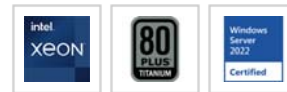


G293-S41 (rev. AAP1)

HPC/AI Server - 4th Gen Intel® Xeon® - 2U DP 4 x PCIe Gen5 GPUs | Application: AI , AI Training , AI Inference & HPC

- Supports up to 4 x Dual slot Gen5 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
- 4 x FHFL PCIe Gen5 x16 or 8 x FHFL PCIe Gen5 x8 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-S41 (rev. AAP1)

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 CRSG821 x 2:

- 2 x PCIe x16 (Gen5 x16) or 4 x PCIe x16 (Gen5 x8) FHFL slots, from PS7101, for GPUs

Riser Card CRSG822 x 2:

- 2 x PCIe x16 (Gen5 x16) or 4 x PCIe x16 (Gen5 x8) FHFL slots, from PS7101, for GPUs

Riser Card CRSG01F x 2:

- 1 x PCIe x16 (Gen5 x16) low-profile slot, from CPU_0
- 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

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~

+ 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-S41
2 x CPU heatsinks
6 x Carrier clips
1 x L-shape Rail kit

Part Numbers

- Barebone package: 6NG293S41DR000AAP1*
- 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 - CRSG821: 9CRSG821NR-00
- Riser card - CRSG822: 9CRSG822NR-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

* The entire materials provided herein are for reference only. GIGABYTE reserves the right to modify or revise the content at anytime without prior notice.

* 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.

* All trademarks and logos are the properties of their respective holders.

* 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.