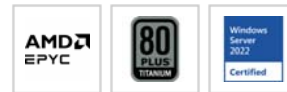


# G293-Z43 (rev. AAP1)

HPC/AI Server - AMD EPYC™ 9004 - 2U DP 16 x PCIe Gen5 GPUs | Application: AI , AI Training , AI Inference & HPC

- Supports up to 16 x Single slot Gen5 GPU cards
- AMD EPYC™ 9004 Series processors
- Dual processor, 5nm technology
- 12-Channel RDIMM DDR5, 24 x DIMMs
- Dual ROM Architecture
- 2 x 10Gb/s BASE-T LAN ports (Broadcom® BCM57416)
- 1 x Dedicated management port
- 4 x 2.5" Gen5 NVMe/SATA/SAS hot-swappable bays
- 4 x 2.5" SATA/SAS hot-swappable bays
- 16 x FHFL PCIe Gen5 x16 slots for GPUs
- 2 x LP PCIe Gen5 x16 slots for add-on cards
- Dual 3000W (240V) 80 PLUS Titanium redundant power supply



Compare



OVERVIEW

**SPECIFICATIONS**

SUPPORT

RESOURCES

BUY

G293-Z43 (rev. AAP1)

## Dimensions (WxHxD, mm)

2U  
448 x 87.5 x 800

## Motherboard

MZ43-G20

## CPU

AMD EPYC™ 9004 series processors  
Dual processor, 5nm technology  
Up to 32-core, 64 threads per processor  
CPU TDP up to 210W

**cTDP 240W supported at ambient 30°C**

**NOTE: If only 1 CPU is installed, some PCIe or memory functions might be unavailable**

## Socket

2 x LGA 6096  
Socket SP5

## Chipset

System on Chip

## Memory

24 x DIMM slots  
DDR5 memory supported only  
12-Channel memory architecture  
RDIMM modules up to 96GB supported  
3DS RDIMM modules up to 256GB supported  
Memory speed: Up to 4800 MHz

## LAN

**Rear side:**  
2 x 10Gb/s BASE-T LAN ports (1 x Broadcom® BCM57416)  
Support NCSI function

1 x 10/100/1000 management LAN

## Video

Integrated in Aspeed® AST2600  
2D Video Graphic Adapter with PCIe bus interface  
1920x1200@60Hz 32bpp, DDR4 SDRAM

## Storage

**Front side:**  
4 x 2.5" Gen5 NVMe/SATA/SAS hot-swappable bays  
4 x 2.5" SATA/SAS hot-swappable bays  
- (NVMe from CPU\_1, SATA from CPU\_1)

**SAS card is required for SAS devices support**

## SAS

Depends on SAS Add-on card

## RAID

N/A

#### Expansion Slots

##### Riser Card CRSG742 x 2

- 8 x PCIe x16 (Gen5 x16) FHFL slots, from PEX89088, for GPUs

##### Riser Card CRSG743 x 2

- 8 x PCIe x16 (Gen5 x16) FHFL slots, from PEX89088, for GPUs

##### Riser Card CRSG01F x 2

- 2 x PCIe x16 (Gen5 x16) low-profile slots, from CPU\_0

- Maximum limitation of GPU card: 285mm (L) x 111.5mm (W) x 39.5mm (H)

- System is validated for population with a uniform GPU model

- Support is not provided for mixed GPU populations

- For the latest GPU cards QVL, please contact your GIGABYTE representative

#### Internal I/O

1 x TPM header

#### Front I/O

1 x Power button with LED

1 x ID button with LED

2 x LAN activity LEDs

1 x HDD activity LED

1 x System status LED

1 x Reset button

#### Rear I/O

2 x USB 3.2 Gen1

1 x VGA

2 x RJ45

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

#### Backplane I/O

Speed and bandwidth:

PCIe Gen5 x4 or SATA 6Gb/s or SAS 12Gb/s

#### TPM

1 x TPM header with SPI interface

Optional TPM2.0 kit: [CTM010](#)

#### Power Supply

Dual 3000W (240V) 80 PLUS Titanium redundant power supply

AC Input:

- 100-127V~/ 15.5A, 50-60Hz

- 200-220V~/ 15.5A, 50-60Hz

- 220-240V~/ 15.5A, 50-60Hz

DC Input:

- 240Vdc/ 15.5A

DC Output:

- Max 1000W/ 100-127V~

+ 12.2V/ 81A

+ 12Vsb/ 3A

- Max 2600W/ 200-220V~

+ 12.2V/ 213A

+ 12Vsb/ 3A

- Max 3000W/ 220-240V~ or 240Vdc Input

+ 12.2V/ 245A

+ 12Vsb/ 3A

**NOTE: The system power supply requires C19 power cord**

#### System Management

Aspeed® AST2600 management controller

GIGABYTE Management Console (AMI MegaRAC SP-X) web interface

Dashboard

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

Advanced power capping

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

#### OS Compatibility

Please refer to OS compatibility table in support page

#### Additional certifications:

[Windows Server 2022 \(x64\)](#)

#### System Fans

8 x 80x80x38mm (18,300rpm)

#### 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)

#### Packaging Dimensions

1133 x 724 x 261 mm

#### Packaging Content

1 x G293-Z43

2 x CPU heatsinks

1 x L-shape Rail kit

#### Part Numbers

- Barebone package: 6NG293Z43DR000AAP1\*

- Motherboard: 9MZ43G20UR-000

- L-shape Rail kit: 25HB2-A86102-K0R

- CPU heatsink: 25ST1-243105-A0R/25ST1-553202-A0R

- Backplane board - CBPG086: 9CBPG086NR-00

- Fan module: 25ST2-88382R-S1R

- Riser card - CRSG01F: 9CRSG01FNR-00

- Riser card - CRSG742: 9CRSG742NR-00

- Riser card - CRSG743: 9CRSG743NR-00

- Power supply: 25EP0-230005-G1S

#### Optional parts:

- C19 power cord 125V/15A (US): 25CP1-018000-Q0R

- C19 power cord 250V/16A (EU): 25CP3-01830H-Q0R

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\* Advertised performance is based on maximum theoretical interface values from respective Chipset vendors or organization who defined the interface specification. Actual performance may vary by system configuration.

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\* Due to standard PC architecture, a certain amount of memory is reserved for system usage and therefore the actual memory size is less than the stated amount.