G493-SB1-AAP1
HPC/AI Server - 4U DP 10 x PCIe Gen5 GPUs

Features
• Supports up to 10 x Dual slot Gen5 GPUs
• Dual 5th/4th Gen Intel® Xeon® Scalable Processors
• Dual Intel® Xeon® CPU Max Series
• 8-Channel DDR5 RDIMM, 32 x DIMMs
• Dual ROM Architecture
• 2 x 10Gb/s LAN ports via Intel® X710-AT2
• 12 x 3.5"/2.5" Gen5 NVMe/SATA/SAS-4 hot-swappable bays
• 1 x M.2 slot with PCIe Gen3 x1 interface
• 10 x FHFL PCIe Gen5 x16 slots for GPUs
• 2 x LP PCIe Gen5 x16 slots on the front side
• 3+1 3000W 80 PLUS Titanium redundant power supplies

Application
AI, AI Training, AI Inference, Visual Computing, HPC...

Specification
Dimensions
4U (W448 x H176 x D880 mm)

Motherboard
MSB3-G40

CPU
5th/4th Generation Intel® Xeon® Scalable Processors
Intel® Xeon® CPU Max Series
Dual processor, TDP up to 350W

Socket
2 x LGA 4677 (Socket E)

Chipset
Intel® C741 Chipset

Memory
32 x DIMM slots, 8-Channel DDR5 memory
RDIMM up to 96GB; 3DS RDIMM up to 256GB supported
Memory speed: Up to 5600 MT/s (1DPC), 4400 MT/s (2DPC)

LAN
2 x 10Gb/s LAN ports (1 x Intel® X710-AT2) - Supported NCSI
1 x 10/100/1000 management LAN

Video
ASPEED® AST2600 Integrated 2D Graphic Adapter

Storage
12 x 3.5"/2.5" Gen5 NVMe/SATA/SAS-4" hot-swappable bays
*SAS card is required to support SAS drives.
1 x M.2 slot (M-key, PCIe Gen3 x1, supports 2280/22110)

RAID
Intel® SATA RAID 0/1/10/5
Support optional RAID add-in cards

Expansion Slots
10 x FHFL PCIe Gen5 x16 slots for GPUs (with PCIe switches)
2 x LP PCIe Gen5 x16 slots on the front side

I/O Ports
Front: 2 x USB 3.2 Gen1, 1 x VGA, 2 x RJ45, 1 x MLAN
Internal: 1 x TPM header, 1 x VROC connector

Backplane Board
Speed and bandwidth:
PCIe Gen5 x4 or SATA 6Gb/s or SAS-4 24Gb/s

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

Power Supply
3+1 3000W 80 PLUS Titanium redundant power supplies
AC Input: 100-240V
*The system power supply requires C19 power cord.

System Management
ASPEED® AST2600 management controller
GIGABYTE Management Console (AMI MegaRAC SP-X)

OS Compatibility
Windows Server 2019 / 2022
SLES 15 SP4 / SP5 / SP6
Ubuntu 22.04 / 22.04.1 / 22.04.2 / 22.04.3 / 22.04.4 / 24.04 LTS
VMware ESXi 7.0 Update 3o / 8.0 Update 1, Update 2, Update 3
Citrix Hypervisor 8.2 LTSR CU1

System Fans
4 x 40x40x28mm (25,000rpm), 12 x 60x60x38mm (23,000rpm)

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 Content
1 x G493-SB1-AAP1, 2 x CPU heatsinks, 6 x Carriers,
10 x GPU power cables (12VHPWR), 1 x L-shape Rail kit
Packaging Dimensions: 1200 x 800 x 444 mm w/pallet

Reference Numbers
Barebone package (5th/4th Gen): 6NG493SB1DR000ABP1*
Barebone package (4th Gen): 6NG493SB1DR000AAP1*
-L-shape Rail kit: 25HB2-A96100-K0R
-CPU fansink: 25ST1-363204-C1R
-Power supply: 25EP0-23000C-00S
-C19 power cord 125V/16A (EU): 25CP3-01830H-Q0R (optional)
-C19 power cord 250V/16A (EU): 25CP3-01830H-Q0R (optional)
-C19 power cord 125V/15A (JP): 25CPA-01830B-Q0R (optional)

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

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