

# QCT Product Portfolio

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Specifications

### Leading Technologies for the Data-centric Era

Quanta Cloud Technology (QCT) has a significant market presence and offers a full spectrum of data center products that include servers, storage, network switches, and rack systems. QCT also has a wide array of hyper-converged and software-defined data center solutions to fit a full range of computing workloads for the datacentric era. We provide customers not only with early access to the latest innovations for faster time-to-market through our partnerships with leading technology partners (i.e. Microsoft, Red Hat, VMware, etc.), but also complete access to our own ecosystem of products which are designed and developed all under one roof.

# **Company Profile**

QCT is Quanta Computer's cloud computing division and a global data center solution provider. We have been an enabler and a disruptor in the market, understanding how important it is to help businesses solve next generation data center design and operational challenges for 5G, AI, and Clouds. From fulfilling unique data center requirements to streamlining the digital transformation journey, QCT has proven its ability to provide end-to-end solutions to global data centers and clouds from a single node to an entire rack.

Quanta has been recognized as one of the Clarivate Top 100 Global Innovators. Clarivate Analytics is a Philadelphia-based global information solutions provider whose focus is on intellectual property and the sciences. Quanta and QCT's commitment to innovation has resulted in hundreds of patents filed in cloud computing since 2014. Quanta's patent success rate and global reach were identified as outstanding, marking the recognition in consecutive years since 2018. Quanta has also been named among Fortune Magazine's World's Most Admired Companies 2021.





#### **Headquarters/Locations**

QCT is headquartered in Taoyuan, Taiwan, with two offices in the United States (San Jose, CA; Seattle, WA); two in China (Beijing and Hangzhou); one in Germany (Düren); one in Korea (Seoul); one in Japan (Tokyo); and one in Singapore.

#### **President/Leadership**

Mike Yang is the president of QCT and executive vice president and general manager of the cloud business unit of Quanta Computer Inc.

#### **Employees**

QCT has employees worldwide, including engineers, architects, sales & marketing, business development, and service personnel.

# QCT Services and Support

As a prominent cloud hardware solution provider, we proudly stand behind our products by offering our customers the highest level of professional services and support.

- QCT worldwide office
- QCT's own service center
- QCT's authorized service partner
- O Integration Center



**QCT Services and Support** is comprised of a basic package and flexible premium options for customers to select according to their needs.



\* Service details may vary by country. Please contact your QCT local service center for more information.

# QCT Systems

QuantaGrid	AI HP	C Hyperscale CSP CSP	Data Storage Edge/Telco Analytics
1U QuantaGrid S55R-1U Ultimate Compute Architecture for Performance and Efficiency	QuantaGrid <b>D55X-1U</b> Versatile Server for Every Workload, Tailored for Diverse Applications	QuantaGrid <b>D54X-1U</b> Ultimate Compute Performance and Security Architecture P 10	QuantaGrid <b>S54S-1U</b> High-density and Powerful Storage
QuantaGrid <b>D53X-1U</b> Balanced architecture with built-in acceleration and advanced security P 10			
2U QuantaGrid S55J-2U Flexible, Ultra-Dense Architecture for Storage Building Blocks	QuantaGrid <b>D55Q-2U</b> Power, flexibility, and performance all in one robust 2U server for diverse workloads	QuantaGrid <b>D54Q-2U</b> Scale Ahead for the Workload of Tomorrow	QuantaGrid <b>D53XQ-2U</b> Scale Ahead for the Workload of Tomorrow
30	5U —		







## QuantaGrid



## QuantaPlex



## QuantaEdge



## Networking

Speed, Bandwidth



### **Features**



DIRRERAR

## QCT Server Product Lines Support Intel<sup>®</sup> Xeon<sup>®</sup> 6 Processors

Unleash The Performance for Today's Acceleration and Al Needs QCT's latest generation of server systems powered by Intel<sup>®</sup> Xeon<sup>®</sup> 6 processors enable significant upgrades over the previous generation to increase performance utilizing PCIe Gen5, DDR5 memory, Compute Express Link<sup>™</sup> (CXL). Experience the power of innovation today!

With more compute and faster memory at the same power envelope as the previous generation, these processors are built to support your organization's evolving needs. Intel® Xeon® 6 processors provide you with a single platform with processors that range from high AI performance to exceptional efficiency and cloud scalability. Designed for better energy efficiency, QCT server systems equipped with Intel® Xeon® 6 processors are optimized for the most demanding AI, HPC, database and analytics, 5G, edge, networking, and infrastructure and storage workloads. At the same time, you'll get enhanced security features via Intel® Trusted Domain Extensions (Intel® TDX) and Intel® Software Guard Extensions (Intel® SGX) to safeguard your confidential critical data and to maximize your return on investment.

#### **Intel Features**

QCT systems powered by Intel® Xeon® 6 6700E-Series



**Increased Performance** Up to 144 cores, PCIe 5.0, CXL 2.0



#### **Higher Efficiency** • 2.5x Better rack density\*

2.3x Detter rack density
 2.4x Performance per watt improvement\*\*



#### **Upgraded Security**

- $\cdot$  Intel® TDX for virtual machine isolation
- Intel® SGX
   Intel® Platform Firmware Resilience (Intel® PFR)



#### Increased Memory Bandwidth

1.14x DDR5 speed for HPC, AI & Data Analytics

\*2.5x better rack density at similar or higher performance per vCPU in comparison with 4th Gen Intel® Xeon® processors based on Intel architectural projections as of August 2023.

\*\*2.4x performance per watt improvement in comparison with 4th Gen Intel® Xeon® processors based on Intel architectural projections as of August 2023.

### **QCT** Features

Advanced air cooling with up to 330W TDP CPU



E3.S support to enable high-performance drives

Enhanced serviceability with

tool-less, hot-swappable

designs (HDD, SSD, Fan,

PSU, PCIe Riser Brackets)



⊞

Optimized for Al acceleration: Supports up to 3x single-width accelerators in 1U systems and up to 4x single-width, 3x dual-width accelerators in 2U systems





QCT system manageme tool: Orqestra

# QuantaGrid Series

QCT offers a comprehensive line of high-performance, rackmount, single-node servers, ideal for granularity and capable of tackling a variety of modern data center workloads. From enterprises to cloud service providers, the QuantaGrid series delivers optimized performance and astonishing user experience with the most advanced industrial technologies and thoughtful engineering designs.





- Versatile, Single-Node Computing Servers
- Low Power Consumption While Delivering High Operating Performance
- Modularized Components that Increase Serviceability and Configuration Flexibility
- Designed with High Availability and Reliability to Protect Business Critical Applications

## QuantaGrid S55R-1U

#### Ultimate Compute Architecture for Performance and Efficiency

QuantaGrid S55R-1U is a general-purpose rackmount server product designed with a balanced architecture utilizing a single socket populated to support more network expansions with increased PCle lanes. Powered by single Intel<sup>®</sup> Xeon<sup>®</sup> 6 processor, if features 2 PCle 5.0 slots and 1 OCP 3.0 NIC SFF slot. Under the single processor design, S55R-1U also features the capacity of 12x 2.5" SAS/SATA/NVMe drives at the front bay and 2 on board M.2 NVMe drives, which enables Intel VROC for RAID function. This platform targets data center/enterprise customers with general but cost-efficient solution for computing and storage purposes.





## QuantaGrid **D55X-1U**

## Versatile Server for Every Workload, Tailored for Diverse Applications

QuantaGrid D55X-1U is a general-purpose 1U rackmount server designed for diverse workloads. Powered by dual Intel<sup>®</sup> Xeon<sup>®</sup> 6 CPUs, it offers flexible storage options including NVMe/SATA/SAS 2.5" drives; E1.S and E3.S 1T for density; E3.S CXL SKU for memory-bound CXL 2.0 applications, catering to various needs. As for PCIe expansion, 400Gb networking, GPUs, and DPUs are supported. Flexible configurations ensure that it is an ideal tailored solution.







## QuantaGrid S55J-2U

#### Flexible, Ultra-Dense Architecture for Storage **Building Blocks**

QuantaGrid S55J-2U is a density-optimized rackmount storage server designed for data storage, data management, and software-defined storage (SDS). Powered by single Intel<sup>®</sup> Xeon<sup>®</sup> 6 processor, it features excellent network expansions under a 1P architecture, supporting up to 3 PCIe 5.0 slots, 1 OCP 3.0 SFF slot, and 1 internal PCIe 5.0 slot dedicated to the HBA/RAID controller. In addition, QuantaGrid S55J-2U offers the capacity of 24x 3.5"/2.5" SAS/SATA drives at the front bay; and 8x 2.5" NVMe drives at the rear to fulfill customer requirements for data management.



### QuantaGrid D75F-9U

#### Supercharged AI Training Performance

The QuantaGrid D75F-9U stands as an acceleration server meticulously engineered to confront the most intricate AI & HPC tasks. Fueled by 5th/4th Gen Intel<sup>®</sup> Xeon<sup>®</sup> processors and equipped with 32 DDR5 DIMM slots, the D75F-9U is equipped with 8 NVIDIA Blackwell GPUs interconnected with fifth-generation NVIDIA<sup>®</sup> NVLink<sup>®</sup>. This dynamic configuration empowers the QuantaGrid D75F-9U to effortlessly manage diverse workloads, including large language models, recommender systems, and chatbots, rendering it an optimal choice for businesses seeking to expedite their AI transformation.



### QuantaGrid D75L-5U

#### Supercharged AI Training Performance with Liquid Cooling

The QuantaGrid D75L-5U stands as an acceleration server meticulously engineered to confront the most intricate AI & HPC tasks. The D75L-5U is equipped with the NVIDIA HGX<sup>™</sup> B200 8-GPU baseboard, in which the 8 GPUs are interconnected with fifth-generation NVIDIA® NVLink®. The system is powered by 5th/4th Gen Intel® Xeon® processors and equipped with 32 DDR5 DIMM slots. The structure empowers the QuantaGrid D75L-5U to fulfill diverse workloads, including large language models, recommender systems, and chatbots, rendering it an optimal choice for businesses seeking to expedite their AI transformation. Nevertheless, D75L-5U is supported by direct-to-chip liquid cooling to deliver better energy efficiency and optimize rack density.



## QuantaGrid D550-2U

#### Power, Flexibility, and Performance All-in-one **Robust 2U Server for Diverse Workloads**

QuantaGrid D55Q-2U is a general-purpose 2U rackmount server designed for diverse workloads. Powered by dual Intel<sup>®</sup> Xeon<sup>®</sup> 6 processors, it supports 3.5" HDDs for cold-tier storage, NVMe/SATA/SAS 2.5" drives for higher-density storage, E3.S CXL SKU for memory-bound CXL 2.0 applications, fulfilling various storage/memory requirements. As for PCIe expansion, 400Gb networking and DPUs are all supported, depending on the customer's application needs. Additionally, up to (3) DW GPU or (4) SW GPU support facilitates inference tasks. All these features and more are packed into this powerful 2U server.



