



# QuantaGrid D53XQ-2U

## Scale Ahead for the Workload of Tomorrow

- 3rd Gen Intel® Xeon Scalable processor Ice Lake empowered
- PCIe Gen 4 platform ready
- Support up to 200GbE with PCIe x16 networking bandwidth
- Upgrade data protection with Intel SGX, Intel® Crypto Acceleration, and PRF (optional)
- Enhanced serviceability with tool-less, hot-swap designs



### Ultimate Compute Performance and Security Architecture

- 3rd Gen Intel Xeon Scalable Processor Ice Lake based dual socket platform.
- Up to 3x UPI at 11.2 GT/sec CPU interconnect speed.
- Advance system cooling support up to 270W CPU TDP per socket.
- Memory capacity up to 8TB with 8 channel DDR4 memory and 12TB with 2nd Gen Intel® Optane™ PMem 200 Series Barlow Pass.



### Scalability, Flexibility, Capability, All in 2U

Up to (2) Dual Width Accelerators



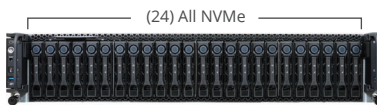
Config 1



Config 2



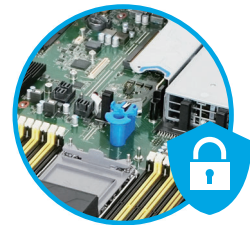
Config 3



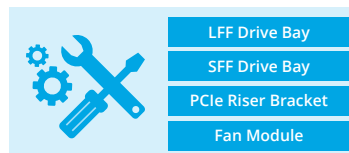
- Flexible SKU options from 12x 3.5" drive to 24x 2.5" /U.2 drive with PCIe Gen 4
- Optional rear NVMe as booting device (Intel VMD supported), or high speed NIC with optional HHHH slots
- 24x PCIe Gen 4 NVMe drives. For high performance hot tier storage, HPC and enterprise workloads
- Built-in AI acceleration: support up to 2x dual-width accelerators in 2U systems

### Enhanced Security

- Chassis intrusion triggered when top cover removed while AC/DC on, to alert and log any possible breach to your QCT servers.



### Quick Deployment with Great Serviceability



- Tool-less, hot-swap designs for drive trays, riser brackets and fan modules.
- Auto back-up BMC event logs in MicroSD without opening chassis.
- Easy service with OCP3.0 pull-tab & ejector without opening chassis.

Found at: [www.QCT.io/wheretobuy](http://www.QCT.io/wheretobuy)



Powered by 3rd gen Intel® Xeon® Scalable Processors

### Easy Management



- Secure and dynamic data administration of data center resources with Orchestra (QCT System Manager), featuring redfish v1.8.x.
- Monitor up to 5000 devices per Orchestra module.

