

QuantaGrid D52G-4U

All-in-one Box prevails over Al and HPC challenge

- Up to 8x NVIDIA® Tesla® V100 with NVLink™ support up to 300GB/s GPU to GPU communication*
- Up to 10x dual-width 300Watt GPU or 16x single-width 75Watt GPU support
- Diversify GPU topology to conquer any type of parallel computing model
- Up to 4x100Gb/s high bandwidth RDMA-enabled network to scale out with efficiency
- 8x NVMe storage to accelerate deep learning

*Please contact local sales for more detail on D52G-4U NVLink™ version

About QCT

Quanta Cloud Technology (QCT) is a global data center solution provider. We combine the efficiency of hyperscale hardware with infrastructure software from a diversity of industry leaders to solve next-generation data center 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 data center 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



Intel Inside®. New Possibilities Outside.



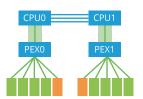


As an purpose-built system for Artificial Intelligent (AI) and High-Performance Computing (HPC) workloads, QuantaGrid D52G-4U can deliver up to 960* tensor Tflops to training deep learning model with eight* NVIDIA® Tesla V100 or provides up to 293 GOPS/watt of peak INT8 performance to do inferencing with sixteen NVIDIA® Tesla P4 and 2-socket Intel® Xeon® Scalable processor; up to 56* double precision Tflops computing power can accelerate HPC workloads such as Oil & Gas, bioinformatics, Mechanical Engineering. On top of superior computing power, D52G is of 2x100Gb/s high bandwidth low-latency networking to expedite communication among different GPU nodes.

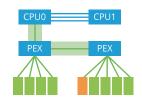
* Max. NVIDIA® dual-width GPU qty is eight due to vendor software limitation. D52G-4U still can install 10x dual-width AMD® GPU, but there is only PCIe expansion slot available on motherboard while installing 10x dual width GPU.

Diversify GPU topology to conquer any type of parallel computing model

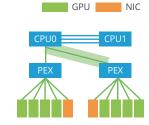
The QuantaGrid D52G-4U can provides multiple GPU topology on the same baseboard tray to meeting your different use case.



Balance mode, for application emphasize higher CPU to GPU communications, balance mode topology outperform better I/O between CPU and GPU.



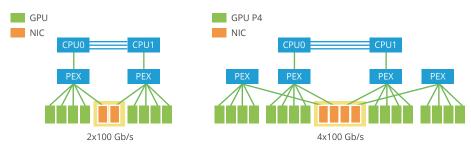
Cascade mode is suitable for workloads which takes huge time to do peer to peer communication between GPU.



Common mode is of certain degree of Peer to Peer GPU communication and enough I/O bandwidth between CPU and GPU.

High-Bandwidth, low-latency networking between GPU nodes

D52G-4U have additional two/four PCle Gen3x16 LP-MD2 slot to provide optional two/four 100Gb/s low-latency infiniband or Intel® Omni Path options to do GPUDirect in the server or RDMA between different GPU nodes.



NVMe SSD support to accelerates deep learning

D52G-4U support max. 8x NVMe SSD, which can accelerates both training and inferencing with Fast I/O data reading as deep learning is a data-driven algorithm.





QuantaGrid D52G-4U Specifications

Processor	Processor Type: Intel® Xeon® Processor Scalable Family Max. TDP Support: 165W		
	Number of Processors: 2 Processors		
	Internal Interconnect: 9.6/10.4 GT/s		
Form Factor	4U		
Dimensions	W x H x D (inch): 17.5 x 7 x 34.6		
	W x H x D (mm): 444x 177.8x 880		
Chipset	Intel® C621		
Storage	Default Configuration: NVMe support, 2.5" Hot-plug		
	SKU - #1 (24) 2.5" hot-plug SATA/SAS SSD or (20) 2.5" hot-plug SATA/SAS SSD + (4) 2.5" hot-plug NVMe or (8) 2.5" hot-plug NVMe		
Memory	Total Slots: 24 Capacity: Up to 3TB (128Gx24) of memory for RDIMM/LRDIMM Memory Type: 2666 MHz DDR4 RDIMM Memory Size: 64GB, 32GB, 16GB, 8GB RDIMM (Refer to CCL)		
Expansion Slot	Motherboard (1) PCle Gen3 x 8 OCP 2.0 mezzanine slot (can switch to U.2) (1) PCle Gen3 x 8 optional SAS mezzanine slot (can switch to U.2) (1) PCle Gen3 x 8 FHHL(can switch to U.2) + (1) PCle Gen3 x 8 LP-MD2 (can switch to U.2) or optional (1) PCle Gen3 x16 LP-MD2	GPGPU baseboard [Option 1] (8) PCIe Gen3 x16, dual-width FHFL + (2) PCIe Gen3 x16, LP-MD2 or (10)PCIe Gen3 x16 dual-width FHFL [Option 2] (20) PCIe Gen3 x16, single-width FHFL or (16) PCIe Gen3 x16, single-width FHFL + (4) PCIe Gen3 x16, LP-MD2	
Network	LOM: Dedicated (1) GbE management port	Management	IPMI v2.0 Compliant, on board "KVM over IP" support
Controller	Optional NIC: Please refer to our Compatible Component List for more information	Rear I/O	(2) USB 3.0 ports (1) VGA port (Display Priority: Second; one device one time (1) RS232 serial port
Front I/O	Power/ID/Reset Buttons		
	Power/ID/Status LEDs		(1) GbE RJ45 management port
	(2) USB ports		(1) ID LED
	(1) VGA port (Display Priority: First; one device one time)		(1) MicroSD slot
Storage Controller	Optional Controller:	Operating Environment	Operating temperature*: 5°C to 30°C (41°F to 86°F) Non-operating temperature: -40°C to 70°C (-40°F to 158°F
	Quanta LSI® 3008 12Gb/s SAS mezzanine, RAID 0,1,10		
	Quanta LSI® 3108 12Gb/s RAID mezzanine, RAID 0, 1, 5, 10; RAID 6		Operating relative humidity: 20% to 85%RH.
	requires additional RAID key		Non-operating relative humidity: 10% to 95%RH
	$(Please\ refer\ to\ our\ Compatible\ Component\ List\ for\ more\ information)$		*Certain configuration support higher operating temperature or lower CPU TDP. Please contact local sale for more detail; The performance of the system may be impacted when operating over the maximum temperature limit.
Power Supply	3+1 high efficiency hot-plug 1600W PSU, 80 Plus Platinum (200V-240V)		
Onboard Storage	(2) SATADOM (option)		composition of minicipal control of minicipal contr
	(2) 2280/2210 SATA/PCIe M.2 (option)	TPM	TPM 2.0
Fan	(4) dual rotor fans (7+1 redundant)	Weight (Max. Configuration)	61.5 (Kg)
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Video

System

Found at: www.QCT.io/wheretobuy

Integrated ASPEED AST2500 8MB DDR4 video memory

All specifications and figures are subject to change without prior notice. Actual products may look different from the photos.

Redfish v1.0.2

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