

R165-DG2-AS1

Rack Server - AMD EPYC™ 9006 SP7 Server Processors -
1U UP, 1 x PCIe Gen6 GPU



Key Features

- Supports DC-SCM for modular BMC deployment
- Supports 1 x dual-slot Gen6 GPU
- Single AMD EPYC™ 9006 SP7 Server processors
- 16-Channel DDR5 RDIMM/MRDIMM per CPU with 16 x DIMMs
- 2 x 1 Gb/s LAN ports via Intel® I350-AM2
- 12 x 2.5" Gen5 NVMe/SATA/SAS-4 hot-swap bays
- 2 x M.2 slots with PCIe Gen4 x2
- 1 x FHFL PCIe x16 slot with Gen6 x16 lanes for GPUs
- 1 x FHFL PCIe x16 slot with Gen6 x16 lanes
- 1 x FHHL PCIe x16 slot with Gen6 x16 lanes
- 2 x 3200 W 80 PLUS Titanium redundant power supplies

Applications

AI Platform, AI Inference Server, Visual Computing, Networks
Server, Servers for Hybrid/Private Cloud...

Specification

Dimensions	1U (W438 x H43.5 x D815 mm)	PCIe Expansion Slots	1 x FHFL x16 (Gen6 x16), for GPUs 1 x FHFL x16 (Gen6 x16) ^[1] 1 x FHHL x16 (Gen6 x16) ^[1] Blocked when a dual-slot GPU is installed.
Motherboard	MDG5-GU0	I/O Ports	Front: 1 x USB 3.2 Gen1 Rear: 2 x RJ45, 2 x USB 3.2 Gen1, 1 x Mini-DP, 1 x MLAN
CPU	AMD EPYC™ 9006 SP7 Server processors Single processor, PPT up to 500 W	TPM	1 x TPM header (SPI), Optional TPM 2.0 kit: CTM012
Socket	1 x LGA 7536 (Socket SP7)	Power Supply	2 x 3200 W 80 PLUS Titanium redundant power supplies AC Input: 100-240 V *The system power supply requires C19 power cord.
Chipset	Integrated into SoC	System Fans	9 x 40x40x56mm
Memory	16-Channel DDR5 RDIMM/MRDIMM, 16 x DIMMs [RDIMM] Up to 8000 MT/s [MRDIMM] Up to 12800 MT/s ^[1] ^[1] MRDIMMs are supported only on select CPU SKUs.	Operating Properties	Operating: 10°C to 30°C, 8% to 80% (non-condensing) Non-operating: -40°C to 60°C, 20% to 95% (non-condensing)
LAN	2 x 1 Gb/s LAN (1 x Intel® I350-AM2), Support NCSI 1 x Management LAN	Packaging Content	1 x R165-DG2-AS1 1 x CPU heatsink 1 x GPU power cable (16-pin, 250mm) 1 x 2-Section Rail kit
Video	Integrated in ASPEED® AST2700 - 1 x Mini-DP	Ordering Part Numbers	6NR165DG2HR000AS1*
Storage	Front hot-swap: 12 x 2.5" Gen5 NVMe/SATA/SAS-4 ^[1] Internal M.2: 2 x M.2 (2280/22110), PCIe Gen4 x2 ^[1] Storage card(s) required to support SATA and SAS drives.	Optional Parts	- 3-Section Rail kit (Supports CMA): 25HB2-A56121-K0R - Cable Management Arm: 25HB1-R18300-K0R



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

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Last updated: Sep 4, 2026

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