## QuantaGrid D75H-7U

#### Unleashing Next-Level AI Performance

The QuantaGrid D75H-7U builds upon the robust foundation established by its predecessor, the QuantaGrid D74H-7U, to effectively address the most complex AI and HPC tasks. Powered by 5th/4th Gen Intel<sup>®</sup> Xeon<sup>®</sup> processors and featuring 32 DDR5 DIMM slots, the D75H-7U is further enhanced with 8 NVIDIA Hopper™ GPUs interconnected via NVIDIA<sup>®</sup> NVLink® and flexible I/Os to support NVIDIA BlueField®-3 SuperNICs and DPUs. This dynamic configuration empowers the QuantaGrid D75H-7U to seamlessly handle diverse workloads, making it the ideal solution for enterprises looking to accelerate their AI transformation.



## QuantaGrid D74F-7U

#### Built for HPC and Advanced AI Workloads

The QuantaGrid D74F-7U stands as an acceleration server meticulously engineered to confront the most intricate AI & HPC tasks. Fueled by 5th/4th Gen Intel<sup>®</sup> Xeon<sup>®</sup> processors and equipped with 32 DDR5 DIMM slots, the D74F-7U is equipped with 8 NVIDIA Hopper™ GPUs to significantly enhance time-to-insight. This dynamic configuration enables the QuantaGrid D74F-7U to drive the acceleration of generative AI and large language models (LLMs), while also advancing scientific computing for HPC workloads.



\* All specifications and figures are subject to change without prior notice.

## QuantaGrid **D54X-1U**

## Ultimate Compute Performance and Security Architecture

QuantaGrid D54X-1U is a general-purpose rackmount server designed for a balanced architecture with built-in acceleration and power efficiency. Powered by 5th/4th Gen Intel<sup>®</sup> Xeon<sup>®</sup> Scalable processors, it features up to 5 PCIe 5.0 expansion slots including 2 OCP 3.0 slots. As the 4th Gen of the QuantaGrid product lineup, the D54X-1U now offers All 12 2.5" NVMe flash or 16 E1.S NVMe flash drives, targeting HPC and enterprise workloads.



#### QuantaGrid **S54S-1U**

Storage Server

#### High-density and Powerful Storage

QuantaGrid S54S-1U is a high density 1U storage server with 12 HDDs and 4 NVMe SSDs. Equipped with 5th/4th Gen Intel<sup>®</sup> Xeon<sup>®</sup> Scalable processors and 8 DDR5 DIMM slots, this hybrid architecture enhances overall caching performance, making the S54S-1U the ideal platform for software-defined storage.



### QuantaGrid D74H-7U

#### Accelerated Performance for the Most Extreme AI-HPC Workloads

The QuantaGrid D74H-7U is an acceleration server purposebuilt to tackle the most complex AI & HPC workloads. Powered by 5th/4th Gen Intel<sup>®</sup> Xeon<sup>®</sup> Scalable processors, 32 DDR5 DIMM slots, the D74H-7U NVIDIA HGX<sup>™</sup> H100 provides nonblocking GPUDirect<sup>®</sup> RDMA and GPUDirect<sup>®</sup> Storage. This powerhouse is optimized to accelerate massive data sets, huge AI models, and supercomputing applications with optimized performance.



#### 10 Powered by Intel<sup>®</sup> Xeon<sup>®</sup> processors

## QuantaGrid **D54Q-2U**

#### Scale Ahead for the Workload of Tomorrow

D54Q-2U is 2U general purpose server, powered by 5th/4th Gen Intel<sup>®</sup> Xeon<sup>®</sup> Scalable processors. The D54Q-2U provides ultimate resilience and scalability with flexible PCIe expansion slot options, all supporting PCIe 5.0. It is also thermally optimized for 2 dualwidth accelerators and optimized for AI workloads. As the 4th Gen of the QuantaGrid product lineup, the D54Q-2U offers All 24 NVMe flash drives in U.2 or E1.S form factors as hot tier storage, targeting HPC and enterprise workloads.



## QuantaGrid **D54U-3U**

#### **Optimizing AI/High-performance Computing**

The QuantaGrid D54U-3U is an acceleration server designed for parallel computing. Supporting two 5th/4th Gen Intel<sup>®</sup> Xeon<sup>®</sup> Scalable processors up to 350W and 32 DIMM slots, this 3U system features 4 dual-width accelerator cards with NVIDIA<sup>®</sup> NVLink<sup>®</sup> bridge option or up to 8 single-width accelerator cards to provide a comprehensive and flexible architecture that can be optimized for various AI/HPC/DL applications.



### QuantaGrid **D53X-1U**

## Ultimate Compute Performance and Security Architecture

QuantaGrid D53X-1U is a general-purpose rackmount server featuring a balanced architecture with built-in acceleration and advanced security. It is 3rd Gen Intel<sup>®</sup> Xeon<sup>®</sup> Scalable processor Ice Lake empowered and features up to 5 PCIe 4.0 expansion slots.



## QuantaGrid **D53XQ-2U**

#### Scale Ahead for the Workload of Tomorrow

D53XQ-2U features ultimate resilience and scalability with flexible PCIe expansions: support rear NVMe as booting device with VMD RAID1, or high speed NIC with optional HHHL slots, along with 2x dual-width accelerators, optimized for AI workloads. As the 3rd gen of the product lineup, D53XQ-2U now offers All 24x NVMe flash drives as hot tier storage, targeting HPC and enterprise workloads.





# QuantaPlex Series

The QCT QuantaPlex series is a highly sophisticated, multinode design that delivers extremely high density and computing performance. The shared infrastructure solution provides the flexibility to set up different workloads while maximizing space savings and augmenting cooling and energy efficiency to reduce TCO.





- Multi-Independent Nodes Create High Performance and Flexibility for Multiple Workload Scenarios
- Improved Performance, Availability and More Cost-Effective than Single Nodes of Comparable Speeds
- QCT Modularized Design Concepts Optimize Interoperability and Serviceability with Reduced Complexity
- Provides Optimal Data Center Performance and Storage Per Dollar

## QuantaPlex **\$45Z-2U/\$25Z-2U**

#### Ample Performance Multi-node Server

QuantaPlex S45Z-2U and QuantaPlex S25Z-2U are ultra-dense servers equipped with four or two independent nodes. They increase flexibility to set up different workloads independently in one 2U shared infrastructure, providing optimal data center performance per dollar.







Storage Server

#### Storage Pioneer for Data Center Workload

The QuantaPlex S24P-5U is an ultra-dense storage server powered by 5th/4th Gen Intel<sup>®</sup> Xeon<sup>®</sup> Scalable processors. It has 84/96 HDD bays which adhere to the latest RVI-optimized designs to support future HDDs. Built with SAS4 bandwidth to eliminate bottlenecks between storage card and expander, it also comes with flexible options for either 1 or 2 server nodes to meet different workload needs. This is an ideal option for both Software-Defined Storage (SDS) and warm and cold data storage.



5U 1 8 per node per node

## QuantaPlex T43Z-2U

#### High Performance Multi-node Server

The QuantaPlex T43Z-2U is a high-performance server optimized for compute density. Supporting the latest Intel<sup>®</sup> Xeon<sup>®</sup> 3rd Gen Scalable processor family, with 16 primary DIMM slots, PCIe 4.0 high-speed networking and NVMe support, this powerful, compact server is ideal for HPC, HCI and cloud computing workloads.



intel. XEON	↓ Form Factor	CPU Number	Memory Number
PLATINUM	2U4N	V 2 per node	16 per node

# QoolRack Series

### Ultimate Thermal Efficiency with Optimized Power Savings

With the escalating demand for high-performance computing capabilities, it is essential to deploy energy-saving technologies to remain sustainable. QCT QoolRack offers a flexible and scalable thermal optimized solution for higher power CPUs that require cooler system demands. The solution significantly reduces power usage efficiency to lower the overall PUE and decrease operating expenses (OPEX) to bring down total cost of ownership (TCO) over a system's lifecycle when compared to traditional air-cooled infrastructures.





#### **Cold Plate Modules**

- Heat from the CPU will be removed by coolant through each cold plate module.
- More heat can be dissipated in a limited space.



Front

#### Liquid to Air

- L11 flexible deployment with no additional data center infrastructure required.
- Carries heat out with a rear door heat exchanger (RDHx).

QCT's liquid cooling solutions lead the way to a cleaner and greener data center that minimizes its environmental impact by providing maximum energy savings and bringing sustainable and environmentally friendly innovations to mother earth.



#### QoolRack Integrated Solution

- At the bottom of the QoolRack Integrated Solution is a coolant distribution unit (CDU), which has two pumps and one filter to push and filter coolant to the cold plate modules.
- The DC-SCM on each node's Smart Link automatically adjusts the RDHx's fan speeds through fan zoning for enhanced power savings.



Front



QCT QoolRack supports hot swappable features to provide optimal user experiences and to avoid rack and system downtime.

#### CDU Pump Module









14

#### **QoolRack Stand-alone Solution**

- Optimized heat dissipation design to support more servers.
- Achieve better power efficiency compared to traditional air-cooled racks.
- Improves sustainability and reduces the carbon footprint of data centers.
- Ensures cooling reliability with redundant RDHx fans and pumps module.



Found at: www.QCT.io/wheretobuy

# Orqestra

Orchestrate your Data Center from a Single Pane of Glass

Orquestra is a light-weight data center management tool that uses the latest Redfish API, an open and secure industry standard, to help administrators manage their data centers collectively. Orquestra comes with an intuitive graphic user interface, so administrators can monitor, control and orchestrate their QCT hardware devices remotely from a single pane of glass.

## Hyperscale Monitoring with Intuitive GUI

Orquestra offers resource and firmware monitoring, data center power consumption, and the latest critical events, all in a single dashboard.

With this real-time information, administrators can conduct holistic assessment as well as spotlight areas of concern.

#### Remote Batch Firmware Management

Remote functions allow users to conduct firmware compliance checks on a batch of devices, and easily update two or more firmware packages at the same time with official or custom QCT Update Bundles (QUB). Scheduling of required actions or routine actions can also be set up.

### Customizable Event Subscription

Customizable real-time alerts based on event type, severity, or source allow users to quickly resolve issues before they result in more serious problems like server downtime.

Different users managing the same account can subscribe to the event types related to their team function roles, so that only selected events are sent to specified event receivers.

### Supported Models

3rd Gen and 4th Gen Intel<sup>®</sup> Xeon<sup>®</sup> Scalable processor platforms.







# QuantaEdge Series

QCT QuantaEdge series offers a dynamic edge server spectrum from on-premise edge to regional edge and from Open RAN based Telco infra to enterprise private network. QCT COTS servers feature high flexibility, expandability, minimized power consumption and a small hardware footprint, tailor-made for network function disaggregation and virtualization to realize zero touch provisioning.



### QuantaEdge EGX77B-1U

Edge Server

#### Carrier-Grade Multi-Access Edge Computing (MEC) Server

QuantaEdge EGX77B-1U is a 300mm extremely short depth edge server that features wide operation temperature and up to 12 LOM for advanced networking. Powered by 5th/4th Gen Intel<sup>®</sup> Xeon<sup>®</sup> Scalable processors, this model delivers enhanced performance with a built-in FEC and SyncE on board.



