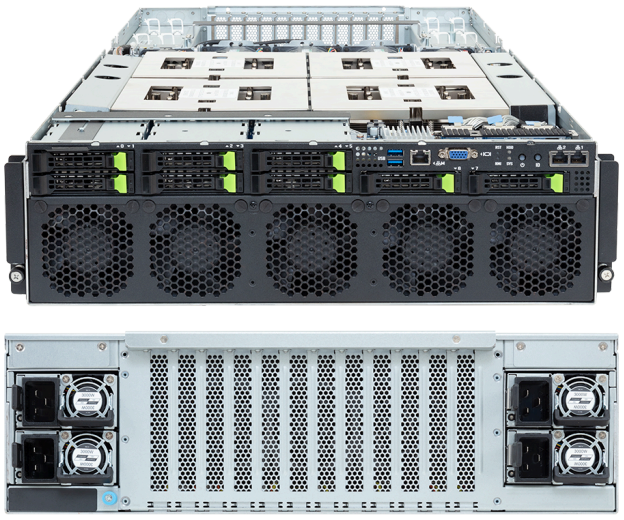
GIGABYTE™

G383-R80-AAP1

HPC/AI Server - AMD Instinct™ MI300A APUs - 3U, 8-Bay Gen5 NVMe



Key Features

- 4 x AMD Instinct™ MI300A APUs
- 128 GB HBM3 per APU
- 2 x 10 Gb/s LAN ports via Broadcom® BCM57416
- 1 x M.2 slot with PCIe Gen5 x4
- 8 x 2.5" Gen5 NVMe bays
- 4 x FHFL dual-slot PCIe x16 slots with Gen5 x16 lanes
- 4 x FHFL single-slot PCIe x16 slots with Gen5 x16 lanes
- 3+1 3000 W 80 PLUS Titanium redundant power supplies

Applications

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

Specification

Dimensions	3U (W447 x H131 x D950 mm)
Motherboard	MR83-AC0
APU	4 x AMD Instinct™ MI300A APUs - 24 x Zen4 CPU cores per APU - 228 x CDNA3 compute units per APU - TDP up to 550 W (CPU + GPU + memory) - Peak up to 760 W
OS Compatibility	OS Support List
Socket	4 x Socket SH5
Chipset	System on Chip
Memory	128 GB HBM3 unified memory Memory bandwidth 5.3 TB/s
LAN	2 x 10 Gb/s LAN (1 x Broadcom® BCM57416), Support NCSI 1 x 10/100/1000 Mb/s Management LAN
Video	Integrated in ASPEED® AST2600 - 1 x VGA port
Storage	**Front:** 8 x 2.5" Gen5 NVMe **Internal M.2:** 1 x M.2 (2280/22110), PCIe Gen5 x4
RAID	Require RAID add-in cards

PCIe Expansion Slots	4 x FHFL x16 (Gen5 x16), dual-slot 4 x FHFL x16 (Gen5 x16), single-slot
I/O Ports	**Front:** 2 x USB 3.2 Gen1, 1 x VGA, 2 x RJ45, 1 x MLAN
Backplane Board	PCIe Gen5 x4
TPM	1 x TPM header (SPI), Optional TPM 2.0 kit: CTM010
Power Supply	3+1 3000 W 80 PLUS Titanium redundant power supplies AC Input: 100-240 V *The system power supply requires C19 power cord.
System Management	ASPEED® AST2600 Baseboard Management Controller GIGABYTE Management Console web interface
System Fans	2 x 60x60x56mm 8 x 80x80x80mm
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)
Packaging Content	1 x G383-R80-AAP1 4 x APU heatsinks 1 x L-shape Rail kit
Ordering Part Numbers	6NG383R80DR000AAP1*

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: Oct 30, 2026

Designed by GIGA COMPUTING