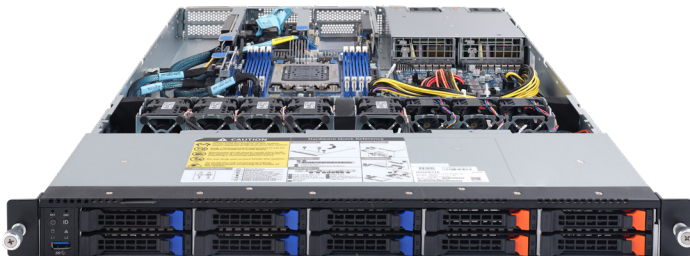


R162-Z11

Rack Server - 1U UP 10-Bay



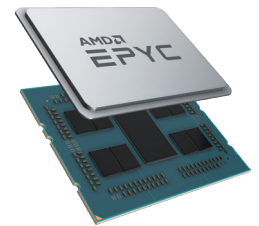
Features

- Compatible with 3 x NVIDIA Tesla® PCIe GPU cards
- Single AMD EPYC™ 7002 series processor family
- 8-Channel RDIMM/LRDIMM DDR4, 8 x DIMMs
- 2 x 1Gb/s LAN ports (Intel® I350-AM2)
- 1 x Dedicated management port
- 6 x 2.5" SATA and 4 x 2.5 NVMe hot-swap HDD/SSD
- Ultra-Fast M.2 with PCIe Gen3 x4 interface
- 3 x PCIe x16 expansion slots
- 1 x OCP 2.0 Gen3 x16 mezzanine slots
- Aspeed® AST2500 remote management controller
- 1200W 80 PLUS Platinum redundant PSU

AMD EPYC™ 7002 Series Processor (Rome)

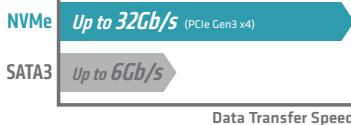
The next generation of AMD EPYC has arrived, providing incredible compute, IO and bandwidth capability – designed to meet the huge demand for more compute in big data analytics, HPC and cloud computing.

- ✓ Built on **7nm** advanced process technology, allowing for denser compute capabilities with lower power consumption
- ✓ Up to **64 core** per CPU, built using Zen 2 high performance cores and AMD's innovative chiplet architecture
- ✓ Supporting **PCIe Gen 4.0** with a bandwidth of up to 64GB/s, twice of PCIe Gen 3.0
- ✓ **Embedded security protection** to help defend your CPU, applications, and data



NVIDIA® Tesla® T4 Support

The R162 Series features three low profile PCIe 3.0 x16 expansion slots in the rear, which can be used to support three NVIDIA T4 GPU cards, making the R162 ideal for diverse CPU / GPU computing workloads in VDI, inferencing or deep learning.



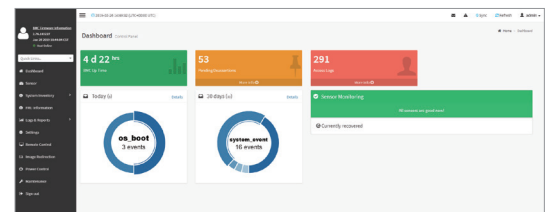
More M.2 Storage

GIGABYTE's AMD EPYC 7002 Series server platforms feature more M.2 drive capacity for ultra-fast NVMe storage – both onboard M.2 slots and extra capacity via optional riser cards.

GIGABYTE Management Console (AMI MegaRAC SP-X)

This GIGABYTE server product utilizes a AMI MegaRAC SP-X platform for BMC server management, with a feature rich and easy to use browser-based graphical user interface. Notable features include:

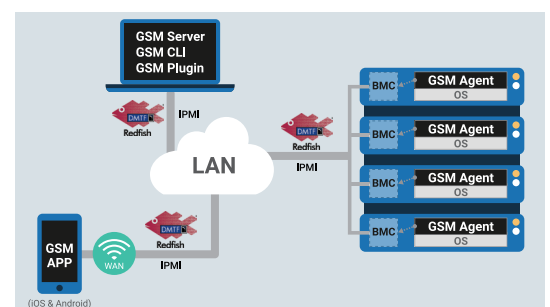
- **RESTful API support** (including the latest DMTF standards of Redfish) allows the administrator to integrate with 3rd party applications for server management
- **HTML5-based iKVM** remote management client included as a standard feature, no additional add-on license required to purchase
- **Detailed FRU information** from SMBIOS
- **Pre-event automatic video recording** feature from 10 to 30 seconds
- **SAS / RAID controller monitoring** feature



GIGABYTE Server Management (GSM)

GIGABYTE Server Management (GSM) is GIGABYTE's proprietary multiple server remote management software platform, available as a free download from each GIGABYTE server product page. GSM is compatible with either IPMI or Redfish (RESTful API) connection interfaces, and comprises the following sub-programs:

