



CG481-S6053

NVIDIA MGX™ 4U GPU Server Platform



SPECIFICATIONS

Dimensions (Width x Height x Depth)

438.5mm (17.2") Wx 175mm (6.88") Hx 800mm (31.4") D

Processor

Dual AMD EPYC™ 9005 Series processors, up to TDP 500W

Memory

(24) DDR5 DIMM slots, 12 channels(1DPC), RDIMM/RIMM-3DS
- Max. Frequency 6400MT/s
- Max. Capacity per DIMM: 256GB

Expansion Slots

(8) PCIe 6.0 x16 FHFL double wide slots (through ConnectX-8 chipsets)
(1) PCIe 5.0 x16 FHFL single wide slot (from CPU0)

Networking

(8) 400G QSFP ports with NVIDIA ConnectX-8 chipsets

Storage

(8) Front hot-swap 2.5" U.2 PCIe 5.0 x4 NVMe drive bays
(4 from CPU0, 4 from CPU1)
(2) 2280/22110 PCIe 3.0 x2 NVMe M.2 ports

Server Management

(1) 1000Base-T Dedicated Server Management port
ASPEED AST2600 with AMI MegaRAC based firmware supporting IPMI 2.0 and DMTF Redfish API
Dual BIOS and dual BMC
eMMC for local BMC storage media

Security

Chassis Intrusion
On-board TPM2.0
Hardware Root of Trust - Microchip CEC1736 supported (optional)

4U AI Server with NVIDIA MGX™ and AMD EPYC™

The CG481-S6053 Series GPU Server is engineered for high-performance computing and AI workloads, featuring a switching GPU topology that supports up to eight dual-slot GPU accelerators within a 4U rackmount chassis. Powered by dual AMD EPYC 9005 Series processors, the system is based on the NVIDIA MGX modular architecture, enabling flexible integration of GPUs, CPUs, and DPUs. This modular design allows for optimized system configurations tailored to diverse enterprise data center applications, including AI training, inference, and data analytics.

Applications

Training, Fine-Tuning
LLM Inference
NVIDIA Omniverse™

Front I/O

(8) Hot-swap 2.5" U.2 drive bays

Rear I/O

(1) 1000Base-T Dedicated Server Management port
(8) 400G QSFP ports
(1) USB 3.0/2.0 Type-A port
(1) Mini Display port
(1) Power LED button
(1) UID LED button