#### 1U2N Carrier-Grade Multi-Access Edge Computing (MEC) Server

QuantaEdge EGX77I-1U2N is our first multi-node short depth MEC server powered by 5th/4th Gen Intel<sup>®</sup> Xeon<sup>®</sup> Scalable processors. Featuring high density, flexibility, and a chip down design, it provides optimal computing performance and cost efficiency. With a design driven by ORAN and TIP standards, the EGX77I-1U2N is NEBS GR63 Level 3 and GR3108 Class 2 compliant to support diverse 5G services.



QuantaEdge EGX74I-1U

Edge Server

## Carrier-Grade Multi-Access Edge Computing (MEC) Server

EGX74I-1U is a 5th/4th Gen Intel<sup>®</sup> Xeon<sup>®</sup> Scalable processor Single Socket short depth MEC server. High-Performance, I/ O expandability and power efficiency provides best-in-class open platform for 5G Open RAN, private 5G networks, and a broad range of 5G MEC applications. EGX74I-1U design is driven by ORAN and TIP, also meets NEBS GR63 Level 3 and GR3108 Class 2 compliant for 5G services.





## Carrier-Grade Multi-Access Edge Computing (MEC) Server

EGX66Y-2U is a 3rd Gen Intel<sup>®</sup> Xeon<sup>®</sup> Scalable processor Dual Socket based short depth MEC server, supporting 2 x dual width GPU. High-Performance, I/O expandability and power efficiency provides best-in-class open platform for 5G Open RAN, private 5G networks, and a broad range of 5G MEC applications. EGX66Y-2U design is driven by ORAN and TIP, also meets NEBS level 3 and Earthquake zone 4.



## QuantaEdge EGX63IS-1U Edge Server

## Carrier-Grade Multi-Access Edge Computing (MEC) Server

EGX63IS-1U is a 3rd Gen Intel<sup>®</sup> Xeon<sup>®</sup> Scalable processor Single Socket short depth MEC server. High-Performance, I/O expandability and power efficiency provides best-in-class open platform for 5G Open RAN, private 5G networks, and a broad range of 5G MEC applications. EGX63IS-1U design is driven by ORAN and TIP, also meets NEBS level 3 and Earthquake zone 4.



### QuantaEdge EGT23D-DT

#### Software-Defined Customer Premises Equipment

EGT23D-DT is an Intel<sup>®</sup> Atom<sup>®</sup> based universal customer premises equipment (uCPE) which turns traditional networking hardware appliances into software-defined appliances and extends the virtualization from cloud to enterprise edge. The EGT23D-DT offers rich WAN connectivity options including 4G LTE, 5G, Wi-Fi 5 and Wi-Fi 6.





uCPE

### QuantaEdge EGD33B-WT

#### Edge Server

#### Bookshelf Pole Mount / Wall MountNEBS GR3108 Class 4 Fanless Outdoor DU/MEC Server

EGD33B-WT is a fanless IP67 outdoor server based on Intel<sup>®</sup> Xeon<sup>®</sup> D-2700 processors, featuring performance in a small profile to drive 5G base stations and AI edge computing applications, with integrated Ethernet and high-capacity I/O optimized. Its bookshelf design can support up to 6 DUs on a single pole. EGD33B-WT is designed to overcome extreme thermal fluctuations, high humidity, and other demanding environmental factors. It is also NEBS GR3108 Class 4 compliant with a greater operating temp threshold from -40 °C to +55 °C with a solar load.



# QuantaMesh Series

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Networking Router for Carrier Networks and Service Providers



- ONIE Pre-loaded
- ArcOS<sup>®</sup> Ready



QuantaMesh BMS T7080-IXA 80-port 100GbE QSFP28



Networking Router for Carrier Networks and Service Providers

onie	
	<ul><li>X86 CPU Board</li><li>ONIE Pre-loaded</li></ul>

ArcOS<sup>®</sup> Ready







48-port 25GbE SFP28 & 8-port **100GbE QSFP28** 

The Next Wave Enterprise Data Center 25GbE Switch





- ARRCUS
- X86 CPU Board • ONIE Pre-loaded
- ArcOS<sup>®</sup> Ready

QuantaMesh BMS T4048-IX8A BDE



48-port 25GbE SFP28 & 8-port **100GbE QSFP28** 

The Next Wave Enterprise Data Center 25GbE Switch





- x86 CPU Board ONIE Pre-loaded



• ONL Ready

#### QuantaMesh BMS **T9043-IX9**

32-port 400GbE QSFP56-DD



The 400GbE Spine Switch for Data Center and **Cloud Computing** 



## QuantaMesh BMS T4048-IX8



#### 48-port 25GbE SFP28 & 8-port **100GbE QSFP28**

Next-Generation 25GbE/100GbE ToR Switch for Data Center and Cloud Computing

#### one CUMULUS &

ONL

ARRCUS

SONIC

**100GbE Switch** 

onie

ONL

ARRCUS



- X86 CPU Board
  - ONIE Pre-loaded
  - Cumulus Linux Ready
- ONL Ready

32-port 100GbE QSFP28

- ArcOS<sup>®</sup> Ready
- SONiC Ready

QuantaMesh BMS T7032-IX7 BDE

The Next Wave Enterprise Data Center

X86 CPU Board

ONL Ready

ONIE Pre-loaded

QuantaMesh BMS **T7032-IX7** 



32-port 100GbE QSFP28

Next-Generation 100GbE Spine or ToR Switch for Data Center and Cloud Computing



• SONIC Ready

🗾 SONiC

## QuantaMesh T1048-LB9M

48-port 1000BASE-T & 4-port 25GbE SFP28

The Next Generation Data Center Management Switch



- Layer3 Management Switch
- Hot Swappable Redundant Power Supply
- 25G Uplink Port for Non-blocking Architecture





48-port 25GbE SFP28 & 8-port 100GbE QSFP28 Next-Generation 25GbE/100GbE ToR Switch for

Data Center and Cloud Computing



- VXLAN
- Multi-Chassis Link Aggregation (MLAG)
- OSPF, BGP4 with ECMP
- Network Automation





Next-Generation 100GbE Spine or ToR Switch for Data Center and Cloud Computing





- onie
- VXLANMulti-Chassis Link Aggregation (MLAG)
- OSPF, BGP4 with ECMP
- Network Automation

QuantaMesh T1048-LY4R



48-port 1000BASE-T & 4-port 10GbE SFP+

The Next Wave Data Center Rack Management Switch



• BMC Built-in

onie

- IPMI Management Support
- Optical OOB Port Support

## QCT Network Operating System (QNOS)

QCT Network Operating System (QNOS) is the modern software platform for data centers and cloud networks which is based on Broadcom's ICOS platform for tradition L2/L3 features as well as software-defined network (SDN) applications. Inherited from ICOS, QNOS is a proven protocol stack solution that can run on several control plane processors including PowerPC, x86, and ARM with robust operating performance and flexible deployment. For the fundamentals of modern data center networks such as network automation, virtualization, high availability and data center orientated features, QNOS provides a comprehensive feature set to cover all types of applications.



#### Automation

With the rapid adoption of cloud computing and the proliferation of big data and parallel computing the need for data center network devices is growing exponentially, making network automation a critical factor. Supporting auto installation, Zero Touch Provision (ZTP), RESTful API, NETCONF/RESTCONF, and Ansible, QNOS facilitates easy deployment to build-up a mass data center with Infrastructure-as-a-Service (laaS).



#### Virtualization

Virtualization technology has been booming up fast and widely required in data center for the Cloud computing and virtual machines (VMs) applications. To provide the scalability and stretched ability of L2 environment, QNOS supports Virtual eXtensible LAN (VXLAN) Switching/Routing running over the existing L3 network infrastructure. BGP-EVPN is also introduced in QNOS to support the VXLAN tunnel creation automatically and reduce network overhead by protocol-based MAC address and ARP learning.

High Availability

For data center network robust operations, QNOS eliminates single-point of failure with the following features:

- Multi-chassis Link Aggregation (MLAG)
- Virtual Router Redundancy Protocol (VRRP) and
- Bidirectional Forwarding Detection (BFD)
- In-Service Software Upgrade (ISSU)
- Up to 48 paths ECMP routing for load balancing and redundancy
- Spanning Tree with Guarding Features

### Data-Center Orientated

To build up a network infrastructure with a high bandwidth and low latency for network storage or high computing requirements, QNOS supports ROCEv1/v2, DCBX, and FIP SNP for the service differentiation to fulfill the needs of modern data center applications.

## Best-In-Class Networking OS for Cloud

- In-Service Software Upgrade (ISSU)
- VxLAN Switching, BGP-EVPN Route Support, and VxLAN Routing
- Multi-Chassis Link Aggregation (MLAG)
- OSPF, BGP4 with ECMP
- Network Automation
- RoCEv1/v2, DCBX, and FIP SNP

#### Layer 2 Features

Switching Mode: Store-and-Forward Spanning Tree:

- 802.1w
- 802.1s
- Auto Edge
- VLAN :
- IEEE 802.1Q Tagged Base
- Port-Based
- QinQ (802.1ad)

802.3x Flow Control (Pause Frames)

- Storm Control:
- Broadcast
- Unknown Multicast
- DLF (Unknown Unicast)
- IGMP Snooping:
- v1/v2/v3
- v1/v2 Querier
- Immediate Leave
- MLD Snooping v1/v2

#### Link Aggregation:

- Dynamic Load Balancing (DLB)
- 802.3ad with LACP (Resilient Hashing supported)
- Static Trunk
- Unicast/Multicast Traffic Balance over Trunking Port
- LACP Fallback
- Link State Tracking
- Port Backup
- Loopback Detection
- Private VLAN
- Link Debounce

#### **QoS Features**

Scheduling for priority queue: WRR, Strict, Hybrid COS: 802.1p, IP TOS precedence, DSCP DiffServ

#### **iSCSI** optimization **Security Features** Static and dynamic port security (MAC-based) 802.1x (MD5, MS-CHAPv2): - Port-based - MAC-based - Auto VLAN assignment - Guest VLAN - Unauthenticated VLAN Access Control List: L2/L3/L4 IPv6 ACL: L3/L4 RADIUS/TACACS+: Authentication, Authorization, Accounting **SSH V2.0** User name and password: - Local Authentication - Remote Authentication via RADIUS/TACACS+, AAA Management IP filtering: - SNMP - Telnet - SSH **SSH Public key Authentication IP Source Guard Dynamic ARP inspection (DAI)** DHCP snooping: IPv4, IPv6 **Control Plane Policing (CoPP)** Service Prohibit Access Signed firmware image **Role Base Access Control (RBAC)** VxLAN with port-security Diffie-Hellman 2048-Bit Key Hardware Protocol Checker L2 table update Notification **Port Blocking** Layer 3 Features IPv4 unnumbered interfaces **IP Multinetting/CIDR** /31 subnets **Proxy ARP** Static route: IPv4, IPv6 OSPFv2/v3 FCMP - Reslient Hashing supported for ECMP

