## **GIGABYTE**<sup>™</sup>

# G593-ZD2-LAX1

### HPC/AI Server - 5U DP NVIDIA HGX<sup>™</sup> H100 8-GPU





#### Features

- CPU+GPU Direct liquid cooling solution
- 5U server system with NVIDIA HGX<sup>™</sup> H100 8-GPU
- 900GB/s GPU-to-GPU bandwidth with NVLink<sup>®</sup> and NVSwitch<sup>™</sup>
- Dual AMD EPYC<sup>™</sup> 9004 Series Processors
- 12-Channel RDIMM DDR5, 24 x DIMMs
- Dual ROM Architecture
- 2 x 10Gb/s LAN ports via Intel® X710-AT2
- 2 x M.2 slots with PCIe Gen3 x4 and x1 interface
- 8 x 2.5" Gen5 NVMe hot-swappable bays
- 4 x FHHL PCIe Gen5 x16 slots
- 8 x LP PCIe Gen5 x16 slots
- 4+2 3000W 80 PLUS Titanium redundant power supplies

#### Application

AI, AI Inference, AI Training, High-Performance Computing

#### **Specification**

| 5U (W447 x H219.7 x D945 mm)   | ТРМ  | 1 x TPM header with SPI interface (Optional TPM2.0 kit: CTM010)   |
|--|--|---|
| MZB3-G43   | Backplane<br>Board   | Speed and bandwidth:<br>PCle Gen5 x4 or SATA 6Gb/s or SAS-4 24Gb/s  |
| AMD EPYC <sup>™</sup> 9004 Series processors<br>AMD EPYC <sup>™</sup> 9004 Series processors with AMD 3D V-Cache <sup>™</sup><br>Dual processor, 5nm technology (LGA 6096 Socket SP5)<br>cTDP up to 400W   | Power Supply   | 4+2 3000W 80 PLUS Titanium redundant power supply<br>AC Input: 115-240V<br>*The system power supply requires C19 power cord.  |
| System on Chip   | System<br>Management   | ASPEED® AST2600 management controller<br>GIGABYTE Management Console (AMI MegaRAC SP-X)   |
| 24 x DIMM slots, 12-Channel DDR5 memory<br>RDIMM modules up to 96GB supported<br>3DS RDIMM modules up to 256GB supported<br>Memory speed: Up to 4800 MT/s  | OS<br>Compatibility  | Windows Server, Red Hat Enterprise Linux Server, VMware ESXi,<br>SUSE Linux Enterprise, Ubuntu Server, Citrix Hypervisor  |
| 2 x 10Gb/s LAN ports (1 x Intel® X710-AT2) - Support NCSI function   | System Fans  | 4 x 40x40x56mm (32,000rpm), 3 x 60x60x56mm (24,000rpm),<br>4 x 40x40x28mm (25,000rpm), 4 x 80x80x80mm (17,000rpm)   |
| Integrated in ASPEED® AST2600 - 1 x VGA port   | Operating<br>Properties  | Operating temperature: 10°C to 35°C<br>Operating humidity: 8-80% (non-condensing)<br>Non-operating temperature: -40°C to 60°C<br>Non-operating humidity: 20%-95% (non-condensing)   |
| Storage8 x 2.5" Gen5 NVMe/SATA/SAS-4 hot-swappable bays<br>*Storage card is required to support SATA and SAS drives.1 x M.2 slot: M-key, PCIe Gen3 x4, supports 2280/22110 cards<br>1 x M.2 slot: M-key, PCIe Gen3 x1, supports 2280/22110 cards |  |   |
|  | Packaging<br>Content   | 1 x G593-ZD2-LAX1, 1 x CoollT CPU cold plate loop,<br>1 x L-shape Rail kit<br>Packaging Dimensions: 1200 x 890 x 700 mm   |