- **GSM Server** • **GSM CLI** • **GSM Agent** • **GSM Mobile** • **GSM Plugin**



Specification

Dimensions (WxHxD)	1U 438 x 43.5 x 730	Power Supply	2 x 80 PLUS Platinum 1200W redundant PSUs AC input: - 100-240V/ 12-7A, 50-60Hz - 200-240V/ 7A, 50-60Hz DC output: - 1200W - 12V, 80.5A (100-240V) - 12V, 97A (200-240V) - 12Vsb, 3A
Motherboard	MZ12-HD1	System Management	Aspeed® AST2500 management controller GIGABYTE Management Console (AMI MegaRAC SP-X) Dashboard JAVA Based Serial Over LAN HTML5 KVM Sensor Monitor (Voltage, RPM, Temperature, CPU Status ...etc.) Sensor Reading History Data FRU Information SEL Log in Linear Storage / Circular Storage Policy Hardware Inventory Fan Profile System Firewall Power Consumption Power Control LDAP / AD / RADIUS Support Backup & Restore Configuration Remote BIOS/BMC/CPLD Update Event Log Filter User Management Media Redirection Settings PAM Order Settings SSL Settings SMTP Settings
CPU	AMD EPYC™ 7002 series processor family Single processor, 7nm technology Up to 64-core, 128 threads per processor TDP up to 225W, cTDP up to 240W Conditional support 280W Non-supported NVIDIA Tesla GPU if using 280W CPU Compatible with AMD EPYC™ 7001 series processor	OS Compatibility	Windows Server 2016 (X2APIC/256T not supported) Windows Server 2019 Red Hat Enterprise Linux 7.6 (x64) or later Red Hat Enterprise Linux 8.0 (x64) or later SUSE Linux Enterprise Server 12 SP4 (x64) or later SUSE Linux Enterprise Server 15 SP1 (x64) or later Ubuntu 16.04.6 LTS (x64) or later Ubuntu 18.04.3 LTS (x64) or later VMware ESXi 6.5 EP15 or later VMware ESXi 6.7 Update3 or later Citrix Hypervisor 8.1.0
Socket	Socet SP3	Weight	Net Weight: 11.95 kg / Gross Weight: 20.5 kg
Chipset	System on Chip	Operating Properties	Operating temperature: 10°C to 35°C Operating humidity: 8%-80% (non-condensing) Non-operating temperature: -40°C to 60°C Non-operating humidity: 20%-95% (non-condensing) Ambient temperature limited to 30°C if using 280W CPU
Memory	8 x DIMM slots DDR4 memory supported only 8-Channel memory architecture RDIMM modules up to 64GB supported LRDIMM modules up to 128GB supported Memory speed: Up to 3200 MHz	Packaging Dimensions	985 x 588 x 250 mm
LAN	2 x 1GbE LAN ports (1 x Intel® I350-AM2) 1 x 10/100/1000 management LAN	Packaging Content	1 x R162-Z11 1 x CPU heatsink 1 x Rail kit
Video	Integrated in Aspeed® AST2500 2D Video Graphic Adapter with PCIe bus interface 1920x1200@60Hz 32bpp, DDR4 SDRAM	Part Numbers	Barebone package: 6NR162Z11MR-00 Spare parts: - Motherboard: 9MZ12HD2NR-00 - Rail kit: 25HB2-3A0202-K0R - CPU heatsink: 25ST1-44320M-A3R - Back plane board: 9CBP10A1NR-00 - Power supply: 25EPO-212002-F3S - M.2 Riser card - CMTP052: 9CMTP052NR-00 (as an option) - Riser card - CRSH01D: 9CRSH01DNR-00 - Riser card - CRS1060: 9CRS1060NR-00
Storage	6 x 2.5" SATA/SAS hot-swappable HDD/SSD bays 4 x 2.5" NVMe hot-swappable SSD bays * SAS card is required for SAS devices support * Backplane JP_SEL switch set from "00010" to "00000" (all OFF) if SAS RAID crad is installed	Expansion Slots	
SAS	-	Internal I/O	1 x M.2 slots, 1 x USB 3.0 header, 1 x TPM header, 1 x OCP 2.0 mezzanine slots, 1 x Front panel header, 1 x Back plane board header, 1 x IPMB connector, 1 x Clear CMOS jumper, 1 x BIOS recovery jumper
RAID	-	Front I/O	1 x USB 3.0, 1 x Power button with LED, 1 x ID button with LED, 1 x NMI button, 1 x Reset button, 2 x LAN activity LEDs, 1 x HDD activity LED, 1 x System status LED
Expansion Slots	Riser Card CRSH01D: 1 x PCIe x16 slots (Gen4 x16), LPHL Riser Card CRS1060: 2 x PCIe x16 slots (Gen3 x16), LPHL 1 x OCP 2.0 mezzanine slot with PCIe Gen3 x16 bandwidth (Type1, P1, P2, P3, P4) 1 x onboard M.2 slot: - M-key, PCIe Gen3 x4 - Supports NGFF-2242/2260/2280/22110 cards - CPU TDP is limited to 155W if using M.2 device NOTE: - Support is not provided for mixed GPU populations	Rear I/O	2 x USB 3.0, 1 x VGA, 2 x RJ45, 1 x MLAN, 1 x ID LED
Backplane I/O	Backplane P/N: 9CBP10A1NR-00 Speed and bandwidth: 10 x ports for PCIe x4	Backplane I/O	Backplane P/N: 9CBP10A1NR-00 Speed and bandwidth: 10 x ports for PCIe x4
TPM	1 x TPM header with SPI interface Optional TPM2.0 kit: CTM010	System Fans	5 x 40x40x56mm (23'000rpm) 3 x 40x40x28mm (18'000rpm)

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

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