- Dynamic Load Balancing (DLB) BGP4 IGMP v1/v2/v3 PIM-SM/-SM6 SSM MLD v1/v2 VRRPv2 Policy-Based Routing (PBR) BFD VRF Lite

#### Black Hole Detection (BHD) VRRPv3 **IP SLA Management Features IP** helper **IPv4 Device Tracking** PTP TC 1-Step E2E (1588 1-Step end-to-end transparent clock) Industrial command-line interface **CLI filtering CLI scheduler** SSH Software update: TFTP, SCP, SFTP Configuration download/upload: TFTP, SCP, SFTP **Dual Images** SNMP v1/v2c/v3 SNMP inform v2 RMON1 Groups: 1, 2, 3, & 9 **BOOTP:** client/relay **DHCP** client **DHCP** relay (VxLAN environment supported) **EVENT/Error** log **DNS client Remote PING** Traceroute NTPv4 LLDP: - 802.1ab - Potential error detection UDLD Port mirroring: SPAN, RSPAN sFlow v5 Email alerting: SMTP

#### sFlow v5 Email alerting: SMTP Error-Disable Recovery SNTP

#### IPv6 Management

IPv4/IPv6 Dual Protocol Stack ICMPv6 ICMPv6 Redirect IPv6 Neighbor Discovery Stateless Autoconfiguration Manual Configuration DHCPv6 client/relay SNMP over IPv6 SSH over IPv6 SSH over IPv6 IPv6 DNS Resolver IPv6 RADIUS IPv6 TACACS+ IPv6 Syslog IPv6 SNTP

#### High Availability

#### Multi-Chassis Link Aggregation (MLAG)

- IGMPv1/v2/v3 SNP and MLDv1/v2 SNP
- Standalone mode
- L2/L3 unicast
- RSTP/MSTP
- VXLAN

In-Service Software Upgrade (ISSU)

#### Data Center Features

PFC watchdog (DCBx supported) Anycast gateways Enhanced Transmission Selection (802.1Qaz) Priority-based Flow Control (802.1Qbb) - 802.1p

- IP-DSCP

**DCBX:** DCBX for ETS, DCBX for PFC, DCBX for Application Priority

#### FCoE Initiation Protocol (FIP) snooping RoCEv1/v2

#### Automation

Zero Touch Provision (ZTP) Auto Installation RESTful API Ansible NETCONF/RESTCONF MAC flapping Notification Bus Monitor and Recovery Two Way Active Measurement Protocol VRRP aware PIMSM

#### Virtualization Features

#### VxLAN Switching/Routing BGP-EVPN for VXLAN

- Ethernet autodiscovery Route (Type-1)
- MAC with IP advertisement Route (Type-2)
- inclusive multicast Ethernet tag Route (Type-3)
- Ethernet segment Route (Type-4)
- IP prefix Route (Type-5)

## Multihoming Designated Forwarder election enhancement (RFC8584)

#### SDN

OpenFlow v1.3

Features	IX7D	IX8D	LB9M	LY4R	LB9	IX1	P05	LY2R	LY3	LY6/8/9
L2 Features										
MLAG enhancement for Multicast	20.12 ~	20.12 ~	No	No	No	Yes	No	No	No	No
IGMPv3 SNP with MLAG	20.12 ~	20.12 ~	No	No	No	Yes	No	No	No	No
IGMP SNP	Yes	Yes	19.06B01~	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Port Backup	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Private VLAN	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Link Debounce	19.12 ~	19.12 ~	19.12 ~	No	No	Yes	No	No	No	No
Auto-Nego on 40G/100G	19.12 ~	19.12 ~	No	No	No	No	No	No	No	No
L3 Features										
Black Hole Detection (BHD)	19.06 ~	19.06 ~	No	No	No	Yes	No	No	No	No
IPv6 PBR	19.12~	19.12~	19.12~	No	No	Yes	No	No	No	No
	19.12~	19.12~	19.12~ No	NO	NO	Yes	NO	NO	NO	NO
OoS Features	13.12	13.12	NO	NO	110	163	NO	NO	NO	NO
DSCP-based PFC	20.12 ~	20.12 ~	No	No	No	Yes	No	No	No	No
Dynamic Load Balancing (DLB)	20.12 ~	20.12 ~	No	No	No	No	No	No	No	No
iSCSI Optimization	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Layer 3 Features	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
IGMPv1/v2/v3	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes
PIM-SM/SM6	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes
BED BED	Yes	Yes	N0 No	NO	Yes	Yes	Yes	Yes	Yes	Yes
VRFLite	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
VRRPv3	Yes	Yes	No	No	No	Yes	No	No	No	Yes
Security Features				-	-		-		-	
VxLAN with port-security	22.06 ~	22.06 ~	No	No	No	Yes	No	No	No	No
Diffie-Hellman 2048-Bit Key	22.06 ~	22.06 ~	No	No	No	Yes	No	No	No	No
Hardware Protocol Checker	22.06 ~	22.06 ~	22.06 ~	No	No	No	No	No	No	No
L2 table update Notification	22.06~	22.06~	No	No	No	Yes	No	No	No	No
Port Biocking	22.06 ~	22.06 ~	22.06~	NO	NO	Yes	NO	NO	NO	NO
IPv4 Device Tracking	21.06 ~	21.06~	No	No	No	Yes	No	No	No	No
Zero Touch Provision (ZTP)	20.12~	20.12~	No	No	No	Yes	No	No	No	No
PTP TC 1-Step E2E	20.12~	20.12~	No	No	No	No	No	No	No	No
(1588 1-Step end-to-end transparent clock)	20.12	20.12	NO	NO	NU	110	NO	NO	NO	NO
Signed firmware image	20.06~	20.06~	20.06 ~	No	No	Yes	No	No	No	No
	20.06~	20.06 ~	N0 No	NO	NO	Yes	NO	NO	NO	NO
	20.00 No	20.00 No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
NETCONF/RESTCONF w/ YANG	19.06 ~	19.06 ~	No	No	No	Yes	No	No	No	No
High Availability										
MLAG	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes
MLAG with MSTP and VXLAN	19.06 ~	19.06 ~	No	No	No	Yes	No	No	No	No
ISSU	19.06 ~	19.06 ~	No	No	No	Yes	No	No	No	No
Data Center Features	21.06	21.06	No	No	No	No	No	No	No	No
FTS	21.06 ~ No	21.06 ~ No	No	No	No	No	Yes	NU Ves	NU Ves	Yes
PFC (RoCEv1)	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes
DCBX	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes
FIP SNP	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes
DCBX App Priority Originator	19.12 ~	19.12 ~	No	No	No	Yes	No	No	No	No
ECN (RoCEv2)	19.12 ~	19.12 ~	No	No	No	Yes	No	No	No	No
Automation Features										
NETCONF/RESTCONF architecture	22.06 ~	22.06 ~	No	No	No	Yes	No	No	No	No
RESTFul API of Fiber optics										
information/status	20.06 ~	20.06 ~	No	No	No	Yes	No	No	No	No
RESTFul API of CoS	20.06 ~	20.06 ~	No	No	No	Yes	No	No	No	No
RESTFul API of ACL	19.12 ~	19.12 ~	19.12 ~	No	No	Yes	No	No	No	No
RESTFul API of IGMP SNP	19.12 ~	19.12 ~	19.12 ~	No	No	Yes	No	No	No	No
MAC flapping Notification	22.06 ~	22.06 ~	22.06 ~	No	No	Yes	Yes	Yes	Yes	Yes
Bus Monitor and Recovery	22.06~	22.06~	No	No	No	Yes	Yes	Yes	Yes	Yes
I wo Way Active Measurement Protocol	22.06~	22.06~	22.06~	No	No	Yes	Yes	Yes	Yes	Yes
Vintualization Features	22.00~	22.06~	INO	INU	INO	res	NO	NO	NO	NO
BGP-EVPN support for VRF aware VXI AN Routing	20.12 ~	20.12 ~	No	No	No	Yes	No	No	No	No
MAC Mobility: MAC dumping	20.12 ~	20.12 ~	No	No	No	Yes	No	No	No	No
VRF aware VXLAN Routing	20.06 ~	20.06 ~	No	No	No	No	No	No	No	No
BGP-EVPN Multihoming	20.06 ~	20.06 ~	No	No	No	Yes	No	No	No	No
BGP-EVPN ARP Suppression	20.06 ~	20.06 ~	No	No	No	Yes	No	No	No	No
VXLAN Switching	Yes	Yes	No	No	No	Yes	No	No	No	Yes
BGP-EVPN support for VXLAN Switching/Routing	19.12~	19.12~	No	No	No	Yes	No	No	No	No
VKF unaware VXLAN Routing	19.12 ~	19.12 ~	No	No	No	No	No	No	No	No

\* Do not support split horizon

# QuantaMesh Switch Accessories

QCT offers a full range of copper and optical cables as well as optical transceivers compliant to the IEEE standards. For short reach distances, direct attach copper cables (DAC) and active optical cables (AOC) are supported. For longer distances, AOC and multiple options of optical transceivers are supported.

### Cables

24

10G Direct Attach Copper Cable (SFP+ to SFP+) 25G Direct Attach Copper Cable (SFP28 to SFP28) **40G Direct Attach Copper Cable** (QSFP+ to QSFP+) 40G Direct Attach Copper fan-out Cables (QSFP+ to 4 SFP+) 100G Direct Attach Copper Cable (QSFP28 to QSFP28) 100G Direct Attach Copper fan-out Cables (QSFP28 to 4 SFP28) 400G Direct Attach Copper Cable (QSFP-DD to QSFP-DD) 400G Direct Attach Copper fan-out Cables (QSFP-DD+ to 4 QSFP28) 10G Active Optical Cable (SFP+, 850nm, MMF) 25G Active Optical Cable (SFP28, 850nm, MMF) 40G Active Optical Cable (QSFP+, 850nm, MMF) 40G Active Optical fan-out Cable (QSFP28 to 4 SFP+) 100G Active Optical Cable (QSFP28, 850nm, MMF) **100G Active Optical fan-out Cable** (QSFP28 to 4 SFP28) 200G Direct Attach Copper Cable (QSFP56 to QSFP56): 2m 200G Active Optical Cable (QSFP56, 850nm, MMF): 1m, 3m, 5m, and 10m

400G Active Optical Cable (QSFP-DD, 850nm, MMF)
400G Active Optical fan-out Cable (QSFP-DD+ to 4 QSFP28)
400G Active Copper fan-out Cable (QSFP-DD+ to 4 QSFP28)

### **Optics**

10G Optic (SFP+, LC, 850nm, MMF): 10GBASE-SR 10G Optic (SFP+, LC, 1310nm, SMF): 10GBASE-LR 25G Optic (SFP28, LC, 850nm, MMF): 25GBASE-SR 25G Optic (SFP28, LC, 1310nm, SMF): 25GBASE-LR 40G Optic (QSFP+, MPO, 850nm, MMF): 40GBASE-SR4 40G Optic (QSFP+, LC, 1310nm, SMF): 40GBASE-LR4 100G Optic (QSFP28, MPO, 850nm, MMF): 100GBASE-SR4 100G Optic (QSFP28, LC, 1310nm, SMF): 100GBASE-LR4 100G Optic (QSFP28, LC, 1310nm, SMF): 100GBASE-DR1 100G Optic (QSFP28, LC, 1310nm, SMF): 100GBASE-FR1 100G Optic (QSFP28, LC, 1271~1331nm, SMF): 100GBASE-CWDM4 200G Optic (QSFP56, MPO, 850nm, MMF): 200GBASE-SR4 200G Optic (QSFP56, MPO, 1310nm, SMF): 200GBASE-DR4 200G Optic (QSFP56, LC, 2km, SMF): 200GBASE-FR4 400G Optic (QSFP-DD, MPO, 850nm, MMF): 400GBASE-SR8 400G Optic (QSFP-DD LC, 1273.54~1309.14nm, SMF): 400GBASE-LR8 400G Optic (QSFP-DD, MPO, 1310nm, SMF): 400GBASE-DR4 400G Optic (QSFP-DD, LC, 1271~1331nm, SMF): 400GBASE-FR4



# Cloud Infrastructure

QCT is pioneering hyperconverged infrastructures by offering software-defined, highly scalable compute appliances powered by the world's leading virtualization software built on market-proven hyperscale hardware.

