

G494-SB1-AAP2

HPC/AI Server - Intel® Xeon® 6 - 4U DP 10 x PCIe Gen5 GPUs



Key Features

- Supports up to 10 x Dual slot Gen5 GPUs
- **Conditionally** supports 8 x NVIDIA H200 NVL PCIe GPUs with 4-way NVLink bridges*
- Dual Intel® Xeon® 6700/6500-Series Processors
- 8-Channel DDR5 RDIMM / MRDIMM, 32 x DIMMs
- 2 x 10Gb/s LAN ports via Intel® X710-AT2
- 12 x 2.5" Gen5 NVMe/SATA/SAS-4 hot-swap bays
- 10 x FHFL PCIe Gen5 x16 slots for GPUs
- 2 x FHHL PCIe Gen5 x16 slots on the front side
- Quad 3000W 80 PLUS Titanium redundant power supply

Applications

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

Specification

Dimensions	4U (W448 x H176 x D880 mm) (W448 x H176 x D1000.5 mm with optional fan kit)	PCIe Expansion Slots	Rear: 10 x FHFL PCIe Gen5 x16, for GPUs Front: 2 x FHHL PCIe Gen5 x16
Motherboard	MSB4-G40		
CPU	Intel® Xeon® 6 Processors - Intel® Xeon® 6700-Series Processors - Intel® Xeon® 6500-Series Processors Dual processor, TDP up to 350W		*The system supports up to 8 x 600W GPUs and 1 x dual-slot FHFL + 1 x single-slot FHFL for other AICs with an optional fan kit . GPU video output ports are not available. *The system supports 8 x NVIDIA H200 NVL PCIe GPUs at 25°C ambient, arranged as two 4-GPU sets, each with a 4-way NVLink bridge.
OS Compatibility	OS Support List	I/O Ports	Front: 2 x USB 3.2 Gen1, 1 x VGA, 2 x RJ45, 1 x MLAN
Socket	2 x LGA 4710 (Socket E2)	Backplane Board	PCIe Gen5 x4 or SATA 6Gb/s or SAS-4 24Gb/s
Chipset	System on Chip	TPM	1 x TPM header (SPI), Optional TPM2.0 kit: CTM012 1 x PRoT connector (only enabled on RoT SKU)
Memory	8-Channel DDR5 RDIMM/MRDIMM, 32 x DIMMs [RDIMM] Up to 6400 MT/s (1DPC), 5200 MT/s (2DPC) [MRDIMM] Up to 8000 MT/s ^[1] ^[1] MRDIMMs are supported only on select Intel® Xeon® 6 processors with P-cores and only in a 1DPC configuration.	Power Supply	Quad 3000W 80 PLUS Titanium redundant power supply AC Input: 100-240V *The system power supply requires C19 power cord.
LAN	2 x 10Gb/s LAN (1 x Intel® X710-AT2), Support NCSI 1 x 10/100/1000 Mbps Management LAN	System Fans	4 x 40x40x28mm 12 x 60x60x56mm
Video	Integrated in ASPEED® AST2600 - 1 x VGA port	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)
Storage	Front hot-swap: 12 x 2.5" Gen5 NVMe/SATA/SAS-4 ^[1] ^[1] Storage card is required to support SATA and SAS drives.	Packaging Content	1 x G494-SB1-AAP2 2 x CPU fansinks 8 x GPU power cables (16-pin, 150mm) 2 x GPU power cables (16-pin, 350mm) 4 x Carriers 1 x L-shape Rail kit
RAID	Require RAID add-in cards Onboard VROC key headers	Ordering Part Numbers	6NG494SB1DR000AAP2*
		Optional Parts	- 8080 fan kit for 600W GPUs: 6NG494ZB0S0000AAP2* (packaging dimensions: L441 x W242 x H272 mm)



Learn more at: <https://www.gigabyte.com/Enterprise>
* All specifications are subject to change without notice. Please visit our website for the latest information.
* All trademarks and logos are the properties of their respective holders.
© 2026 Giga Computing Technology Co., Ltd. All rights reserved.
Last updated: Jan 21, 2026

Designed by

