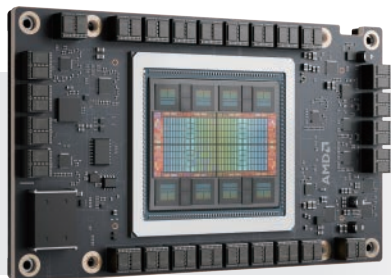# QCT Next Gen Server Solutions Powered by AMD EPYC™ 9005 Series Processors

QCT Next Gen Server Solutions powered by the latest AMD EPYC™ 9005 Series processors and AMD Instinct™ MI325X accelerators feature the AMD "Zen 5" and AMD CDNA™ 3 architectures to offer leading AI performance and energy efficiency for training and inference tasks.

AMD Instinct™ MI325X GPU Accelerators

Memory:
Up to 256GB of HBM3E memory

Memory bandwidth:
6TB/s peak memory bandwidth

Architecture:
AMD CDNA™ 3

Chiplets:
Eight compute, four I/O, and eight memory chiplets using advanced 2.5D and 3D packaging technology

- Built for enterprise AI, offering seamless integration for fast, cost-effective upgrades
- Drop-in compatible with existing AMD Instinct™ MI300X infrastructures
- Infinity Fabric™ technology for seamless data sharing
- AMD ROCm™ software to accelerate AI inferencing and training

Elevated Data Center Performance with AMD EPYC ™ Series Processors

	AMD EPYC™ 9005 Series	AMD EPYC™ 9004 Series
Max core count per socket	128 cores/ 256 threads	96 cores/ 192 threads
Max TDP	500W	400W
L3 cache	Up to 512 MB	Up to 384 MB
Memory channels / socket	12 channels, 2DPC	12 channels, 2DPC
Memory frequency	Up to 6000 MHz 1DPC	Up to 4800 MHz 1DPC
CPU interlinks	GMI-3, 32GT/s	GMI-3, 32GT/s
PCIe Lane	PCIe 5.0 128 lanes	PCIe 5.0 128 lanes

QCT Product Info
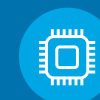
AMD EPYC

Enterprise — HPC — AI/Acceleration

SDS/HCI	Virtualization	Design & Simulation	IC design & EDA	Machine Learning	AI Training & Inferencing

QuantaGrid S44NL-1U   **QuantaGrid D44N-1U**   **QuantaGrid D74A-7U**   **QuantaGrid D75T-7U**   **QuantaGrid D75M-5U**

QuantaGrid D74A-7U

Advanced Performance for the Most Extreme AI-HPC Workloads

AMD EPYC

- Powered by dual AMD EPYC™ 9004 or 9005 Series Processors with up to 500W TDP and AMD Instinct™ MI300X or MI325X GPU accelerators
- UBB architecture to support AI & HPC workloads
- PCIe 5.0 OCP expansion slots for RDMA networking
- Modularized system design for optimal flexibility and easy serviceability
- High NVMe storage density, supporting up to 18x 2.5" NVMe drives
- Accelerated parallel computing performance for the most extreme AI-HPC workloads
- Enhanced serviceability with tool-less, hot-pluggable designs

Processor	(2) AMD EPYC™ 9004 or 9005 Series Processors, up to 500W TDP
Memory	Up to 6TB memory capacity with (24) DDR5 RDIMM up to 6000 MHz
Networking	Dedicated (1) GbE management port
Storage	Front (18) 2.5" hot-pluggable NVMe drives
Expansion Slot	(2) PCIe 5.0 x16 OCP 3.0 SFF slots (10) PCIe 5.0 x16 OCP 3.0 TSFF slots
GPU Expansion Slot	(8) Accelerator modules on one single baseboard (AMD Instinct™ MI300X/ MI325X and NVIDIA HGX™ H100 8-GPU baseboard)
Dimensions	447.8 mm x 307.85 mm x 886 mm
Form Factor	7U rackmount server

QuantaGrid D75T-7U

Transform Computational Capabilities and Achieve High Performance

AMD EPYC | INSTINCT

- Powered by dual AMD EPYC™ 9005 Series Processors with up to 500W TDP and AMD Instinct™ MI300X/MI325X accelerators
- UBB architecture to support AI & HPC workloads
- PCIe 5.0 expansion slots for RDMA networking
- Modularized system design for optimal flexibility and easy serviceability
- High NVMe storage density, supporting up to 18x 2.5" NVMe drives.
- Accelerated parallel computing performance for the most extreme AI-HPC workloads
- Enhanced serviceability with tool-less, hot-pluggable designs