Power Supply

(3+1) Redundant 3200W CRPS 80 PLUS Titanium

Cooling

(2) EVAC air cooling modules for max. 500W CPU
(10) 8080 Hot-swap system fans

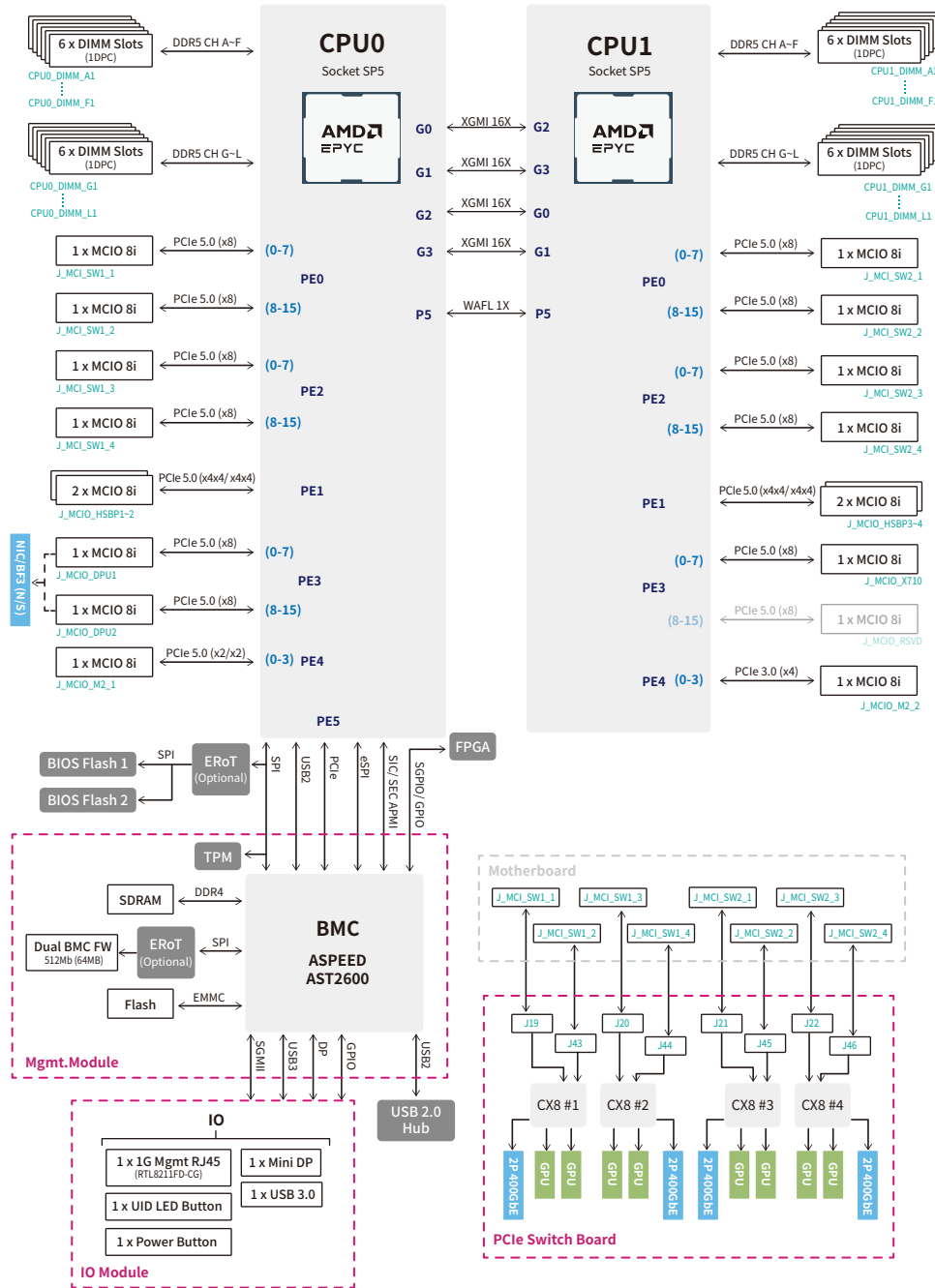
Environmental

Operating Temperature: 10°C ~ 35°C (50°F ~ 95°F)
Operating humidity: 8% to 85% (non-condensing)
Non-operating Temperature: -30°C ~ 60°C (-40°F to 140°F)
Non-operating Relative Humidity: 8% to 90% (non-condensing)

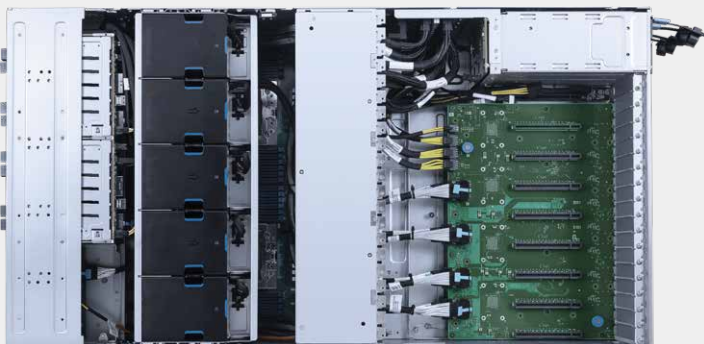
Regulatory

FCC (Class A), CE

CG481-S6053 System Block Diagram



Top View



Learn more about MSI servers, visit <https://eps.msi.com>

Specifications are subject to change without notice. Please visit our website for the latest information.



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