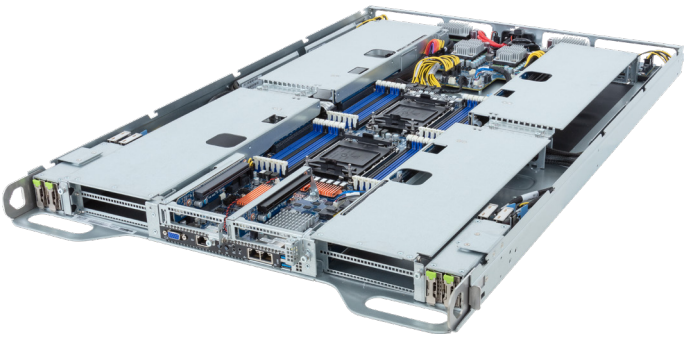
GIGABYTE™

T015-S40-IA01

ORv3 GPU Server - 10U DP 4 x PCIe Gen5 GPUs



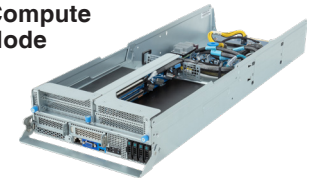
Features

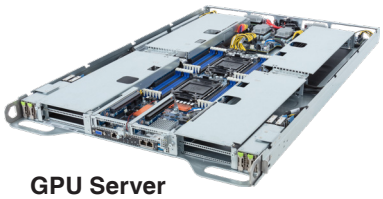
- Single-Phase Immersion Ready Server
- Supports up to 4 x dual-slot Gen5 GPU cards
- 4th Gen Intel® Xeon® Scalable Processors
- Intel® Xeon® CPU Max Series
- Dual processor, LGA 4677
- 8-Channel RDIMM DDR5 per processor, 24 x DIMMs
- Dual ROM Architecture
- 2 x 10Gb/s LAN and 1 x MLAN ports
- 4 x 15mm E1.S NVMe hot-swappable bays
- 4 x FHFL PCIe Gen5 x16 slots or 8 x FHFL PCIe Gen5 x8 slots for GPUs
- 2 x LP PCIe Gen5 x16 slots
- 48V DC Bus Bar power solution

GIGABYTE OCP ORV3 Compliant Solutions

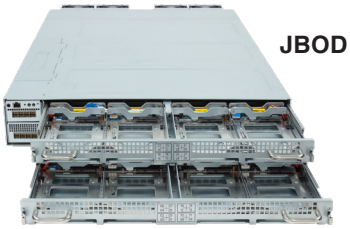
GIGABTYE is an active member of the OCP, regularly attending the OCP's annual summits and continuously designing and releasing new compute, storage and GPU server hardware based on the OCP Open Rack Standard specifications and providing the best performing mezzanine cards for your OCP solution. GIGABYTE's 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.

Compute Node





GPU Server



JBOD

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)
Open Rack Version	ORv3
Motherboard	MS43-G20
CPU	4th Generation Intel® Xeon® Scalable Processors Intel® Xeon® CPU Max Series Dual processor, CPU TDP up to 350W
Socket	2 x LGA 4677 (Socket E)
Chipset	Intel® C741 Chipset
Memory	8-Channel DDR5 memory, 24 x DIMM slots RDIMM modules up to 96GB supported 3DS RDIMM modules up to 256GB supported Up to 4800 MHz (1DPC), 4400 MHz (2DPC)
LAN	2 x 10GbE LAN ports (Intel X710-AT2) - Support NCSI 1 x 10/100/1000 management LAN
Storage	4 x 15mm E1.S NVMe hot-swappable bays
Expansion Slots	4 x PCIe Gen5 x16 FHFL slots or 8 x PCIe Gen5 x8 FHFL slots for GPUs 2 x PCIe Gen5 x16 LP slots Optional 2 x M.2 slots: PCIe Gen5 x4, support 22110 cards
Front I/O	2 x USB 3.2 Gen1 1 x VGA 1 x MLAN 1 x Power button with LED 1 x ID button with LED 1 x NMI button 1 x Reset button 1 x System status LED
TPM	1 x TPM header with SPI interface Optional TPM2.0 kit: CTM010
System Management	Aspeed® AST2600 management controller GIGABYTE Management Console (AMI MegaRAC SP X Solution Web interface)
Packaging Content	1 x TO15-S40 2 x CPU heatsinks 6 x Carrier clips
OS Compatibility	Windows Server 2019 / 2022 RHEL 8.6 / 8.7 / 9.0 / 9.1 / 9.2 (x64) SLES 15 SP4 Ubuntu 22.04 LTS / 22.04.1 LTS / 22.04.2 LTS (x64) VMware ESXi 7.0 Update 3i / 8.0 / 8.0 Update 1 Citrix Hypervisor 8.2 LTSR CU1
No. of Bus Bars	1 x 48V Bus Bar

Learn more about GIGABYTE server, visit **https://www.gigacomputing.com**

Engineered by GIGA COMPUTING