QuantaGrid D54X-1U

Ultimate Compute Performance and Modular Design

- **Powered by 4th Gen Intel® Xeon® Scalable processors with up to 350W TDP**
- **PCIe 5.0 & DDR5 platform ready**
- **Offers 16x E1.S" NVMe flash or 12x 2.5" NVMe flash drives**
- **Up to 3x SW accelerators in a 1U chassis**
- **Supports up to 400GbE networking bandwidth in x16 PCIe 5.0 slots.**
- **Enhanced serviceability with tool-less, hot-swap designs**
- **NEBS compliant for Telco/5G data center deployments**
- **Liquid cooling supported**
- **Upgraded data protection with Intel SGX, Intel® Crypto Acceleration, and PFR (optional)**
- **Enhanced serviceability with tool-less, hot-swap designs**

About QCT

Quanta Cloud Technology (QCT) is a global datacenter solution provider. We combine the efficiency of hyperscale hardware with infrastructure software from a diversity of industry leaders to solve next-generation datacenter design and operation challenges. QCT serves cloud service providers, telecoms and enterprises running public, hybrid and private clouds.
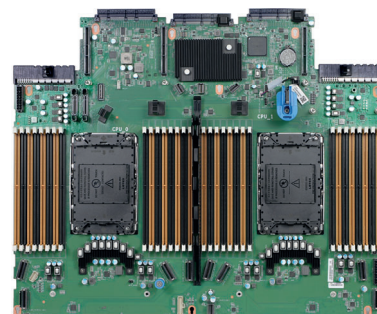
Product lines include hyper-converged and software-defined datacenter solutions as well as servers, storage, switches, integrated racks with a diverse ecosystem of hardware component and software partners. QCT designs, manufactures, integrates and services cutting edge offerings via its own global network. The parent of QCT is Quanta Computer, Inc., a Fortune Global 500 corporation.
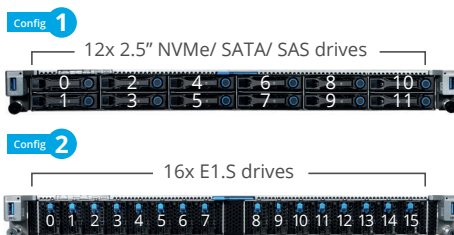
Found at: www.QCT.io/wheretobuy

Ultimate Compute Performance and Modular Design

- Powered by dual 4th Gen Intel® Xeon® Scalable processors with up to 4x UPI of 16 GT/sec CPU interconnect speed.
- Advanced system cooling architecture supporting the top bin 350W TDP CPU, both air and liquid cooling ready
- Memory capacity up to 8TB with 16 channels of DDR5 memory.
- Up to 3x PCIe Gen5 expansion slots, 2x OCP3.0, and DC-SCM architecture.
- Up to 3x single-width accelerator in a 1U system.
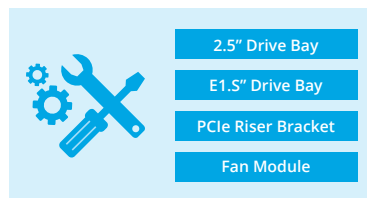- System optimized for cloud, enterprise, AI, HPC, network, security, and IoT workloads.

Flexible and Scalable Configurations

- Up to 5x PCIe 5.0 slots, supporting 400GbE networking bandwidth in PCIe x16 PCIe 5.0 slots in a 1U system.
- Flexible I/O options with a variety of OCP mezzanine options for diverse configurations.

Config 1 — 12x 2.5" NVMe/ SATA/ SAS drives

- Vast variety of storage configurations, supporting 2.5" 12x NVMe/SATA/SAS SSD or E1.S" 16xNVMe SSD.

Config 2 — 16x E1.S drives

- 2x onboard PCIe M.2 2230 slot.

Quick Deployment with Great Serviceability

- 2.5" Drive Bay
- E1.S" Drive Bay
- PCIe Riser Bracket
- Fan Module

- Tool-less, hot-swap designs for drive trays, riser brackets and fan modules.
- Easy service with OCP3.0 pull-tab & ejector without opening the chassis.

Easy Management with Orqestra

- Secure and dynamic data administration of data center resources with Orqestra.
- Monitor up to 5000 devices per QST (QCT Service Tool).

QuantaGrid D54X-1U Specifications

Processor	**Processor Type:** 4th gen Intel® Xeon Scalable processor
	Max. TDP Support: 350W
	Number of Processors: (2) Processors
	Internal Interconnect: 16 GT/s
	L3 Cache: Up to 112.5MB
Form Factor	1U Rackmount
Dimensions	**W x H x D (inch):** 17.6" x 30.7" x 1.7"
	W x H x D (mm): 447 x 780 x 43.2
Chipset	Intel® C741 Series
Storage	**Default Configuration:** SATA/ SAS/ NVME support, 2.5" Hot-plug, E1.S" All Flash
	SKU - #1 : [2.5" SKU]: (12) 2.5" hot-plug NVMe/SATA/SAS SSD
	SKU - #2 : [E1.S" All Flash]: (16) E1.S" hot-plug NVMe SSD
Memory	**Total Slots:** 32
	Capacity: Up to 8TB (256Gx32) of memory capacity
	Memory Type: 4800 MHz DDR5 RDIMM/LRDIMM
	Memory Size: 16G, 32G, 64G, 128G, 256G RDIMM/LRDIMM/3DS DIMM
Expansion Slot	***Default Configuration***
	(2) PCIe Gen5 x16 OCP 3.0 SFF
	(1) DC-SCM
	SKU - #1 :
	(2) PCIe Gen5 x16 FHHL
	(2) PCIe Gen5 x16 OCP 3.0 SFF
	(1) DC-SCM
	SKU - #2 :
	(3) PCIe Gen5 x16 HHHL
	(2) PCIe Gen5 x16 OCP 3.0 SFF
	(1) DC-SCM
Network Controller	**LOM:** Dedicated (1) GbE management port
	Optional NIC: Please refer to our Compatible Component List for more information
Front I/O	**Front I/O:** (2) USB 3.0

Storage Controller	**Onboard:** Intel® C741
	12x SATA3 6Gb/s ports
	Optional Controller:
	Broadcom MegaRAID 9560 Series HHHL Channel Card
	Broadcom 9500 Series PCIe Gen 4.0 Tri-Mode Storage HBAs
Power Supply	1+1 High efficiency redundant hot-plug 800W/1600W/2000W 80 Plus Titanium
Onboard Storage	**Onboard Storage:** (2) 2230 PCIE M.2 on board for Booting OS
Optional Storage	(2) 2280/22110 PCIe/SATA M.2 for booting OS
Fan	(8) Dual rotor fans (15+1 redundant)
Video	Integrated AST2600
	Maximum display resolution is up to 1920x1080p 32bpp@60Hz
System Management	Redfish v1.11
	IPMI v2.0 Compliant, on board "KVM over IP" support
	Orqestra (QCT System Manager) (Optional)
Rear I/O	(1) USB 3.0, (1) Mini display port, (1) ID LED, (1) PFR/PWR LED, (1) PFR/PWR Button, (1)COM Port (micro USB type-B), (1)RJ45
Operating Environment	Operating temperature: 5°C to 40°C (can support 45°C under certain situation)
	Non-operating temperature: -40°C to 70°C
	Operating relative humidity: 20% to 85%RH
	Non-operating relative humidity: 10% to 95%RH
TPM	TPM 2.0
OCP Compliance	OCP Compliant