



# QuantaGrid D53X-1U

Balanced architecture with built-in acceleration and advanced security

- 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)
- AI acceleration optimized, up to 3x Tesla T4 GPU support in 1U system
- 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](http://www.QCT.io/wheretobuy)



Powered by 3rd gen Intel® Xeon® Scalable Processors

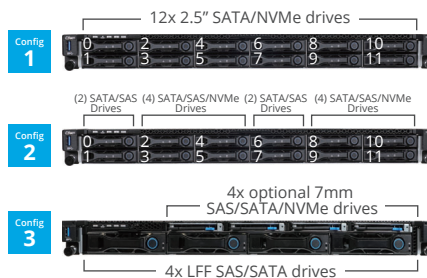


## Ultimate Compute Performance and Security Architecture

- 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.
- Up to 3x Single Width Tesla T4 GPU in 1U system.
- System optimized for cloud, enterprise, AI, HPC, network, security and IoT workloads.



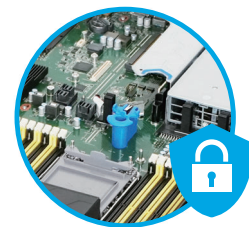
## Flexible and Scalable Configurations



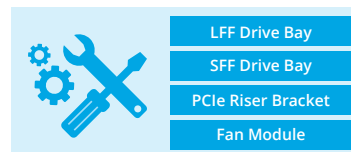
- Industry most expansions in 1U system with up to 5x PCIe Gen 4 slots, supporting 200GbE networking bandwidth in x16 PCIe Gen 4 slots.
- Flexible I/O options with a variety of SAS mezzanine and OCP mezzanine options for diverse configurations.
- Vast variety of storage configurations, supporting All Flash, Tiered and Hybrid SKUs.
- 2x onboard PCIe M.2 2230 slot.

## 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.

## 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 D53X-1U 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 57MB
<b>Form Factor</b>	1U Rackmount
<b>Dimensions</b>	<b>W x H x D (inch):</b> 17.3 x 1.7 x 30.7 <b>W x H x D (mm):</b> 440 x 43.2 x 780
<b>Chipset</b>	Intel® C621A Series
<b>Storage</b>	<b>Default Configuration:</b> 2.5"/3.5"Hot-plug, SATA/ SAS/ NVMe support <b>SKU - #1 :</b> [All Flash SKU]: (12) 2.5" hot-plug SATA/ NVMe drives <b>SKU - #2 :</b> [SFF Tiered SKU]: (4) 2.5" hot-plug SATA/SAS drives + (8) 2.5" hot-plug NVMe/SATA/SAS drives <b>SKU - #3:</b> [Hybrid SKU]: (4) 3.5"/2.5" hot-plug SATA/SAS drives, (4) 7mm NVMe/SATA/SAS drives (optional)
<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> 2933/3200 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 RDIMM/LRDIMM/3DS DIMM
<b>Expansion Slot</b>	<b>SKU - #1 :</b> (1) PCIe 4.0 x8 OCP 3.0 mezzanine slot SFF (1) PCIe 4.0 x8 Internal SAS mezzanine slot (2) PCIe 4.0 x16 FHHL <b>SKU - #2 :</b> (1) PCIe 4.0 x8 OCP 3.0 mezzanine slot SFF (1) PCIe 4.0 x8 Internal SAS mezzanine slot (3) PCIe 4.0 x16 HHHL
<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>	<b>Front I/O:</b> (2) USB 3.0, (1) PWR BTN/LED, (1) ID BTN/LED, (1) Reset BTN, (1) Status LED, (1) PFR LED

<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 800W/1200W/1600W AC PSU, Gold 1200W/1600W -48V DC PSU
<b>Onboard Storage</b>	<b>Onboard Storage:</b> (2) 2230 PCIe M.2 onboard for booting OS
<b>Fan</b>	(8) Dual rotor fans (15+1 redundant)
<b>System Management</b>	Redfish v1.9 IPMI v2.0 compliant, onboard "KVM over IP" support Orqestra (QCT System Manager) (Optional)
<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 40°C Non-operating temperature: -40°C to 70°C Operating relative humidity: 20% to 85%RH Non-operating relative humidity: 10% to 95%RH
<b>TPM</b>	TPM 1.2/2.0 SPI module



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

All specifications and figures are subject to change without prior notice. Actual products may look different from the photos.  
QCT, the QCT logo, Rackgo, Quanta, and the Quanta logo are trademarks or registered trademarks of Quanta Computer Inc.  
All trademarks and logos are the properties of their respective holders.  
Copyright © 2021 Quanta Computer Inc. All rights reserved.

**United States**  
QCT LLC., Silicon Valley office  
1010 Rincon Circle, San Jose, CA 95131  
TOLL-FREE: 1-855-QCT-MUST  
TEL: +1-510-270-6111  
FAX: +1-510-270-6161  
Support: +1-510-270-6216

**Japan**  
Quanta Cloud Technology Japan 株式会社  
日本国東京都港区芝大門二丁目五番八号  
牧田ビル3階  
TEL: +81-3-5777-0818  
FAX: +81-3-5777-0819

**Germany**  
Quanta Cloud Technology Germany GmbH  
Hamborner Str. 55, 40472 Düsseldorf  
TEL: +49-2405-4083-1300

**Other regions**  
Quanta Cloud Technology  
No. 211 Wenhua 2nd Rd., Guishan Dist., Taoyuan City 33377, Taiwan  
TEL: +886-3-327-2345  
FAX: +886-3-397-4770



Powered by 3rd gen Intel® Xeon® Scalable Processors

Intel, the Intel logo, Xeon, and Xeon Inside are trademarks or registered trademarks of Intel Corporation in the U.S. and/or other countries.