

G242-Z12 (rev. A00)

HPC Server - 2U UP 4 x GPU Gen4 Server | Application: AI, AI Training, AI Inference & HPC

- Hardware-level root of trust support
- Up to 4 x NVIDIA® PCIe Gen4 GPU cards
- AMD EPYC™ 7003 processors with AMD 3D V-Cache™ Technology
- Single AMD EPYC™ 7003 series processors
- 8-Channel RDIMM/LRDIMM DDR4 per processor, 8 x DIMMs
- 1 x dedicated management port
- 4 x SATA 3.5" hot-swappable HDD/SSD bays on front side
- 2 x 2.5" Gen4 U.2/SAS/SATA hot-swappable HDD/SSD bays in rear side
- 2 x PCIe Gen4 expansion slots
- 1 x OCP 3.0 Gen4 x16 mezzanine slot
- 2 x 80 PLUS Platinum 1600W (240V) redundant PSU



ОБЗОР **СПЕЦИФИКАЦИИ** ПОДДЕРЖКА RESOURCES BUY

Dimensions (WxHxD, mm)

2U
438 x 87.5 x 820

Motherboard

MZ12-HD6

CPU

AMD EPYC™ 7003 processors with AMD 3D V-Cache™ Technology
AMD EPYC™ 7003 series processor family
Single processor, 7nm technology
Up to 64-core, 128 threads per processor
cTDP up to 280W

Compatible with AMD EPYC™ 7002 series processor family

Socket

Socket SP3

Chipset

System on Chip

Memory

8 x DIMM slots
DDR4 memory supported only
8-Channel memory architecture
RDIMM modules up to 128GB supported
LRDIMM modules up to 128GB supported
3DS RDIMM/LRDIMM modules up to 256GB supported
Memory speed: Up to 3200 MHz

LAN

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

Audio

N/A

Storage

Front side: 4 x 3.5" SATA hot-swappable HDD/SSD bays
2.5" HDD/SSD supported
SATA devices supported only

Rear side: 2 x 2.5" Gen4 U.2/SAS/SATA hybrid hot-swappable HDD/SSD bays

SAS card is required for SAS devices support

SAS

Depend on SAS Card

RAID

N/A

Peripheral Drives

N/A

Expansion Slots

4 x PCIe x16 slots (Gen4 x16 bus) for GPU cards

Riser Card CRSG120:

- 1 x PCIe x16 slot (Gen4 x16 or x8 bus), FHHL
- 1 x PCIe x8 slot (Gen4 x0 or x8 bus), FHHL

1 x OCP 3.0 mezzanine slot with PCIe Gen4 x16 bandwidth
NCSI function supported

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

Internal I/O

1 x TPM header
1 x Front panel header

Front I/O

1 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

Rear I/O

2 x USB 3.0
1 x VGA
1 x MLAN
1 x ID LED

Backplane I/O

Front side_CBP041: 4 x SATA/SAS ports
Rear side_CBP021: 2 x NVMe/SATA/SAS ports
Speed and bandwidth: SATA 6Gb/s, SAS 12Gb/s or PCIe x4 per port

TPM

1 x TPM header with SPI interface
Optional TPM2.0 kit: [CTM010](#)

Power Supply

2 x 1600W redundant PSUs
80 PLUS Platinum

AC Input:
- 100-120V~/ 12A, 50-60Hz
- 200-240V~/ 10A, 50-60Hz

DC Input:
- 240Vdc/ 10A

DC Output:
- Max 1000W/ 100-120V~
+ 12V/ 81.5A
+ 12Vsb/ 2.5A
- Max 1600W/ 200-240V~ or 240Vdc Input
+ 12V/ 133A
+ 12Vsb/ 2.5A

System Management

Aspeed® AST2600 management controller
GIGABYTE Management Console (AMI MegaRAID 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
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

Windows Server 2016 (x2APIC/256T not supported)
Windows Server 2019
Windows Server 2022

Red Hat Enterprise Linux 8.3 (x64) or later
Red Hat Enterprise Linux 9.0 (x64) or later

SUSE Linux Enterprise Server 12 SP5 (x64) or later
SUSE Linux Enterprise Server 15 SP2 (x64) or later

Ubuntu 18.04.5 LTS (x64) or later
Ubuntu 20.04 LTS (x64) or later
Ubuntu 22.04 LTS (x64) or later

VMware ESXi 6.7 Update3 P03 or later
VMware ESXi 7.0 Update1 or later
VMware ESXi 8.0 or later

Citrix Hypervisor 8.2.0 or later

System Fans

5 x 80x80x38mm (16,300rpm)

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

1077 x 679 x 300 mm

Packaging Content

1 x G242-Z12
1 x CPU heatsink
1 x Rail kit