## **vm**ware<sup>®</sup>

### QxStack VMware EditionvSAN ReadyNode™

Flexible Virtualization Architecture to Fulfill Your Workloads



- Reliability, efficiency, and manageability
- Pre-configured for quick VMware vSAN™ deployment
- Pre-validated hardware configuration

QxStack VMware Edition-VRN is a series of hyperconverged IaaS appliances with VMware vSAN ReadyNode<sup>™</sup> Certification. Pre-validated to simplify complex implementation and management, QxStack VMware Edition-VRN also adopts the latest VMware vSAN technologies, such as vSAN OSA, vSAN ESA and vSAN Max, to help customers to boost utilization of compute and storage resources. Overall, the solution delivers simplicity, agility and manageability at a lower TCO for cloud building.

## **vm**ware<sup>®</sup>

## **QCT VMware Tanzu Solution**

Integrated Virtualization Environment to Fit Today's Cloud-Native Technologies



- Compatible with legacy and modern applications
- Optimal infrastructure for enterprise Kubernetes processes
- Ready for VMware virtualized AI infrastructure

QCT VMware Tanzu comprises a series of infrastructure as a service (laaS) appliances that support VMware vSphere with Tanzu, allowing users to adopt cloud native features to simplify and secure Kubernetes deployments at scale across clouds, whether it's a single team, a single cloud, or enterprise-wide operations in multiple clouds. It alleviates the heavy management load for DevOps teams and IT operators, further lowering TCO. It is also ready for Enterprise AI platforms, which provide streamlined management and orchestration to speed up AI infrastructure building.

## **m**ware<sup>®</sup>

## **QxVDI VMware Edition**

## A Selection of VDI Appliances Catering to Various Workload & Scenario Needs



- A pre-validated, reliable, turnkey VDI solution
- Different packages to fulfill diverse business demands
- Enhanced user experience

QCT's cutting-edge turnkey virtual desktop infrastructure (VDI) solution caters to the needs of various workloads and scenarios, spanning basic office tasks, entry-level graphics, to graphicintensive applications and Al/ML tasks. Powered by a market-proven software — VMware Horizon<sup>®</sup> — this desktop virtualization solution is unique in its ease of implementation and management.



### QxStack with Red Hat OpenStack Platform

A Carrier-Grade Infrastructure Pre-Integrated and Validated for Network Service Providers



- Ensure business continuity
- Achieve optimal network performance
- Accelerate faster time-to-value

QCT QxStack with Red Hat OpenStack Platform provides a comprehensive solution for cloud service providers, enterprises and Telecom operators. The platform is designed with high network bandwidth and capacity to meet demanding performance requirements. The stack adopts EPA designs and fully takes advantage of QCT NUMA-balanced systems to improve network performance.





# QxStack with Cloud Native Platform

An agile, flexible, and high-throughput performance platform to accelerate network transformation



- Extraordinary network performance
- Outstanding extendibility and flexibility
- Optimized model and configuration

QxStack with Cloud-Native Platform is a Platform as a Service (PaaS) solution built on the Red Hat<sup>®</sup> OpenShift<sup>®</sup> Container Platform and strengthened by Intel Enhanced Platform Awareness (EPA) technology. The production-ready performance-optimized solution features a Hyper Converged Infrastructure (HCI) architecture that supports VMs and container coexistence and allows resource sharing.

## Microsoft

### **QxStack Azure Stack HCI Solution**

#### **Certified Azure Stack HCI Solution**



- Enable diverse use cases
- Deliver faster time-to-market
- Easy to deploy

QxStack Azure Stack HCl is a Microsoft certified HCl solution designed to deliver a seamless hybrid cloud experience. With various configurations, it is not only optimized for diverse business workloads and use cases, but also pre-configured and pre-validated to minimize your hardware-software integration effort and system implementation cost.



# Software Defined Storage

QCT offers high-performance and high capacity virtualized storage environments to help enterprises effectively process an everincreasing volume of data and manage the complex workloads of analytics. QCT offers scalable, software-defined storage platforms equipped to address file, object and block storage requirements across the board and power the most demanding cloud computing solutions in the industry.



## **QxStor Red Hat Ceph Storage**

Optimal Integrated Ceph Solutions at Petabyte Scale



- Provide various workloads to meet diverse demand
- Exhibit industry-leading performance
- Accelerate faster time-to-value

QxStor Red Hat Ceph Storage Edition offers a family of Ceph solutions for building different types of scaleout storage clusters based on Red Hat Ceph Storage. The seamless interoperability and leading performance for block and object storage make it well suited for archival, rich media, and cloud infrastructure workloads like OpenStack.

# Converged AI & HPC System

Building up a system to run both HPC & AI workloads from scratch is very challenging because the system design and system integration in this process is highly complex. QCT delivers the QCT Platform on Demand (QCT POD), a converged HPC and AI platform, with best-practice hardware and software integration to fulfill workload-optimized performance for HPC, AI and Data Analytics workloads.



## QCT Platform on Demand (QCT POD)

Realize Industrial Workloads with Converged HPC & Al Infrastructures



- Best-practice HPC& AI converged platform for industrial workloads
- Streamlines management and deployment to accelerate time-to-value
- Provides a workload-driven design with flexible hardware and software integration

QCT Platform on Demand (QCT POD) provides bestfit building blocks for a converged HPC and Al system. It not only simplifies user' deployment journey, but also streamlines system management and monitoring. Moreover, with a comprehensive development environment, it can support both HPC and Al workloads in either a baremetal or containerized environment, depending on users' requirement, to accelerate their time-to-value.



## Process Automation Solution

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QCT offers an end-to-end Robotic Process Automation (RPA) solution, providing a powerful, trustworthy infrastructure, and RPA software support from qualified process consultants and process automation developers, delivering an optimized, customizable RPA implementation service to fulfill all automation needs.

### **QCT RPA Solution**

An End-to-end RPA Implementation Solution to Optimize and Automate Business Processes



- Saves human labor cost and time
- Conducts in-depth process reviews
- Improves process efficiency

QCT RPA Solution can help companies plan and start their automation journey. With rich experience in infrastructure, applications and process consulting, QCT can help companies build the digital workforce they need in a very short time, consolidating their business processes and steps into "AS-IS" and "To-Be" models to achieve real business process optimization, saving human labor and operational costs while boosting productivity.

# Private 5G Network Solution

QCT offers OmniPOD, an end-to-end private 5G network solution comprised of a 5G core with a high-availability design, a 5G RAN with flexible system configurations, and an OAM system with visualized network management. The network system is 3GPP standard-compliant and Intel x86 processor-based. It supports both single-site and multisite deployment depending on the user's scenario. Overall, OmniPOD equips enterprise users with a reliable, flexible, and user-friendly solution catering to diverse private 5G needs.

## **QCT OmniPOD Enterprise 5G Solution**

A Turnkey Solution to Shape Diverse Future 5G User Scenarios



- Optimal enterprise-grade reliability
- Flexible uplink/downlink slot configuration
- Visualized OAM system to provide user-friendly network management

QCT OmniPOD is composed of OmniCore (5G Core), OmniRAN (5G RAN), and OmniView (OAM). Our end-to-end enterprise 5G solution leverages best-of-breed technologies to help you build a scalable, secure, and agile network tailored for different vertical markets.



# Specifications

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### QuantaGrid Series

**intel** xeon

	QuantaGrid S55R-1U
Processor	(1) Intel <sup>®</sup> Xeon <sup>®</sup> 6 processor, up to TDP 350W
Memory	Up to 4TB memory capacity with (16) DDR5 RDIMM up to 6,400 MHz, (8) MCRDIMM up to 8,000 MHz
Storage	Front bay: (12) 2.5" SATA/SAS/NVMe drives
Network Controller	(1) 1GbE RJ45 dedicated management port (1) OCP 3.0 SFF slot
Expansion Slot	<b>Option 1:</b> (2) PCIe 5.0 x16 FHHL slots <b>Option 2:</b> (2) PCIe 5.0 x16 HHHL slots
Form Factor	1U Rackmount
Management Module	DC-SCM 2.0

	QuantaGrid D55X-1U
Processor	(2) Intel $^{\circ}$ Xeon $^{\circ}$ 6 processors, up to TDP 350W
Memory	UP to 8TB memory capacity with (32) DDR5 RDIMM up to 6,400 MHz, (16) MRDIMM up to 8,000 MHz
Storage	Option 1: (12) 2.5" hot-pluggable SATA/SAS/NVMe drives Option 2: (16) E1.S hot-pluggable NVMe drives Option 3: (20) E3.S 1T hot-pluggable NVMe drives Option 4: (4) E3.S 1T hot-pluggable NVMe drives + (8) E3.S 2T CXL devices
Network Controller	(1) Dedicated 1GbE management port Support (2) OCP 3.0 SFF network cards
Expansion Slot	Option 1:           (2) PCIe 5.0 x16 FHHL slots           (2) PCIe 5.0 x16 OCP 3.0 SFF slots           Option 2:           (3) PCIe 5.0 x16 HHHL slots           (2) PCIe 5.0 x16 OCP 3.0 SFF slots
Form Factor	1U Rackmount
Management Module	DC-SCM 2.0



	QuantaGrid S55J-2U	
Processor	(1) Intel $^{\circ}$ Xeon $^{\circ}$ 6 processors, up to TDP 350W	
Memory	Up to 4 TB memory capacity with (16) DDR5 RDIMM up to 6,400 MHz	
Storage	Front bay: (24) 3.5"/2.5" SAS/SATA drives Rear bay: (8) 2.5" NVMe drives On board: (2) 2230 M.2 NVMe boot drives	
Network Controller	(1) OCP 3.0 NIC PCIe 5.0 x16 SFF (1) 1GbE RJ45 dedicated management port	
Expansion Slot	<b>Option 1:</b> (2) PCIe 5.0 x16 FHHL slots <b>Option 2:</b> (3) PCIe 5.0 x16 HHHL slots	
Form Factor	2U Rackmount	
Management Module	DC-SCM 2.0	





