# T015-Z20-IA01

ORv3 GPU Server - 10U UP 4 x GPUs



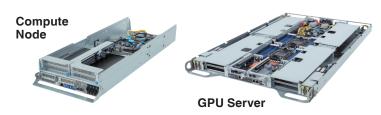


# **Key Features**

- Immersion Cooling Server
- Supports up to 4 x Dual slot Gen5 GPUs
- Single AMD EPYC™ 9005/9004 Series Processors
- 12-Channel DDR5 RDIMM, 12 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 PCle Gen5 x4 interface
- 2 x M.2 slots with SATA interface (optional)
- 4 x PCle Gen5 x16 or 8 x PCle Gen5 x8 FHFL slots for GPUs
- 2 x LP PCle 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.





OCP 21" 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.



# 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)	RAID	N/A
Open Rack Version	ORv3	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
Motherboard	MZ23-G20	T 1/0	
CPU	AMD EPYC™ 9005 Series Processors AMD EPYC™ 9004 Series Processors Single processor, cTDP up to 400W	Top I/O	2 x USB 3.2 Gen1 1 x VGA 2 x RJ45 1 x MLAN
Socket	1 x LGA 6096 (Socket SP5)	Security Modules System	1 x TPM header with SPI interface Optional TPM2.0 kit: CTM010
Chipset	System on Chip		ASPEED® AST2600 Baseboard Management Controller
Memory	12-Channel DDR5 RDIMM, 12 x DIMMs	Management	GIGABYTE Management Console web interface
	[EPYC 9005] Up to 6000 MT/s [EPYC 9004] Up to 4800 MT/s	Packaging Content	1 x TO15-Z20-IA01 1 x CPU heatsink 4 x GPU power cables (12VHPWR, 550mm) Packaging Dimensions: 1095 x 709 x 235 mm
	2 x 10Gb/s LAN (1 x Broadcom® BCM57416) - Support NCSI function		
	1 x 10/100/1000 management LAN		Windows Server, SUSE Linux Enterprise server,
Video	Integrated in ASPEED® AST2600 - 1 x VGA port		Red Hat Enterprise Linux server, Ubuntu, VMware ESXi, Citrix Hypervisor
Storage	Top hot-swap: 4 x 15mm E1.S NVMe	Bus Bars	1 x 48V Bus Bar
		Part Numbers	Barebone package: 6NTO15Z20DR000IC01*  Optional parts: - M.2 expansion card - COMTP61: 9COMTP61NR-00* - RMA packaging: 6NTO15Z20SR-RMA-I100
	Internal M.2: 2 x M.2 (22110), PCIe Gen5 x4		
	Optional internal M.2: 2 x M.2 (2280/22110), SATA		



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

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