 x 78 mm	110.85 x 78 mm	110.85 x 78 mm
Part Numbers	9CRAO558NR-00	9CRAO438NR-00	9CRAO338NR-00	9CRAO358NR-00



CMT4032

CMT4034

CMT2014

I/O	2 x M.2 sockets: Socket 3, M key Type 2280/ 22110 Supports PCIe interface SSD only	4 x M.2 sockets: Socket 3, M key Type 2280/ 22110 Supports PCIe interface SSD only	4 x M.2 sockets: Socket 3, M key Type 2242/ 2260/ 2280/ 22110 Supports PCIe interface SSD only
Controller	-	-	-
Interface	PCIe 3.0 x8	PCIe 3.0 x16	PCIe 3.0 x16
Format	PCIe type, low profile form factor	PCIe type, low profile form factor	PCIe type, full height form factor
Dimension	150 x 68.9mm	150 x 68.9mm	210 x 130mm
Part Numbers	9CMT4032NR-00	9CMT4034NR-00	9CMT2014NR-00

Security Module



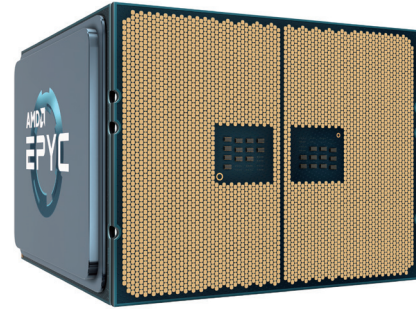
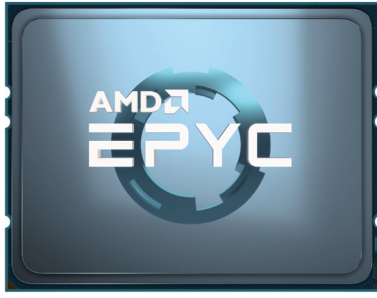
	CTM010	CTM000	GC-MUFL
I/O	-	-	-
Controller	Infineon SLB9670VQ2	Infineon SLB9665TT2.0	Infineon SLB9635TT1.2
Interface	Serial Peripheral Interface 2 x 7 pin	Low pin count interface 2 x 7 pin	Low pin count interface 2 x 7 pin
Format	-	-	-
Dimension	20 x 15 (mm)	20 x 15 (mm)	20 x 15 (mm)
Part Numbers	9CTM010NR-00	9CTM000NR-00	9CMUFLNR-00

Management Module



Ring Topology Kit	
I/O	1x GbE port
Controller	Realtek RTL8370N-VB Realtek RTL8211E-VB
Interface	-
Format	-
Dimension	CLSH10: 76x54mm CLBH020: 66x38mm
Part Numbers	6NH23NR48SR-00