# QuantaGrid D53XQ-2U Specifications

<b>Processor</b>	<b>Processor Type:</b> 3rd gen Intel® Xeon Scalable processor <b>Max. TDP Support:</b> 270W <b>Number of Processors:</b> (2) per node <b>Internal Interconnect:</b> 11.2GT/s <b>L3 Cache:</b> Up to 60MB			
<b>Form Factor</b>	2U Rackmount			
<b>Dimensions</b>	W x H x D (inch): 17.3 x 3.4 x 30.7 W x H x D (mm): 440 x 87.5 x 780			
<b>Chipset</b>	Intel® C621A Series			
<b>Storage</b>	<b>Default Configuration:</b> 2.5" Hot-plug, 3.5" Hot-plug, SATA/ SAS/ NVMe support			
<b>SKU - #1</b> <b>[LFF SATA/SAS]:</b>	<b>SKU - #2</b> <b>[LFF Tiered]:</b>	<b>SKU - #3</b> <b>[SFF Passthrough]:</b>	<b>SKU - #4</b> <b>[SFF Expander]:</b>	<b>SKU - #5</b> <b>[SFF All Flash]:</b>
<b>Front Storage:</b> (12) 3.5"/ 2.5" hot-plug SATA/ SAS drive	<b>Front Storage:</b> (4) 3.5"/ 2.5" hot-plug SATA/SAS + (8) 2.5" hot-plug NVMe/ SATA/ SAS drive	<b>Front Storage:</b> (16) 2.5" hot-plug SATA/SAS + (8) 2.5" hot-plug NVMe SSD	<b>Front Storage:</b> (16) 2.5" hot-plug SATA/SAS + (8) 2.5" hot-plug NVMe/ SATA/ SAS drive	<b>Front Storage:</b> (24) Hot-plug NVMe SSD
<b>Optional Rear Storage:</b> (2) 2.5" hot-plug NVMe/ SATA/ SAS drive	<b>Optional Rear Storage:</b> (2) 2.5" hot-plug NVMe/ SATA/ SAS drive	<b>Optional Rear Storage:</b> (2) Hot-plug NVMe SSD	<b>Optional Rear Storage:</b> (2) 2.5" hot-plug NVMe/ SATA/ SAS drive	<b>Optional Rear Storage:</b> (2) Hot-plug NVMe SSD
<b>Memory</b>	<b>Total Slots:</b> 32 <b>Capacity:</b> Up to 8TB DIMM Up to 12TB DIMM+PMem (200 series) <b>Memory Type:</b> 2933 MHz DDR4 RIMM/LRDIMM 3200 MHz DDR4 RDIMM/LRDIMM - Intel® Optane™ PMem 200 series (BPS) 128, 256, 512GB supported on selected CPU SKUs <b>Memory Size:</b> 16G, 32G, 64G, 128G, 256G RDIMM/LRDIMM/3DS DIMM			
<b>Expansion Slot</b>	<b>SKU - #1</b> <b>[General Config]:</b> (1) PCIe 4.0 x8 SAS mezzanine slot (1) PCIe 4.0 x8 OCP 3.0 SFF mezzanine slot (2) PCIe 4.0 x16 FHHL + (4) PCIe 4.0 x8 FHHL slot Optional (2) PCIe 4.0 x16 HHHL slot	<b>SKU - #2</b> <b>[Dual Width GPU Config]:</b> (1) PCIe 4.0 x8 SAS mezzanine slot (1) PCIe 4.0 x8 OCP 3.0 SFF mezzanine slot (2) PCIe 4.0 x16 FHFL + (2) PCIe 4.0 x16 FHHL slot Optional (2) PCIe 4.0 x16 HHHL slot	<b>SKU - #3</b> <b>[Single Width GPU Config]:</b> (1) PCIe 4.0 x8 SAS mezzanine slot (1) PCIe 4.0 x8 OCP 3.0 SFF mezzanine slot (4) PCIe 4.0 x16 FHFL slot Optional (2) PCIe 4.0 x16 HHHL slot	
<b>Network Controller</b>	<b>LOM:</b> Dedicated (1) GbE management port <b>Optional NIC:</b> Please refer to our Compatible Component List for more information			
<b>Front I/O</b>	Power/ID/Reset Buttons Power/ID/Status LEDs (2) USB ports (1) VGA port (Display priority: first; one device one time)			
<b>Storage Controller</b>	<b>Onboard:</b> Intel® 621A 14x SATA3 6Gb/s ports SATA RAID 0, 1 <b>Optional Controller:</b> Quanta LSI® PCIe 4.0 3816 12Gb/s SAS mezzanine Quanta LSI® PCIe 4.0 3916 12Gb/s SAS mezzanine (RAID 0,1,5,6,10,50,60) Intel® VROC upgrade module for PCIe SSD (Please refer to the Compatible Component List for more options)			

<b>Power Supply</b>	1+1 High efficiency redundant hot-plug Platinum/Titanium 1200W/1600W/2200W AC PSU
<b>Onboard Storage</b>	(2) 2230 PCIe M.2 onboard for booting OS
<b>Fan</b>	(6) Dual rotor fans (11+1 redundant)
<b>System Management</b>	Redfish v1.9 IPMI v2.0 compliant, onboard "KVM over IP" support
<b>Rear I/O</b>	(2) USB 3.0, (1) RS232 serial port, (1) VGA port, (1) Micro USB (COM port), (1) ID LED, (1) PFR LED, (1) MicroSD
<b>Operating Environment</b>	Operating temperature: 5°C to 35°C (41°F to 95°F) Non-operating temperature: -40°C to 70°C (-40°F to 158°F) Operating relative humidity: 20% to 85%RH Non-operating relative humidity: 10% to 95%RH
<b>TPM</b>	TPM 2.0 SPI module

## 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.

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