QuantaGrid S31A-1U

Energy Efficient, Compact 1U Architecture Envisioned for Performance and Large Storage Capacity in Space Constrained Data Centers

Rear view

The QuantaGrid S31A-1U is a one-socket, 1U server tailored for applications requiring large local storage, scalable I/O, entry-level computing and high availability in space-constrained datacenters.

Energy Efficiency without Compromising Performance

Based on the Intel® Xeon® processor E3-1200 v5, v6 product family in combination with DDR4 memory implementation, the QuantaGrid S31A-1U delivers a computing performance improvement of 10% and memory performance enhancement of 33% over the previous generation server. The maximum memory capacity also has been improved to 64GB while power consumption has been reduced by 20%. As a result, the QuantaGrid S31A-1U provides superior performance while simultaneously lowering operating costs of the data center.

Ultra Dense Chassis and Power Loss Protection Design

The QuantaGrid S31A-1U supports a CPU socket, 4x DRAMs, 1x PCIe expansion device, 1x OCP expansion device and redundant PSUs in a compact, 1U 24" depth chassis. As a compact size form factor server, this elegant, flexible architecture can be deployed in almost any SMB or data center environment. A reliable, redundant power supply design keeps the system consistently dependable and protects against power supply loss, device damage, and human negligence.

Hybrid Storage Solution and Flexible Options for Boot-up or Caching.

• Hybrid Storage Solution

• Ultra Dense Chassis Design

• Enterprise-grade Internal Boot Device

• Flexible and Scalable I/O Options

The QuantaGrid S31A-1U has 4x 2.5"/3.5" hot swappable SATA/SAS HDD bays and 2x additional fixed 2.5" SAS/SATA SSDs. With the flexible options of the outstanding 2x 2280 M.2 equipped on the motherboard, the QuantaGrid S31A-1U can easily configure for extremely fast boot-up (SATA M.2) or high-performance data-caching (PCIe M.2) to meet the specific requirements of data center workloads.
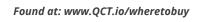
Flexible and Scalable I/O options

The QuantaGrid S31A-1U offers flexible I/O scalability for today's diverse data center application requirements. It features OCP LAN mezzanine card solutions in addition to dual GbE LAN on motherboards (LoM). With various controller selections and different speed and technology options from 1GbE to 56GbE bandwidth, copper or fiber-optic cabling, basic Ethernet function or FCoE and ISCSI SAN connectivity.

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

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QCT authorized partner

Processor	**Processor Type:** Intel® Xeon® processor E3-1200 v5, v6 product family
	Max. TDP Support: 80W
	Number of Processors: 1
	L3 Cache: Up to 8MB
Chipset	Intel® C236
Memory	**Total Slots:** 4
	Capacity: Up to 64GB UDIMM
	Memory Type: 2133 MHz DDR4 UDIMM
	Memory Size: 16GB, 8GB UDIMM
Network Controller	**LOM:**
	Intel® I210 dual-port 1 GbE
	Dedicated 1 GbE management port
	Optional NIC (more options refer to the CCL):
	QCT Intel® i350 dual-port OCP mezzanine
	QCT Intel® X540 dual-port 10GbE BASE-T OCP mezzanine
	QCT Intel® 82599ES dual-port 10G SFP+ OCP mezzanine
Storage Controller	**Onboard:**
	Intel® C236:
	(8) SATA 6Gb/s ports
	SATA RAID 0, 1, 5, 10
	Optional Controller:
	QCT LSI® 3008 12Gb/s SAS mezzanine, RAID 0,1,10
	QCT LSI® 3108 12Gb/s RAID mezzanine, RAID 0, 1, 5, 10; RAID 6 requires additional RAID key
Onboard Storage	(2) 2280 M.2
Video	Integrated AST2400 with 8MB DDR3 video memory
Rear I/O	(2) USB 3.0 ports
	(2) 1GbE RJ45
	(1) 1GbE RJ45 management port
	(1) Console port on the system
	(1) VGA port
TPM	Yes (With TPM 1.2/ 2.0 option)
Form Factor	1U Rack Mount
Dimensions	**W x H x D (inch):** 17.2 x 1.7 x 24
	W x H x D (mm): 438 x 43.2 x 609.2
Storage	(4) 3.5"/2.5" hot-plug HDD
	(2) 2.5" fixed SSD
Expansion Slot	(1) PCIe Gen3x8 Low profile MD-2 slot
	(1) PCIe Gen3x8 OCP mezzanine slot
Front I/O	(2) USB 2.0 ports
Power Supply	Option 1 : (2) 400W/700W High efficiency redundant hot-plug PSU
	Option 2 : (1) 500W fixed PSU
	(default with one PSU only; detailed PSU options please refer to "ordering info" or "CCL")
Fan	(3) dual rotor fans
System Management	IPMI v2.0 Compliant, on board "KVM over IP" support Quanta System Manager
Operating Environment	Operating temperature: 5°C to 40°C (41°F to 104°F)
	Non-operating temperature: -40°C to 65°C (-40°F to 149°F)
	Operating relative humidity: 20% to 85%RH.
	Non-operating relative humidity: 10% to 90%RH

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