Processor	(2) AMD EPYC™ 9005 Series Processors, up to 500W TDP
Memory	Up to 6TB memory capacity with (24) DDR5 RDIMM up to 6000 MHz
Networking	Dedicated (1) GbE management port
Storage Expansion Slot	Front (18) 2.5" hot-pluggable NVMe drives (2) PCIe 5.0 x16 FHHL slots (8) PCIe 5.0 x16 HHHL slots
GPU Expansion Slot	(8) Accelerator modules on one single baseboard (AMD Instinct™ MI300X/ MI325X 8-GPU baseboard)
Dimensions	447.8 mm x 307.85 mm x 950 mm
Form Factor	7U rackmount server

QuantaGrid D75M-5U

Advanced Performance for the Most Extreme AI-HPC Workloads

AMD EPYC

- Powered by AMD EPYC™ 9004 or 9005 Processors with up to 500W TDP
- Liquid cooling solution designed for AMD CPU platforms
- All-NVMe drive bays for GPUDirect® Storage
- Flexible with NVIDIA topology for BlueField®-3 DPU and SuperNIC
- PCIe 5.0 expansion slots for GPUDirect® RDMA
- Accelerated parallel computing performance for the most extreme AI-HPC workloads
- Enhanced serviceability with tool-less, hot-pluggable designs

Processor	(2) AMD EPYC™ 9004 or 9005 Series Processors, up to 500W TDP
Memory	Up to 6TB memory capacity with (24) DDR5 RDIMM up to 6000 MHz
Networking	Dedicated (1) GbE management port
Storage Expansion Slot	Front (18) 2.5" hot-pluggable NVMe drives (2) PCIe 5.0 x16 FHHL slots (8) PCIe 5.0 x16 HHHL slots
GPU Expansion Slot	(8) Accelerator modules on one single baseboard (NVIDIA HGX™ H200 8-GPU baseboard)
Dimensions	447.8 mm x 219.5 mm x 950 mm
Form Factor	5U rackmount server

QuantaGrid S44NL-1U

Cost-effective Server with Scalable Expansion Options and Optimized Performance

AMD EPYC

- *Supports 1x AMD EPYC™ 9004 or 9005 Processor, up to 500W TDP*
- *Advanced air-cooling architecture supporting top-bin CPUs*
- *Liquid cooling-ready by design*
- *Up to 5x PCIe 5.0 expansion slots and the DC-SCM architecture to meet different configuration needs*
- *Featuring up to 2x single-width accelerators to support AI inference workloads*
- *System optimized for cloud, enterprise, AI, HPC, networking, security and IoT workloads*

Processor	(1) AMD EPYC™ 9004 or 9005 Series processors, up to 500W TDP
Memory	Up to 6TB memory capacity with (24) DDR5 RDIMM up to 5200 MHz
Networking	Dedicated (1) GbE management port
Storage	**All U.2** Front (12) 2.5" hot-pluggable NVMe/SATA/SAS drives **All E1.S** Front (12) or (16) E1.S hot-pluggable NVMe drives
Expansion Slot	**Option 1-1** (2) PCIe 5.0 x16 FHHL slots (2) PCIe 5.0 x16 OCP 3.0 slots **Option 1-2, 2-1** (2) PCIe 5.0 x16 HHHL slots (2) PCIe 5.0 x16 OCP 3.0 slots **Option 1-3. 2-2** (3) PCIe 5.0 x16 HHHL slots (2) PCIe 5.0 x16 OCP 3.0 slots
Dimensions	440 mm x 43.2 mm x 780 mm
Form Factor	1U rackmount server

QuantaGrid D44N-1U

Ultimate 1U Server with AMD EPYC Performance Breakthrough

AMD EPYC

- *Powered by dual AMD EPYC™ 9004 or 9005 Series Processors, up to 500W TDP*
- *Advanced air-cooling architecture supporting top-bin CPUs*
- *Liquid cooling-ready by design*
- *Up to 5x PCIe 5.0 expansion slots and the DC-SCM architecture to meet different configuration needs*
- *Featuring up to 2x single-width accelerators to support AI inference workloads*
- *System optimized for cloud, enterprise, AI, HPC, networking, security and IoT workloads*

Processor	(2) AMD EPYC™ 9004 or 9005 Series processors, up to 500W TDP
Memory	Up to 6TB memory capacity with (24) DDR5 RDIMM up to 6000 MHz
Networking	Dedicated (1) GbE management port
Storage	**All U.2** Front (12) 2.5" hot-pluggable NVMe/SATA/SAS drives **All E1.S** Front (12) or (16) E1.S hot-pluggable NVMe drives
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Dimensions	440 mm x 43.2 mm x 780 mm
Form Factor	1U rackmount server

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.

https://www.qct.io/

www.QCT.io

Contact Us

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ver Oct., 2024