

G294-S42-AAP2

HPC/AI Server - Intel® Xeon® 6 - 2U DP 8 x PCIe Gen5 GPUs



Key Features

- Supports up to 8 x Dual slot Gen5 GPUs
- Supports
 - 4 x NVIDIA H200 NVL PCIe GPUs with 2-way NVLink bridges or
 - 4 x NVIDIA RTX PRO™ 6000 Blackwell Server Edition GPUs
- Dual Intel® Xeon® 6700/6500-Series Processors
- 8-Channel DDR5 RDIMM / MRDIMM, 24 x DIMMs
- 2 x 10Gb/s LAN ports via Intel® X710-AT2
- 8 x 2.5" Gen5 NVMe/SATA/SAS-4 hot-swap bays
- 8 x FHFL PCIe Gen5 x16 slots for GPUs
- 2 x LP PCIe Gen5 x16 slots
- Dual 3000W 80 PLUS Titanium redundant power supply

Applications

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

Specification

Dimensions	2U (W448 x H87.5 x D962 mm, depth incl. 112 mm rear fans)	RAID	Require RAID add-in cards Onboard VROC key headers
Motherboard	MS44-G20	PCIe Expansion Slots	8 x FHFL PCIe Gen5 x16, for GPUs 2 x LP PCIe Gen5 x16 *The system supports 4 x NVIDIA H200 NVL PCIe GPUs at 25°C ambient, arranged as two 2-GPU sets, each with a 2-way NVLink bridge. *The system supports 4 x RTX PRO™ 6000 Blackwell Server Edition GPUs at 25°C ambient.
CPU	Intel® Xeon® 6 Processors - Intel® Xeon® 6700-Series Processors - Intel® Xeon® 6500-Series Processors Dual processor, TDP up to 250W - At 30°C ambient, TDP up to 300W - At 25°C ambient, TDP up to 350W	I/O Ports	Rear: 2 x USB 3.2 Gen1, 1 x VGA, 2 x RJ45, 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 4710 (Socket E2)	TPM	1 x TPM header (SPI), Optional TPM2.0 kit: CTM012 1 x PRoT connector (only enabled on RoT SKU)
Chipset	System on Chip	Power Supply	Dual 3000W 80 PLUS Titanium redundant power supply AC Input: 100-240V *The system power supply requires C19 power cord.
Memory	8-Channel DDR5 RDIMM/MRDIMM, 24 x DIMMs ^[1] [RDIMM] Up to 6400 MT/s (1DPC), 5200 MT/s (2DPC) [MRDIMM] Up to 8000 MT/s ^[2] ^[1] Intel® Xeon® 6700E-Series Processors only support up to 16 x DIMMs. ^[2] MRDIMMs are supported only on select Intel® Xeon® 6 processors with P-cores and only in a 1DPC configuration.	System Fans	8 x 80x80x80mm
LAN	2 x 10Gb/s LAN (1 x Intel® X710-AT2), Support NCSI 1 x 10/100/1000 Mbps Management LAN	Operating Properties	Operating: 10°C to 35°C, 8% to 80% (non-condensing) Non-operating: -40°C to 60°C, 20% to 95% (non-condensing)
Video	Integrated in ASPEED® AST2600 - 1 x VGA port	Packaging Content	1 x G294-S42-AAP2 2 x CPU heatsinks 4 x GPU power cables (16-pin, 250mm) 4 x GPU power cables (16-pin, 280mm) 4 x Carriers 1 x L-shape Rail kit
Storage	Front hot-swap: 8 x 2.5" Gen5 NVMe/SATA/SAS-4 ^{[1][2]} ^[1] Storage card is required to support SATA and SAS drives. ^[2] Optional M.2 storage kit available for SATA support without requiring a PCIe storage card.	Ordering Part Numbers	6NG294S42DR000AAP2*



Learn more at: <https://www.gigabyte.com/Enterprise>

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Last updated: Jan 21, 2026

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