	QuantaGrid D55Q-2U		
Processor	(2) Intel $^{\circ}$ Xeon $^{\circ}$ 6 processors, up to TDP 350W		
Memory	Up to 8TB memory capacity with (32) DDR5 RDIMM up to 6,400 MHz, (16) MRDIMM up to 8,000 MHz		
Storage	<b>Option 1:</b> (12) 3.5" hot-pluggable SATA/SAS HDDs or (12) 2.5" hot-pluggable NVMe drives <b>Option 2:</b> (24) 2.5" hot-pluggable SATA/SAS/NVMe drives <b>Option 3:</b> (12) E3.S 1T hot-pluggable NVMe drives + (12) E3.S 2T CXL devices		
Network Controller	(1) Dedicated 1GbE management port Support (2) OCP 3.0 SFF network cards		
Expansion Slot	Upper Deck [General SKU]: (4) PCIe 5.0 x8 FHHL slots + (2) 2.5" hot-plug NVMe SSD [SW GPU SKU]: (2) PCIe 5.0 x16 FHFL slots + (2) 2.5" hot-plug NVMe SSD [DW GPU SKU]: (2) PCIe 5.0 x16 FHFL slots		
	Lower Deck Option 1: (2) PCIe 5.0 x16 HHHL slots + (1) PCIe 5.0 x8 HHHL slots Option 2: (2) PCIe 5.0 x16 FHHL slots Option 3: (1) PCIe 5.0 x8 HHHL slot Option 4: (1) PCIe 5.0 x16 HHHL slot + (1) PCIe 5.0 x8 HHHL slot *For PCIe expansion, consider storage options; contact QCT for further details.		
Form Factor	2U Rackmount		

Management Module

DC-SCM 2.0



intel. XEON Platinum

	QuantaGrid D75F-9U
Processor	(2) 5th/4th Gen Intel $^{\circ}$ Xeon $^{\circ}$ processors, up to 350W
Chipset	Intel C741
Memory	Up to 8TB memory capacity with (32) DDR5 DIMM slots
Storage	(18) hot swappable 2.5" PCIe 5.0 NVMe SSDs (2) PCIe 3.0 x1/SATA M.2 2280/2230
Network Controller	Dedicated (1) GbE management port
Expansion Slot	MB Tray: (2) PCle 5.0 x16 FHHL DW slots I/O Tray: (8) PCle 5.0 x16 HHHL slots
<b>GPU Expansion</b>	NVIDIA HGX™ B200 8-GPU baseboard
Form Factor	9U Rackmount
Management Module	DC-SCM 1.0





	QuantaGrid D75H-7U	
Processor	(2) 5th/4th Gen Intel $^{\circ}$ Xeon $^{\circ}$ processors, up to 350W	
Chipset	Intel C741	
Memory	Up to 8TB memory capacity with (32) DDR5 DIMM slots	
Storage	(18) hot swappable 2.5" PCIe 5.0 NVMe SSDs (2) PCIe 3.0 x1/SATA M.2 2280/2230	
Network Controller	Dedicated (1) GbE management port	
Expansion Slot	MB Tray: (2) PCIe 5.0 x16 FHHL DW slots I/O Tray: (8) PCIe 5.0 x16 HHHL slots	
<b>GPU Expansion</b>	NVIDIA HGX™ H200 8-GPU baseboard	
Form Factor	7U Rackmount	
Management Module	DC-SCM 1.0	



	QuantaGrid D75L-5U		
Processor	(2) 5th/4th Gen Intel $^{\circ}$ Xeon $^{\circ}$ processors, up to 350W		
Chipset	Intel C741		
Memory	Up to 8TB memory capacity with (32) DDR5 DIMM slots		
Storage	(18) hot swappable 2.5" PCle 5.0 NVMe SSDs (2) PCle 3.0 x1/SATA M.2 2280/2230		
Network Controller	Dedicated (1) GbE management port		
Expansion Slot	MB Tray: (2) PCle 5.0 x16 FHHL DW slots I/O Tray: (8) PCle 5.0 x16 HHHL slots		
GPU Expansion	NVIDIA HGX™ H200 8-GPU or NVIDIA HGX™ B200 8-GPU baseboard		
Form Factor	5U Rackmount		
Management Module	DC-SCM 1.0		





	QuantaGrid D74F-7U
Processor	(2) 5th/4th Gen Intel $^{\circ}$ Xeon $^{\circ}$ processors, up to 350W
Chipset	Intel C741
Memory	Up to 8TB memory capacity with (32) DDR5 DIMM slots
Storage	(18) hot swappable 2.5" PCIe 5.0 NVMe SSDs (2) PCIe 3.0 x1/SATA M.2 2280/2230
Network Controller	Dedicated (1) GbE management port
Expansion Slot	<b>MB Tray:</b> (1) PCle 5.0 x16 OCP 3.0 slot + (1) PCle 5.0 x16 FHHL <b>I/O Tray:</b> (10) PCle 5.0 x16 OCP 3.0 slot
<b>GPU Expansion</b>	NVIDIA HGX™ H200 8-GPU baseboard
Form Factor	7U Rackmount
Management Module	DC-SCM 1.0

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	QuantaGrid D54X-1U		
SKU	2.5"	E1.S	
Processor	(2) 5th/4th Gen Intel <sup>®</sup> Xeon <sup>®</sup> Scalable processors, up to 385W TDP		
Chipset	Intel <sup>®</sup> C741		
Memory	Up to 8TB memory capacity with (32) DDR5 DIMM slots		
Storage	Front (12) 2.5" hot-pluggable SATA/SAS/NVMe drives Front (16) E1.5" hot-pluggable NVMe drives		
Network Controller	(1) Dedicated 1GbE management port Optional (2) OCP 3.0 small form factor network cards		
Expansion Slot	<b>Option 1</b> (2) PCIe 5.0 x16 FHHL slots (2) PCIe 5.0 x16 OCP3.0 slots	<b>Option 2</b> (3) PCIe 5.0 x 16 HHHL slots (2) PCIe 5.0 x16 OCP3.0 slots	
Form Factor	1U Rackmount		
Management Module	DC-SCM 1.0		





	QuantaGrid D54Q-2U			
SKU	3.5" Tiered	2.5" Tiered	2.5" All U.2	2.5" All E1.S
Processor		(2) 5th/4th Gen Intel <sup>®</sup> Xeon <sup>®</sup> Sca	lable processors, up to 350W TDP	
Chipset		Intel	<sup>®</sup> C741	
Memory		Up to 8TB memory capacit	y with (32) DDR5 DIMM slots	
Storage	Front (12) 3.5" hot-pluggable SATA/SAS drives including (8) hot- pluggable NVMe slots <b>Optional Rear:</b> (2) 2.5" hot- pluggable SATA/SAS/NVMe drives	Front (24) 2.5" hot-pluggable SATA/SAS drives including (8) hot- pluggable NVMe slots <b>Optional Rear:</b> (2) 2.5" hot- pluggable SATA/SAS/NVMe drives	Front (24) 2.5" hot-pluggable SATA/ SAS/NVMe drives	Front (24) E1.S hot-pluggable NVMe drives
Network Controller	(1) Dedicated 1GbE management port Optional (2) OCP 3.0 small form factor network cards			
Expansion Slot	ion Slot Option 1: (2) PCle 5.0 x16 FHHL slots (4) PCle 5.0 x8 FHHL slots Optional (2) PCle 5.0 x16 HHHL slots Option 2: (2) PCle 5.0 x16 FHFL slots (support DW GPU) (2) PCle 5.0 x16 FHHL slots Optional (2) PCle 5.0 x16 HHHL slots Optional (2) PCle 5.0 x16 HHHL slots Optional (2) PCle 5.0 x16 HHHL slots (4) PCle 5.0 x16 FHFL slots (support SW GPU) Optional (2) PCle 5.0 x16 HHHL slots			
Form Factor	2U Rackmount			
Management Module	DC-SCM 1.0			





	QuantaGrid S54S-1U			
SKU	SATA	SATA/SAS		
Processor	(1) 5th/4th Gen Intel <sup>®</sup> Xeon <sup>®</sup> Sc	alable processor, up to 350W TDP		
Chipset	Inte	Intel <sup>®</sup> C741		
Memory	Up to 2TB memory capac	Up to 2TB memory capacity with (8) DDR5 DIMM slots		
Storage	(12) 3.5"/2.5" hot-pluggable SATA HDDs (from PCH) (4) 2.5" 7mm hot-pluggable NVMe drives	(12) 3.5"/2.5" hot-pluggable SATA/SAS HDDs (from HBA/Raid card) (4) 2.5" 7mm hot-pluggable NVMe drives		
Network Controller	(1) Dedicated 1GbE management port			
Expansion Slot	(2) PCIe 5.0 x16 OCP 3.0 slo (1) PCIe 5.0 x16 HHHL slot (	(2) PCIe 5.0 x16 OCP 3.0 slots + (1) PCIe 5.0 x16 HHHL slot (1) PCIe 5.0 x16 HHHL slot (internal, for SAS HHHL card only)		
Form Factor	1U Ra	1U Rackmount		
Management Module	DC-SCM 1.0			





	QuantaGrid D54U-3U
Processor	(2) 5th/4th Gen Intel $^{\ensuremath{\circledast}}$ Xeon $^{\ensuremath{\$}}$ Scalable processors, up to 350W TDP
Chipset	Intel <sup>®</sup> C741
Memory	Up to 8TB memory capacity with (32) DDR5 DIMM slots
Storage	(10) 2.5" hot-pluggable SATA/SAS/NVMe drives
Network Controller	(1) Dedicated 1GbE management port
Expansion Slot	[Dual Width GPU Config] (4) PCIe 5.0 ×16 FHFL slots (2) PCIe 5.0 ×16 HHHL slots (1) PCIe 5.0 ×16 OCP 3.0 TSFF/SFF slot (1) PCIe 5.0 ×8 HHHL slot [Single Width GPU Config] (8) PCIe 5.0 ×8 HHHL slots (2) PCIe 5.0 ×16 HHHL slots (1) PCIe 5.0 ×16 OCP 3.0 TSFF/SFF slot (1) PCIe 5.0 ×8 HHHL slot
GPU Expansion	(4) Dual width GPUs or (8) Single width GPUs
Form Factor	3U Rackmount
Management Module	DC-SCM 1.0

	QuantaGrid D74H-7U
Processor	(2) 5th/4th Gen Intel $^{\rm \otimes}$ Xeon $^{\rm \otimes}$ Scalable processors, up to 350W TDP
Chipset	Intel <sup>®</sup> C741
Memory	Up to 8 TB memory capacity with (32) DDR5 DIMM slots
Storage	(18) 2.5" hot-pluggable NVMe drives
Network Controller	(1) Dedicated 1GbE management port
Expansion Slot	(2) PCle 5.0 x16 OCP 3.0 slots (10) PCle 5.0 x16 OCP 3.0 slots
GPU Expansion	NVIDIA HGX™ H200 8-GPU or NVIDIA HGX™ H100 8-GPU baseboard
Form Factor	7U Rackmount
Management Module	DC-SCM 1.0





