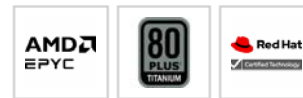# G493-ZB2 (rev. AAP1)

HPC/AI Server - AMD EPYC™ 9004 - 4U DP 8 x PCIe Gen5 GPUs | Application: AI , AI Training , AI Inference & HPC

- Supports up to 8 x Dual slot Gen5 GPU cards
- AMD EPYC™ 9004 series processors
- AMD EPYC™ 9004 series processors with AMD 3D V-Cache™ Technology
- Dual processor, 5nm technology
- 12-Channel RDIMM DDR5, 48 x DIMMs
- Dual ROM Architecture
- 2 x 1Gb/s BASE-T LAN ports (Intel® I350-AM2)
- 1 x Dedicated management port
- 12 x 2.5" Gen5 NVMe/SATA/SAS hot-swappable bays
- 2 x M.2 slots with PCIe Gen3 x4 interface
- 8 x FHFL PCIe Gen5 x16 slots for GPUs
- 4 x FHFL PCIe Gen5 x16 slots
- 2 x LP PCIe Gen5 x16 slots on front side
- 3+1 3000W (240V) 80 PLUS Titanium redundant power supplies

Request a Quote

☐ Compare

OVERVIEW **SPECIFICATIONS** SUPPORT RESOURCES BUY

Dimensions (WxHxD, mm)

4U
448 x 176 x 880

Motherboard

MZB3-G41

CPU

AMD EPYC™ 9004 series processors
AMD EPYC™ 9004 series processors with AMD 3D V-Cache™ Technology
Dual processor, 5nm technology
*Up to 128-core, 256 threads per processor
cTDP up to 300W at ambient 35°C

*cTDP supported up to 400W under limited thermal conditions. Please contact technical support for more details.

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

48 x DIMM slots
DDR5 memory supported only
12-Channel memory architecture per processor
RDIMM modules up to 96GB supported
3DS RDIMM modules up to 256GB supported
Memory speed: Up to 4800 MHz (1DPC), 3600 MHz (2DPC)

LAN

Front side:
2 x 1Gb/s BASE-T LAN ports (1 x Intel® I350-AM2)
NCSI function supported

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:
12 x 2.5" Gen5 NVMe/SATA/SAS hot-swappable bays
- (2 x NVMe from CPU_0, 2 x NVMe from CPU_1, 4 x NVMe from PEX89144_0, 4 x NVMe from PEX89144_1)

SAS card is required for SAS devices support

SAS

Depends on SAS Add-on card

RAID

N/A

Expansion Slots

4 x PCIe x16 (Gen5 x16) FHFL slots, from PEX89144_0, for GPUs
4 x PCIe x16 (Gen5 x16) FHFL slots, from PEX89144_1, for GPUs

2 x PCIe x16 (Gen5 x16) FHFL slots, from PEX89144_0
2 x PCIe x16 (Gen5 x16) FHFL slots, from PEX89144_1

1 x PCIe x16 (Gen5 x16) low-profile slot on front side, from CPU_0
1 x PCIe x16 (Gen5 x16) low-profile slot on front side, from CPU_1

- System is validated for population with a uniform GPU model
- Support is not provided for mixed GPU populations

1 x M.2 slot:
- M-key
- PCIe Gen3 x4, from CPU_0
- Supports 2280/22110 cards

1 x M.2 slot:
- M-key
- PCIe Gen3 x4, from CPU_1
- Supports 2280/22110 cards

Internal I/O

2 x M.2 slots
1 x TPM header

Front 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
1 x NMI button
1 x System status LED
1 x HDD access LED

Rear I/O

N/A

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

3+1 3000W (240V) 80 PLUS Titanium redundant power supplies

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.)
                   ory 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:
Red Hat Enterprise Linux 9.0 (x64) or later

System Fans

6 x 60x60x38mm (23,000rpm)

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

1200 x 800 x 444 mm w/ pallet

Packaging Content

1 x G493-ZB2
2 x CPU fansinks
1 x L-shape Rail kit