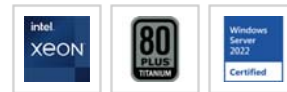


# G293-S40 (rev. AAP1)

HPC/AI Server - 4th Gen Intel® Xeon® - 2U DP 8 x PCIe Gen4 GPUs | Application: AI , AI Training , AI Inference & HPC

- Supports up to 8 x Dual slot Gen4 GPU cards
- 4th Gen Intel® Xeon® Scalable Processors
- Dual processor, LGA 4677
- 8-Channel RDIMM DDR5 per processor, 24 x DIMMs
- Dual ROM Architecture
- 2 x 10Gb/s BASE-T LAN ports (Intel® X710-AT2)
- 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
- 8 x FHFL PCIe Gen4 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

### Dimensions (WxHxD, mm)

2U  
448 x 87.5 x 800

### Motherboard

MS43-G20

### CPU

4th Generation Intel® Xeon® Scalable Processors  
Intel® Xeon® Platinum Processor, Intel® Xeon® Gold Processor, Intel® Xeon® Silver Processor  
Dual processor, CPU TDP up to 225W

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

### Socket

2 x LGA 4677  
Socket E

### Chipset

Intel® C741 Chipset

### Memory

24 x DIMM slots  
DDR5 memory supported only  
8-Channel memory per processor architecture  
RDIMM modules up to 96GB supported  
3DS RDIMM modules up to 256GB supported  
Memory speed: Up to 4800 MHz (1DPC), 4400 MHz (2DPC)

### LAN

**Rear side:**  
2 x 10Gb/s BASE-T LAN ports (Intel® X710-AT2)  
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  
- (2 x NVMe from CPU\_0, 2 x NVMe from CPU\_1)

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

### SAS

Depends on SAS Add-on card

### RAID

Intel SATA RAID 0/1/10/5

#### Expansion Slots

##### Riser Card CRSG624 x 2:

- 4 x PCIe x16 (Gen4 x16) FHFL slots, from PEX88048, for GPUs

##### Riser Card CRSG625 x 2:

- 4 x PCIe x16 (Gen4 x16) FHFL slots, from PEX88048, for GPUs

##### Riser Card CRSG01F x 2:

- 1 x PCIe x16 (Gen5 x16) low  
- 1 x PCIe x16 (Gen5 x16) low-profile slot, from CPU\_1

- 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  
1 x VROC connector

#### 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

##### DI

- 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~  
+ 12.2V/ 240A  
+ 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-S40  
2 x CPU heatsinks  
6 x Carrier clips  
1 x L-shape Rail kit

#### Part Numbers

- Barebone package: 6NG293S40DR000AAP1\*  
- Motherboard: 9MS43G20UR-000  
- L-shape Rail kit: 25HB2-A86102-K0R  
- CPU heatsink: 25ST1-35320F-C1R/25ST1-453207-C1R  
- Backplane board - CBPG086: 9CBPG086NR-00  
- Fan module: 25ST2-88382R-S1R  
- Riser card - CRSG01F: 9CRSG01FNR-00  
- Riser card - CRSG624: 9CRSG624NR-00  
- Riser card - CRSG625: 9CRSG625NR-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.