		QuantaGrid D53X-1U				
SKU	All Flash SKU	SFF Tiered SKU	Hybrid SKU			
Processor	(2) 3rd Gen Intel <sup>®</sup> Xeon <sup>®</sup> Scalable processors, up to 270W					
Chipset		Intel <sup>®</sup> C621A				
Memory	Up to 8TB RDIMM/LRDIMM (32) 3200 MHz DDR4 RDIMM/LRDIMM					
Storage	(12) 2.5" hot-pluggable SATA/NVMe drives	(4) 2.5" hot-pluggable SATA/SAS drives (8) 2.5" hot-pluggable SATA/SAS/NVMe drives	(4) 3.5"/2.5" hot-pluggable SATA/SAS drives (4) 7mm NVMe/SATA/SAS drives (optional)			
Network Controller		(1) OCP 3.0 mezzanine SFF (1) Dedicated 1GbE management port				
Expansion Slot	Option 1 (3 PCle/HHHL Slots):           (1) PCle 4.0 x8 SAS mezzanine slot           (1) PCle 4.0 x8 OCP 3.0 mezz SFF slot           (3) PCle 4.0 x16 HHHL (ex- GPU T4) <sup>1</sup> Option 2 (2 PCle/FHHL Slots):           (1) PCle 4.0 x8 OCP 3.0 mezz SFF slot           (2) PCle 4.0 x16 HHHL (ex- GPU T4) <sup>1</sup> Option 2 (2 PCle/FHHL Slots):           (1) PCle 4.0 x8 OCP 3.0 mezz SFF slot           (2) PCle 4.0 x8 OCP 3.0 mezz SFF slot           (2) PCle 4.0 x16 HHHL (ex- GPU T4) <sup>1</sup>					
Form Factor		1U Rackmount				

Note 1: GPU T4 support with limitations







	QuantaGrid D53XQ-2U				
SKU	3.5" Tiered	2.5" Expander	2.5" Pass Through	2.5" All Flash	
Processor		(2) 3rd Gen Intel <sup>®</sup> Xeon <sup>®</sup> Sca	lable processors, up to 270W		
Chipset		Intel <sup>®</sup>	C621A		
Memory	Up to 12TB me	mory capacity with (32) DDR4 DIMM s	slots and Intel PMEM 200 Series,	supporting 3200 MHz	
UPI		2	UPI		
Storage	Front : (12) 3.5" SATA/SAS drives including (8) NVMe slots Optional Rear : (2) 2.5" SATA/SAS/NVMe drives	Front : (24) 2.5" SATA/SAS drives including (8) NVMe slots Optional Rear : (2) 2.5" SATA/SAS/NVMe drives	Front : (16) 2.5" SATA/SAS drives (8) NVMe SSDs Optional Rear : (2) 2.5" NVMe SSDs	Front : (24) NVMe SSDs Optional Rear : (2) NVMe SSDs	
Network Controller	(1) Dedicated 1GbE management port				
Expansion Slot	Option 1 (2) FHHL PCIe 4.0 x16 slots (4) FHHL PCIe 4.0 x8 slots Optional (2) HHHL PCIe 4.0 x16 slots Option 2 (2) FHFL PCIe 4.0 x16 slots (Support dual width GPUs) (2) FHHL PCIe 4.0 x16 slots Optional (2) HHHL PCIe 4.0 x16 slots Option 3 (4) FHFL PCIe 4.0 x16 slots (Support single width GPUs) Optional (2) HHHL PCIe 4.0 x16 slots				
Form Factor	2U Rackmount				

### QuantaPlex Series





\*Per Node

	Quanta	aPlex S45Z-2U	QuantaPlex S25Z-2U
SKU	Front access, 2.5"	Front access, E1.S	Front access, 2.5"
Processor		(1) Intel <sup>®</sup> Xeon <sup>®</sup> 6 processor, up to TDP 35	0W
Memory	Up to	9 4 TB memory capacity with (16) DDR5 RDIMM u	ip to 6,400 MHz
Storage	(3) 2.5" hot-pluggable NVMe drives	(2) E1.S hot-pluggable NVMe drives	(3) 2.5" hot-pluggable NVMe drives
Network Controller		(1) Dedicated 1GbE management port (1) PCle 5.0 x16 OCP 3.0 SFF slot	
Expansion Slot	NA	(1) PCIe 5.0 x16 HHHL slot	Option 1: (1) PCIe 5.0 x16 FHFL SW slot (1) PCIe 5.0 x8 FHFL SW slot (1) PCIe 5.0 x16 FHHL SW slot Option 2: (1) PCIe 5.0 x16 FHFL DW slot (1) PCIe 5.0 x16 FHHL SW slot
Form Factor		2U Rackmount	
Management Module		DC-SCM 2.0	





		QuantaPlex S24P-5U	
SKU	84 HDD Single Node	84 HDD Dual Node	96 HDD Dual Node
Processor	(1) 5th/4th	Gen Intel <sup>®</sup> Xeon <sup>®</sup> Scalable processor per node, ເ	up to 350W
Chipset		Intel <sup>®</sup> C741	
Memory	Up to 2 TB m	emory capacity per node with (8) DDR5 DIMM sl	ots per node
Storage	(84) 3.5" hot-plugga (2) SATA/NVMe hot-pl	ble SATA/SAS HDDs uggable U.2 per node	(96) 3.5" hot-pluggable SATA/SAS HDDs (2) SATA/NVMe hot-pluggable U.2 per node
Network Controller		(1) Dedicated 1GbE management port per node	
Expansion Slot		(1) PCIe 5.0 x16 OCP 3.0 slot per node (2) PCIe 5.0 x16 HHHL slots per node	
Form Factor		5U Rackmount	
Management Module		DC-SCM 1.0	



	QuantaPlex T43Z-2U
Processor	(2) 3rd Gen Intel <sup>®</sup> Xeon <sup>®</sup> Scalable processors per node, up to 205W
Chipset	Intel <sup>®</sup> C621A
Memory	(16) 3200MHz DDR4 RDIMM/LRDIMM per node
Storage	(2) 2.5" hot-pluggable SATA/SAS/NVMe drives per node
Network Controller	(1) OCP 3.0 mezzanine slot per node (1) Dedicated 1GbE management port per node
Expansion Slot	(2) PCIe 4.0 x16 LP MD-2 slots per node (1) OCP 3.0 PCIe 4.0 x16 SFF mezzanine slot per node
Form Factor	2U Rackmount, 4 Nodes

### QoolRack series



	QoolRack Integrated Solution
Rack Frame	19" EIA
Dimensions	600mm width, 1200mm depth + RDHx 270mm, 42U height supported
Weight	With coolant 515 kg
Cooling Distribution Unit	4U CDU chassis DC-SCM 1+1 liquid pump module Liquid filter module
Power Sled	1U power sled chassis
Manifold	Up to 31 ports
Coolant	LC-25 (PG25)
Noise Level	69.5 dBA (idle; measured 1.5 m away)
Rack Management Control	Sensor monitoring Controlled by OpenBMC Remote control interface: Web-UI & Redfish API

### QuantaEdge Series

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\*Per Node

Processor

	EGX77B-1U
Processor	(1) 5th/4th Gen Intel $^{\circ}$ Xeon $^{\circ}$ Scalable processor, up to 250W
Memory	(8) 4800 MHz DDR5 ECC RDIMM, up to 512GB
Storage	(2) SATA/NVMe M.2 2280
Network Controller	<b>SKU 1:</b> (8) 25GbE w/ SyncE, NCSI <b>SKU 2:</b> (4) 25GbE + (8) 10GbE w/ SyncE, NCSI
Expansion Slot	(1) FHHL PCIe 5.0 x16
Form Factor	1U Rackmount

90	ATINUM	
EGX77I-1U2N		
(1) 5th/4th Gen Intel <sup>®</sup> Xeon <sup>®</sup> Scalable processor, up to	o 250	W

Memory	(8) 4800 MHz DDR5 ECC RDIMM, up to 512GB
Storage	(2) SATA/NVMe M.2 2280
Network Controller	Expansion SKU (8) 25GbE w/ SyncE, NCSI Storage SKU (4) 25GbE + (8) 10GbE w/ SyncE, NCSI
Expansion Slot	Expansion SKU (1) FHHL PCIe 5.0 x16 (1) HHHL PCIe 5.0 x16 Storage SKU (1) FHHL PCIe 5.0 x16
Form Factor	1U2N Sled Design

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	EGX74I-1U
Processor	(1) 5th/4th Gen Intel $^{\circ}$ Xeon $^{\circ}$ Scalable processor, up to 250W
Memory	(8) 4800 MHz DDR5 ECC RDIMM, up to 512GB
Storage	Expansion SKU (2) SATA/NVMe M.2 2280 Storage SKU (2) SATA/NVMe M.2 2280 (2) 2.5" U.2 SSDs
Network Controller	(4) 25GbE SFP28 ports (NCSI) (1) Dedicated 1GbE management port
Expansion Slot	Expansion SKU (2) FH3/4L PCIe 5.0 x16* (1) FHHL PCIe 5.0 x16 Storage SKU (2) FH3/4L PCIe 5.0 x16*
Form Factor	1U Rackmount





xeon

	EGX66	Y-2U
Processor	(2) 3rd Gen Intel <sup>®</sup> Xeon <sup>®</sup> Scalabl	le processors, up to 225W
Memory	(16) 3200 MHz DDR4 RDIMM/LF	RDIMM up to 2TB
Storage	(2) SATA3/NVMe M.2 2280/2211 (4) 2.5" SATA3/SAS/NVMe SSDs <sup>3</sup> (1) Internal RAID card (optional)	0 *
Network Controller	(4) 25GbE SFP28 with Intel <sup>®</sup> E81 (1) 1GbE RJ45 with Intel <sup>®</sup> I210 Lo (1) Dedicated 1GbE management	0 LoM bM nt port
Expansion Slot	<b>GPU SKU</b> (2) FH3/4L dual width PCIe 4.0 x16** (2) FHHL PCIe 4.0 x16	<b>6 Expansion SKU</b> (4) FH3/4L PCle 4.0 x16** (1) FHHL PCle 4.0 x16 (1) FHHL PCle 4.0 x8
Form Factor	2U Rackmount	·

\* Note : Supports up to 6 SATA3/NVMe SSDs \*\* Note : (FH3/4L) supports 266.7mm length GPU

\* Note : (FH3/4L) supports 266.7mm length GPU





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intel. XEON Platinum

	EC	iX63IS-1U
Processor	(1) 3rd Gen Intel $^{\circ}$ Xeon $^{\circ}$ Scalable processor, up to 225W	
Memory	(8) 3200 MHz DDR4 RDIMM/LRDIMM up to 512GB	
Storage	(2) SATA3/NVMe M.2 228 (2) 2.5" SATA3 SSDs (opti	0 onal)
Network Controller	(4) 25GbE SFP28 with Intel <sup>®</sup> E810 LoM (2) 1GbE RJ45 with Intel <sup>®</sup> I210 LoM (1) Dedicated 1GbE management port	
Expansion Slot	<b>Storage SKU</b> (2) 2.5" SATA3 SSDs (2) FHFL PCIe 4.0 x16	<b>Expansion SKU</b> (1) FHHL PCIe 4.0 x16 (2) FHFL PCIe 4.0 x16
Form Factor	1U Rackmount	