AMD EPYC™ 7000 Series Processors



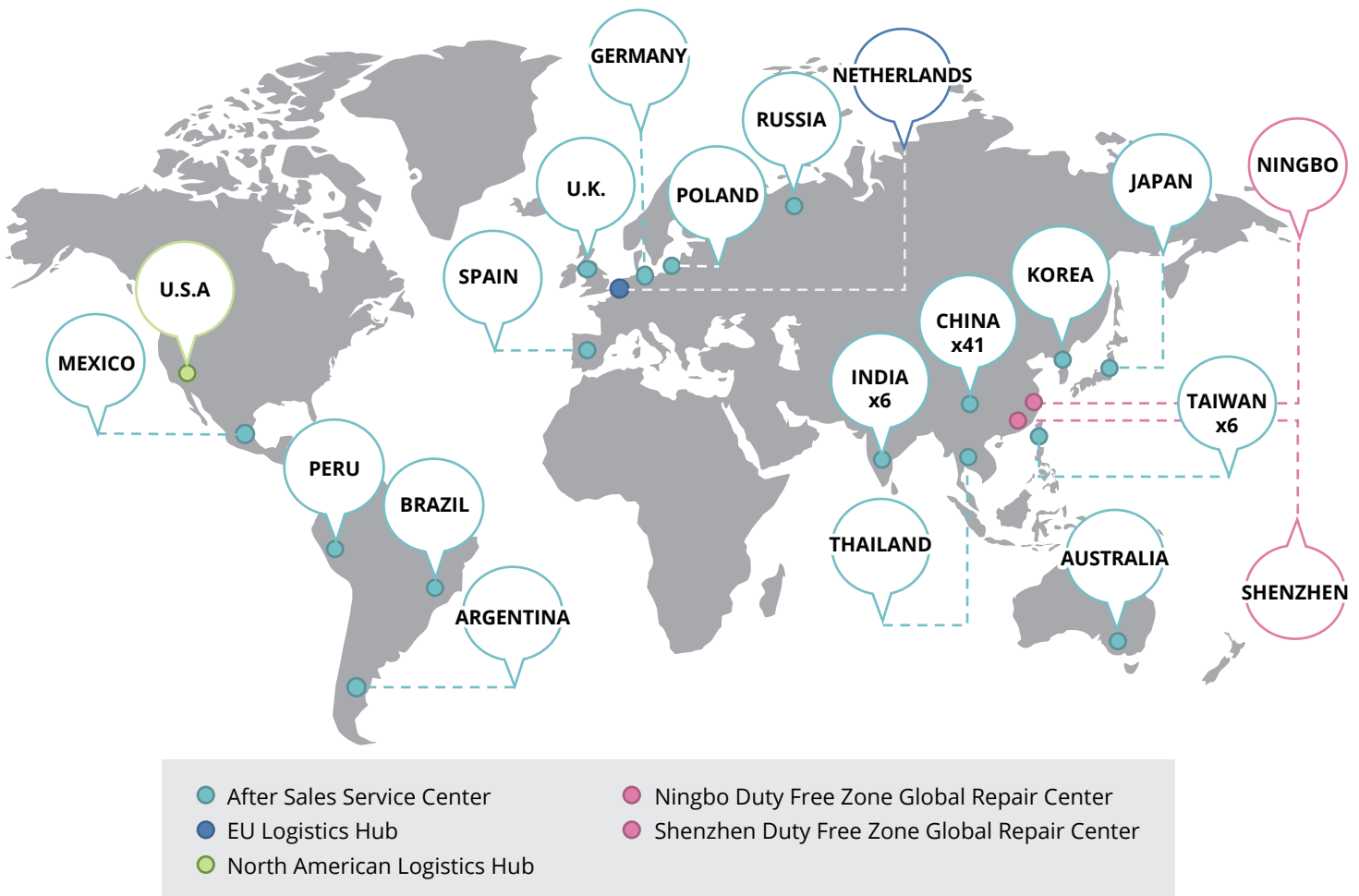
	7601	7551P	7551	7501
Cores	32	32	32	32
Threads	64	64	64	64
Max Boost Clock	3.2GHz	3GHz	3GHz	3.2GHz
Base Clock	2.2GHz	2GHz	2GHz	2.2GHz
TDP	180W	180W	180W	155/170W
Part Numbers	25PSA-111220-A0R	25PSA-111201-A0R	25PSA-111200-A0R	25PSA-111202-A0R

	7451	7401P	7401	7351P
Cores	24	24	24	16
Threads	48	48	48	32
Max Boost Clock	3.2GHz	3GHz	3GHz	2.9GHz
Base Clock	2.3GHz	2GHz	2GHz	2.4GHz
TDP	180W	155/170W	155/170W	155/170W
Part Numbers	25PSA-111230-A0R	25PSA-111204-A0R	25PSA-111203-A0R	25PSA-111221-A0R

	7351	7301	7281	7251
Cores	16	16	16	8
Threads	32	32	32	16
Max Boost Clock	2.9GHz	2.7GHz	2.7GHz	2.9GHz
Base Clock	2.4GHz	2.2GHz	2.1GHz	2.1GHz
TDP	155/170W	155/170W	155/170W	155/170W
Part Numbers	25PSA-111240-A0R	25PSA-111222-A0R	25PSA-112210-A0R	25PSA-112211-A0R

Global After Sales Service & Support

GIGABYTE's global after sales service and support division includes 68 physical repair & support centers located in 18 countries as well as authorized partners in an additional 12 countries.



Authorized Partner Locations:

- | | | | |
|------------|-----------|--------------|---------|
| Bangladesh | Indonesia | Philippines | Turkey |
| Dubai | Iraq | Russia | Vietnam |
| Egypt | Israel | Saudi Arabia | |
| Hong Kong | Malaysia | Singapore | |

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



Multi-level, multilingual telephone & online technical support



Globally located RMA & repair centers, onsite technical support services



Reverse logistics, product warehousing & component storage solutions

Please enquire with your sales representative about GIGABYTE's world-class technical support & repair services available in your local country or region.



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