GIGABYTE[™]

T015-Z40-IA01

ORv3 GPU Server - 10U DP 4 x GPUs





Key Features

- Single-Phase Immersion Ready Server
- Supports up to 4 x Dual slot Gen5 GPUs
- Dual AMD EPYC[™] 9005/9004 Series Processors
- 12-Channel DDR5 RDIMM, 24 x DIMMs
- Dual ROM Architecture
- 2 x 10Gb/s LAN ports via Broadcom® BCM57416
- 4 x 15mm E1.S NVMe hot-swap bays
- 2 x M.2 slots with SATA interface (optional)
- 4 x PCIe Gen5 x16 or 8 x PCIe Gen5 x8 FHFL slots for GPUs
- 2 x LP PCIe Gen5 x16 slots
- 48V DC Bus Bar power solution

GIGABYTE OCP ORV3 Compliant Solutions

GIGABTYE is an active member of the OCP, regularly attending the OCP's annual summits and continuously designing and releasing new compute, storage and GPU server hardware based on the OCP Open Rack Standard specifications and providing the best performing mezzanine cards for your OCP solution. GIGABYTE's latest OCP server product line is based on OCP Open Rack V3 specification. The products are designed for a 21" OCP rack and feature a separate PSU system, with power supplied to each server node by a bus-bar system running along the rear of the rack.



GIGABYTE OCP ORV3 Compliant Solutions Advantages

Efficient Rack Density

 Optimal design (2OU 2nodes / 2OU 3nodes) - balanced consideration between density and power consumption.

Thermal Optimization

- · Best thermal consideration to develop Rack and Nodes based on Cold Aisle/Hot Aisle concept.
- Reduce power consumption of cooling.

Greater Power Efficiency

- Low PUE helps reduce data center operating expense.
- Central power shelf design to enhance power efficiency and optimize power consumption.

Easy Maintenance

- · Easier maintenance in front cold aisle instead of hot aisle.
- Tool-less design for easy replacement and repair.
- Less PSU quantities in whole rack to minimize maintenance efforts.

Higher MTBF

- Centralizing power supplies and removing unnecessary components to enhance MTBF (Mean Time Between Failures).
- Avoids system downtime caused by component failure and minimizes maintenance efforts.



OCP 21" Rack

The Future of Open Source Ecosystem

The Open Compute Project (OCP) is a collaborative community focused on redesigning hardware technology to efficiently support the growing demands on compute infrastructure. In 2011, the OCP Foundation was initiated with a mission to apply the benefits of open source and open collaboration to hardware and rapidly increase the pace of innovation. Its collaboration model is now being widely applied in fields like data centers, telecom industry, and edge infrastructure.



Flexible Node Configuration

GIGABYTE's OCP Open Rack Version 3 compliant solutions maintain the cost-efficient designs created in version 2, yet these new solutions provide even more power to each node. GIGABYTE TO23-BT0, a 2OU node tray, supports three nodes and up to six CPUs in a single tray. And a similar node tray, TO25-BT0, is designed for more PCIe expansion slots with each tray supporting up to four dual-slot GPUs or eight full-height full-length single slot cards for growing HPC and AI needs in data centers.



Specification			
Dimensions	1OU (W537 x H45 x D805.7 mm)	Expansion Slots	4 x FHFL PCIe Gen5 x16 or 8 x FHFL PCIe Gen5 x8 slots for GPUs 2 x LP PCIe Gen5 x16 slots
Open Rack Version	ORv3		
Motherboard	MZ43-G20	Top I/O	2 x USB 3.2 Gen1 1 x VGA
CPU	AMD EPYC [™] 9005 Series Processors AMD EPYC [™] 9004 Series Processors		2 x RJ45 1 x MLAN
	Dual processor, cTDP up to 400W	Security Modules	•
Socket	2 x LGA 6096 (Socket SP5)		ASPEED [®] AST2600 Baseboard Management Controlle
Chipset	System on Chip		GIGABYTE Management Console web interface
Memory	12-Channel DDR5 RDIMM, 24 x DIMMs [EPYC 9005] Up to 6000 MT/s [EPYC 9004] Up to 4800 MT/s	Packaging Content	1 x TO15-Z40-IA01 2 x CPU heatsinks 4 x GPU power cables (12VHPWR, 550mm)
LAN	2 x 10Gb/s LAN (1 x Broadcom [®] BCM57416)		Packaging Dimensions: 1095 x 709 x 235 mm
	- Support NCSI function 1 x 10/100/1000 management LAN	OS Support	Windows Server, SUSE Linux Enterprise server, Red Hat Enterprise Linux server, Ubuntu, VMware ESXi, Citrix Hypervisor
Video	Integrated in ASPEED [®] AST2600 - 1 x VGA port	Bue Ber	
Storage	Top hot-swap:	Bus Bar	1 x 48V Bus Bar
	4 x 15mm E1.S NVMe	Part Numbers	Barebone package: 6NTO15Z400DR000IC01*
	Optional internal M.2: 2 x M.2 (2280/22110), SATA		Optional parts: - M.2 expansion card - COMTP61: 9COMTP61NR-00*
RAID	N/A		- RMA packaging: 6NTO15Z40SR-RMA-I100

RAID



Designed by



GIGABYTEChannel

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