	EGD33B-WT
Processor	(1) Intel <sup>®</sup> Xeon <sup>®</sup> D-2700 series, up to 118W
Memory	64GB ECC DDR4 on board
Storage	(2) SATA/NVMe M.2 2280
Network	SFP Configuration a. (8) 10GbE SFP+ ports b. (2) 25GbE SFP28 & (4) 10GbE SFP+ ports c. (4) 25GbE SFP28 ports (1) 2.5GbE RJ45 (1) Dedicated 1GbE management port
Expansion Slot	(1) PCle 4.0 x16 FHHL
Form Factor	Pole Mount/Wall Mount/Bookshelf Mount Type
Dimensions	(W) 420mm x (H) 154mm x (D) 385mm
Operating Temperature	-40°C to 46°C w/solar load



	EGT23D-DT
Processor	(1) Intel Atom $^{\circ}$ C3000 series, up to 25W
Memory	(1) 2400MHz DDR4 SO-DIMM ECC/non ECC up to 32GB
Storage	(1) 16GB eMMC (1) SATA3 2.5" SSD
Network Controller	(2) 1GbE RJ45 with Intel <sup>®</sup> l210 LoM (4) 1GbE RJ45 with Marvell 88E1543 LoM (1 pair bypass optional) (1) 1GbE RJ45 console port
Expansion Slot	(1) Mini-PCle for Wi-Fi (1) M.2 B Key for LTE/5G
Form Factor	Tabletop

#### QuantaMesh Series



	BMS T7040-IXAE	BMS T7080-IXA	BMS T4048-IX8A	
Physical Ports				
Port Configuration	40-port 100GbE QSFP28	80-port 100GbE QSFP28	48-port 25GbE SFP28 & 8-port 100GbE QSFP28	
Management Port	(1) OOB port (10/100/1000BASE-T)	(1) OOB port (10/100/1000BASE-T)	(1) OOB port (10/100/1000BASE-T)	
Console Port	(1) RJ45 (1) RJ45		(1) RJ45	
USB	(1) USB 2.0	(1) USB 2.0	(1) USB 2.0	
Performance				
ASIC	Broadcom Jericho2 BCM88690	(2) Broadcom Jericho2 BCM88690	Broadcom Trident3 BCM56770	
Switching Capacity	8Tbps	16Tbps	4.0Tbps	
Maximum Forwarding Rate	2Bpps	4Bpps	18Bpps	
Latency	Ultra-low Latency	Ultra-low Latency	Ultra-low Latency	
CPU	Intel <sup>®</sup> Xeon <sup>®</sup> processor D1548	Intel <sup>®</sup> Xeon <sup>®</sup> processor D1548	Intel Atom <sup>®</sup> processor C3558	
Memory	(2) 16GB DDR4/ECC	(2) 16GB DDR4/ECC	-	
Flash	(2) 8MB	(2) 16MB	8GB DDR4/ECC	
Storage	128G SSD	128G SSD	128G SSD	
BMC	AST2520 (optional)	AST2520 (optional)	AST2520 (optional)	
High Availability	Redundant Power Supply: 1+1 Hot-Swappable Fan Tray: 5+1	Redundant Power Supply: 2+2 Hot-Swappable Fan Tray: 3+1	Redundant Power Supply: 1+1 Hot-Swappable Fan Tray: 4+2	







	BMS T4048-IX8A_BDE	BMS T9032-IX9	BMS T404	I8-IX8/IX8D
Physical Ports				
Port Configuration	48-port 25GbE SFP28 & 8-port 100GbE QSFP28	32-port 400GbE QSFP-DD	48-port 25GbE SFP28 & 8-port 100GbE QSFP28	
Management Port	(1) RJ45 out-of-band management port (10/100/1000M)	(1) OOB port (10/100/1000BASE-T)	(1) OOB port (10/100/1000BASE-T)	
Console Port	(1) RJ45	(1) RJ45	(1) RJ45	
USB	(1) USB 2.0	-	(1) USB 2.0	
Performance				
ASIC	Broadcom Trident3 BCM56770	Broadcom Tomahawk3 BCM56980	Broadcom Trident3 BCM56873	
Switching Capacity	4.0Tbps	25.6Tbps	4.0Tbps	
Maximum Forwarding Rate	1B PPS	8Bpps	2Bpps	
Latency	Ultra-low latency	Ultra-low Latency	Ultra-low Latency	
MAC	Unified Forwarding Table to dynamically allocate the L2/L3 tables	8K to 64K	Up to 288K	
CPU	Intel Broadwell DE D-1527, TPM 2.0	Intel Xeon <sup>®</sup> processor D1527	Intel Atom <sup>®</sup> processor C2558	Intel Atom <sup>®</sup> processor C3558
Memory	8GB SO-DIMM DDR4	32GB DDR4/ECC	32GB DDR4/ECC	8GB DDR3/ECC
Flash	32 MB	-	-	
Storage	128G SSD M.2	128G SSD	32G SSD	
BMC	-	AST2520	AST	2520
High Availability	Redundant Power Supply: 1+1 Hot-Swappable Fan Tray: 4+2	Redundant Power Supply: 1+1 Hot-Swappable Fan Tray: 5+1	Redundant Power Supply: 1+1 Hot-Swappable Fan Tray: 4+2	



	BMS T7032-IX7/IX7D		BMS T7032-IX7_BDE	BMS T1048-LB9M
Physical Ports				
Port Configuration	32-port 100GbE QSFP28		32-port 100GbE QSFP28	48-port 1000BASE-T & 4-port 25GbE SFP28
Management Port	(1) OOB port (10/100/1000BASE-T)		Out-of-band management port (RJ-45, 10/100/1000Base-T)	(1) OOB port (10/100/1000BASE-T)
Console Port	(1)	RJ45	(1) RJ45	(1) RJ45
USB	(1) U	SB 2.0	(1) USB 2.0	-
Performance				
ASIC	Broadcom Trident3 BCM56870		Broadcom Trident3 BCM56870	Broadcom StrataXGS Hurricane3-MG
Switching Capacity	6.4Tbps		6.4Tbps	296Tbps
Maximum Forwarding Rate	2Bpps		2Bpps	220Mpps
Latency	Ultra-low Latency		Ultra-low Latency	Ultra-low latency
MAC	Up to 288K		Unified Forwarding Table to dynamically allocate the L2/L3 tables	Up to 32K
CPU	Intel Atom <sup>®</sup> processor C2558	Intel Atom <sup>®</sup> processor C3558	Intel Broadwell DE D-1527, TPM 2.0	ARM Cortex <sup>®</sup> A9 processor 1.25GHz
Memory	8G DDR3/ECC	8G DDR4/ECC	8GB SO-DIMM DDR4	2G DDR4/ECC
Flash	-		32MB	128MB
Storage	32G SSD		128G SSD M.2	8G SSD
BMC	AST2520		-	-
High Availability	Redundant Power Supply: 1+1 Hot-Swappable Fan Tray: 4+2		Redundant Power Supply: 1+1 Hot-Swappable Fan Tray: 4+2	Redundant Power Supply: 1+1



#### QuantaMesh T1048-LY4R

#### **Physical Ports**

-	
Port Configuration	48-port 1000BASE-T & 4-port 10GbE SFP+
Management Port	(1) 10/100/1000BASE-T (RJ45) & (1) 1000BASE-X (SFP)
Console Port	(1) RJ45
USB	(1) USB 2.0
Performance	
ASIC	Broadcom StrataXGS Hurricane2
Switching Capacity	176Gbps
Maximum Forwarding Rate	131Mpps
Latency	-
MAC	16K
CPU	Intel Atom <sup>®</sup> processor C2338
Memory	8GB DDR3/ECC
Flash	-
Storage	8GB microSD
BMC	AST2520
High Availability	Redundant Power Supply: 1+1



	BMS T7032-IX7/IX7D		BMS T7032-IX7_BDE	BMS T1048-LB9M
Physical Ports				
Port Configuration	32-port 100GbE QSFP28		32-port 100GbE QSFP28	48-port 1000BASE-T & 4-port 25GbE SFP28
Management Port	(1) OOB port (10/100/1000BASE-T)		Out-of-band management port (RJ-45, 10/100/1000Base-T)	(1) OOB port (10/100/1000BASE-T)
Console Port	(1)	RJ45	(1) RJ45	(1) RJ45
USB	(1) U	SB 2.0	(1) USB 2.0	-
Performance				
ASIC	Broadcom Trident3 BCM56870		Broadcom Trident3 BCM56870	Broadcom StrataXGS Hurricane3-MG
Switching Capacity	6.4Tbps		6.4Tbps	296Tbps
Maximum Forwarding Rate	2Bpps		2Bpps	220Mpps
Latency	Ultra-low Latency		Ultra-low Latency	Ultra-low latency
MAC	Up to 288K		Unified Forwarding Table to dynamically allocate the L2/L3 tables	Up to 32K
CPU	Intel Atom <sup>®</sup> processor C2558	Intel Atom <sup>®</sup> processor C3558	Intel Broadwell DE D-1527, TPM 2.0	ARM Cortex <sup>®</sup> A9 processor 1.25GHz
Memory	8G DDR3/ECC	8G DDR4/ECC	8GB SO-DIMM DDR4	2G DDR4/ECC
Flash	-		32MB	128MB
Storage	32G SSD		128G SSD M.2	8G SSD
BMC	AST2520		-	-
High Availability	Redundant Power Supply: 1+1 Hot-Swappable Fan Tray: 4+2		Redundant Power Supply: 1+1 Hot-Swappable Fan Tray: 4+2	Redundant Power Supply: 1+1



#### QuantaMesh T1048-LY4R

#### **Physical Ports**

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Port Configuration	48-port 1000BASE-T & 4-port 10GbE SFP+
Management Port	(1) 10/100/1000BASE-T (RJ45) & (1) 1000BASE-X (SFP)
Console Port	(1) RJ45
USB	(1) USB 2.0
Performance	
ASIC	Broadcom StrataXGS Hurricane2
Switching Capacity	176Gbps
Maximum Forwarding Rate	131Mpps
Latency	-
MAC	16K
CPU	Intel Atom <sup>®</sup> processor C2338
Memory	8GB DDR3/ECC
Flash	-
Storage	8GB microSD
BMC	AST2520
High Availability	Redundant Power Supply: 1+1

## About QCT

Quanta Cloud Technology (QCT) designs, manufactures, integrates and services cutting edge offerings for 5G Telco/Edge, AI/HPC, Cloud, and Enterprise infrastructure via its own global network. Product lines include hyper-converged and software-defined data center solutions as well as servers, storage, and network switches from 1U to entire racks with a diverse ecosystem of hardware components and software partners to fit a variety of business verticals and workload parameters.

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#### Contact Us





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