| Liquid cooled NVIDIA HGX™ H100 with 8 x SXM5 GPUs (4-root ports)<br>8 x PCIe Gen5 x16 low-profile slots<br>4 x PCIe Gen5 x16 FHHL slots  | Part Numbers   | Barebone w/ NVIDIA module: 6NG593ZD2DR000LAX1*<br>- CoolIT CPU cold plate loop: 25ST7-20000I-C4R<br>- L-shape Raii kit: 25HB2-A96102-K0R<br>- Power supply: 25EP0-23000J-D0S<br>- C19 power cord 125V/15A (US): 25CP1-018000-Q0R (optional)<br>- C19 power cord 250V/16A (EU): 25CP3-01830H-Q0R (optional)<br>- C19 power cord 125V/15A (JP): 25CP3-01830B-Q0R (optional) |
| Front: 2 x USB 3.2 Gen1, 1 x VGA, 2 x RJ45, 1 x MLAN (default)<br>Rear: 1 x MLAN<br>Internal: 1 x TPM header   |  |   |
|  | MZB3-G43AMD EPYC™ 9004 Series processors<br>AMD EPYC™ 9004 Series processors with AMD 3D V-Cache™<br>Dual processor, 5nm technology (LGA 6096 Socket SP5)<br>crDP up to 400WSystem on Chip24 x DIMM slots, 12-Channel DDR5 memory<br>RDIMM modules up to 96GB supported<br>3DS RDIMM modules up to 256GB supported<br>Memory speed: Up to 4800 MT/s2 x 10Gb/s LAN ports (1 x Intel® X710-AT2) - Support NCSI function<br>1 x 10/100/1000 management LANIntegrated in ASPEED® AST2600 - 1 x VGA port8 x 2.5" Gen5 NVMe/SATA/SAS-4 hot-swappable bays<br>*Storage card is required to support SATA and SAS drives.<br>1 x M.2 slot: M-key, PCIe Gen3 x4, supports 2280/22110 cards<br>1 x M.2 slot: M-key, PCIe Gen3 x1, supports 2280/22110 cards<br>1 x M.2 slot: M-key, PCIe Gen3 x1, supports 2280/22110 cards<br>1 x M.2 slot: M-key, PCIe Gen3 x1, supports 2280/22110 cards<br>1 x M.2 slot: M-key, PCIe Gen3 x1, supports 2280/22110 cards<br>1 x M.2 slot: M-key, PCIe Gen3 x1, supports 2280/22110 cards<br>1 x M.2 slot: M-key, PCIe Gen3 x1, supports 2280/22110 cards<br>1 x M.2 slot: M-key, PCIe Gen3 x1, supports 2280/22110 cards<br>1 x M.2 slot: M-key, PCIe Gen3 x1, supports 2280/22110 cards<br>1 x M.2 slot: M-key, PCIe Gen3 x1, supports 2280/22110 cards<br>1 x M.2 slot: M-key, PCIe Gen3 x1, supports 2280/22110 cards<br>1 x M.2 slot: M-key, PCIe Gen3 x1, supports 2280/22110 cards<br>1 x M.2 slot: M-key, PCIe Gen3 x1, supports 2280/22110 cards<br>1 x M.2 slot: M-key, PCIe Gen3 x1, supports 2280/22110 cards<br>1 x M.2 slot: M-key, PCIe Gen3 x1, supports 2280/22110 cards<br>1 x M.2 slot: M-key, PCIe Gen3 x1, supports 2280/22110 cards<br>1 x M.2 slot: M-key, PCIe Gen3 x1, supports 2280/22110 cards<br>1 x M.2 slot: M-key, PCIe Gen3 x1, supports 2280/22110 cards<br>1 x M.2 slot: M-key, PCIe Gen3 x1, supports 2280/22110 cards<br>1 x M.2 slot: M-key, PCIe Gen3 x1, supports 2280/22110 cards<br>1 x M.2 slot: M- | MZB3-G43Backplane<br>BoardAMD EPYCTM 9004 Series processors<br>AMD EPYCTM 9004 Series processors with AMD 3D V-CacheTM<br>Dual processor, 5nm technology (LGA 6096 Socket SP5)<br>  |



#### Learn more at https://www.GIGABYTE.com/enterprise

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