

G593-ZX1-LAX1 (Rev. 3.x)

HPC/AI Server - AMD EPYC™ 9005/9004 -
5U DP AMD Instinct™ MI300X 8-GPU DLC



Key Features

- Liquid-cooled 8 x AMD Instinct™ MI300X OAM GPUs
- CPU+GPU direct liquid cooling solution with leak detection
- Dual AMD EPYC™ 9005/9004 Series Processors
- 12-Channel DDR5 RDIMM, 24 x DIMMs
- 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/SATA/SAS-4 hot-swap bays
- 4 x FHHL PCIe Gen5 x16 slots
- 8 x LP PCIe Gen5 x16 slots
- 4+2 3000W 80 PLUS Titanium redundant power supplies

Applications

AI Platform, AI Training Server, AI Inference Server, High-Performance Computing Server...

Specification

Dimensions	5U (W447 x H219.7 x D945 mm)	Modular GPU	Liquid-cooled 8 x AMD Instinct™ MI300X OAM GPUs
Motherboard	MZB3-G43	PCIe Expansion Slots	4 x FHHL PCIe Gen5 x16 8 x LP PCIe Gen5 x16
CPU	AMD EPYC™ 9005 Series Processors AMD EPYC™ 9004 Series Processors Dual processor, cTDP up to 500W	I/O Ports	Front: 2 x USB 3.2 Gen1, 1 x VGA, 2 x RJ45, 1 x MLAN (default) Rear: 1 x MLAN
OS Compatibility	OS Support List	Backplane Board	PCIe Gen5 x4 or SATA 6Gb/s or SAS-4 24Gb/s
Socket	2 x LGA 6096 (Socket SP5)	TPM	1 x TPM header (SPI), Optional TPM2.0 kit: CTM010
Chipset	System on Chip	Power Supply	4+2 3000W 80 PLUS Titanium redundant power supplies AC Input: 115-240V *The system power supply requires C19 power cord.
Memory	12-Channel DDR5 RDIMM, 24 x DIMMs [EPYC 9005] Up to 6400 MT/s [EPYC 9004] Up to 4800 MT/s	System Fans	Motherboard: 2 x 40x40x56mm / 3 x 60x60x56mm PCIe slots: 4 x 40x40x28mm / 2 x 40x40x56mm GPU tray: 4 x 80x80x80mm
LAN	Front: 2 x 10Gb/s LAN (1 x Intel® X710-AT2), Support NCSI 1 x 10/100/1000 Mbps Management LAN Rear: 1 x 10/100/1000 Mbps Management LAN	Operating Properties	Operating: 10°C to 30°C, 8% to 80% (non-condensing) Non-operating: -40°C to 60°C, 20% to 95% (non-condensing) *To ensure system stability and prevent condensation, when the relative humidity exceeds 50%, the coolant inlet temperature must be higher than the dry-bulb temperature and it should not exceed 45°C.
Video	Integrated in ASPEED® AST2600 - 1 x VGA port	Packaging Content	1 x G593-ZX1-LAX1 1 x L-shape Rail kit
Storage	Front hot-swap: 8 x 2.5" Gen5 NVMe/SATA/SAS-4 ^[1] Internal M.2: 1 x M.2 (2280/22110), PCIe Gen3 x4 1 x M.2 (2280/22110), PCIe Gen3 x1 ^[1] Storage card is required to support SATA and SAS drives.	Ordering Part Numbers	6NG593ZX1DR000LCX1*
RAID	Require RAID add-in cards		



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