

R282-Z93

Rack Server - 2U DP 12-Bay GPU sku



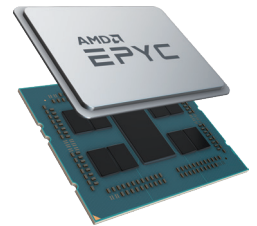
Features

- Supports up to 3 x double slot GPU cards
- Dual AMD EPYC™ 7002 series processor family
- 8-Channel RDIMM/LRDIMM DDR4, 32 x DIMMs
- 2 x 1Gb/s LAN ports (Intel® I350-AM2)
- 1 x Dedicated management port
- 12 x 3.5" SATA hot-swappable HDD/SSD bays
- Ultra-Fast M.2 with PCIe Gen3 x4 interface
- 5 x PCIe Gen4 x16 expansion slots
- 1 x OCP 3.0 Gen4 x16 mezzanine slot
- 1 x OCP 2.0 Gen3 x8 mezzanine slot
- Aspeed® AST2500 remote management controller
- 2000W 80 PLUS Platinum redundant power supply

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



AMD Radeon Instinct™ MI50 Support

This GIGABYTE server features support for AMD's Radeon Instinct™ MI50 compute card, designed to deliver high levels of performance for deep learning, high performance computing (HPC), cloud computing, and rendering systems.



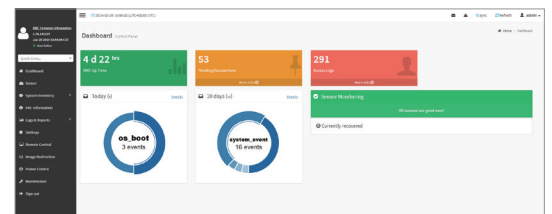
NVIDIA® Tesla® V100 Support

GIGABYTE's AMD EPYC server systems and motherboards are fully compatible and qualified to use with NVIDIA's Tesla® V100 GPU, an advanced data center GPU built to accelerate AI, HPC, and graphics. Powered by NVIDIA's Volta™ architecture and with 640 Tensor Cores, the Tesla® V100 has broken the 100 teraflops (TFLOPS) barrier of deep learning performance — enabling data scientists, researchers, and engineers to tackle challenges that were once impossible.

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:

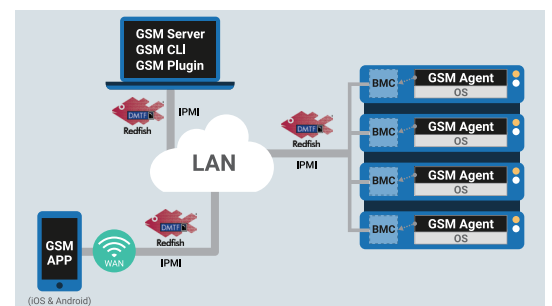
- **RESTful API support** (including the latest DMTF standards of Redfish) allows the administrator to integrate with 3rd party applications for server management
- **HTML5-based iKVM** remote management client included as a standard feature, no additional add-on license required to purchase
- **Detailed 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)	2U 438 x 87 x 730 mm	Power Supply	2 x 80 PLUS Platinum 2000W redundant PSUs AC Input: - 100-120V~/ 12A, 50-60Hz - 180-240V~/ 10A, 50-60Hz DC Input: - 240Vdc/ 10A DC output: - 1000W@ 100-120V, +12.2V/ 81.5A, +12Vsb/ 2.5A - 1600W@ 180-199V, +12.2V/ 131A, +12Vsb/ 2.5A - 1800W@ 200-220V, +12.2V/ 147.5A, +12Vsb/ 2.5A - 2000W@ 221-240V, +12V/ 163.5A, +12Vsb/ 2.5A
Motherboard	MZ92-FS0	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 Dual processors, 7nm Up to 64-core, 128 threads per processor TDP up to 225W, cTDP up to 240W Conditional support 280W NOTE: If only 1 CPU is installed, some PCIe or memory functions might be unavailable 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	Socket SP3	Weight	Net Weight: 18.5 kg / Gross Weight: 25.5 kg
Chipset	System on Chip	System Fans	4 x 80x80x38mm (16,300rpm)
Memory	32 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*/ 2933 MHz * Follow BIOS setting and memory QVL list if running 3200 Mhz with 2DPC	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
LAN	2 x 1GbE LAN ports (1 x Intel® I350-AM2) 1 x 10/100/1000 management LAN	Packaging Dimensions	982 x 588 x 268 (mm)
Video	Integrated in Aspeed® AST2500 2D Video Graphic Adapter with PCIe bus interface 1920x1200@60Hz 32bpp, DDR4 SDRAM	Packaging Content	1 x R282-Z93 system, 2 x CPU heatsinks, 1 x Rail kit
Storage	12 x 3.5" or 2.5 SATA/SAS hot-swap HDD/SSD bays from onboard SATA ports Default configuration supports: 12 x SATA drives or 4 x SATA drives 8 x SAS drives via SAS HBA SAS card is required to enable the drive bays	Part Numbers	Barebone package: 6NR282Z93MR-00 Spare parts: - Motherboard: 9MZ92FS0NR-00 - Rail kit: 25HB2-3A0202-K0R - CPU heatsink: 25ST1-44320G-A0R - Back plane board_12-port: 9CBP20C4NR-00 - Front panel board: 9CFP2001NR-00 - Fan module: 25ST2-883829-D0R - 4 x NVMe optional kit: 6NR282Z9DSR-00-100 - Power supply: 25EP0-22000A-L0S
Expansion Slots	Riser Card CRS2014: 1 x PCIe x16 slot (Gen4 x16), FHFL Riser Card CRS2026: 2 x PCIe x16 slot (Gen4 x16), FHFL Riser Card CRS2026: 2 x PCIe x16 slot (Gen4 x16), FHFL 1 x OCP 3.0 mezzanine slot with PCIe Gen4 x16 bandwidth from CPU_0; Supported NCSI function 1 x OCP 2.0 mezzanine slot with PCIe Gen3 x8 bandwidth (Type1, P1, P2); Supported NCSI function 1 x M.2 slot: - M-key, PCIe Gen3 x4 - Supports NGFF-2242/2260/2280/22110 cards - CPU TDP is limited to 225W if using M.2 device NOTE: Support is not provided for mixed GPU populations	Internal I/O	1 x M.2 slot, 1 x USB 3.0 header, 1 x COM header, 1 x TPM 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
Internal I/O	1 x M.2 slot, 1 x USB 3.0 header, 1 x COM header, 1 x TPM 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	Front I/O	2 x USB 3.0, 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, 1 x HDD activity LED, 2 x LAN activity LEDs, 2 x RJ45, 1 x MLAN (Primary port)
Front I/O	2 x USB 3.0, 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, 1 x HDD activity LED, 2 x LAN activity LEDs, 2 x RJ45, 1 x MLAN (Primary port)	Rear I/O	2 x USB 3.0, 1 x VGA, 2 x RJ45, 1 x MLAN, 1 x ID button with LED
Rear I/O	2 x USB 3.0, 1 x VGA, 2 x RJ45, 1 x MLAN, 1 x ID button with LED	Backplane I/O	9CBP20C4NR-00: 12 x SATA/SAS ports Speed and bandwidth: SATA 6Gb/s or SAS 12Gb/s per port
Backplane I/O	9CBP20C4NR-00: 12 x SATA/SAS ports Speed and bandwidth: SATA 6Gb/s or SAS 12Gb/s per port	TPM	1 x TPM header with SPI interface Optional TPM2.0 kit: CTM010

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

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