T520-OCP-SO

High Performance, Dual Port 10 GbE Unified Wire Adapter for Open Compute Project (OCP)

Overview
Chelsio’s T520-OCP-SO for Open Compute Project (OCP) is a memory free dual-port 10 Gigabit Ethernet Unified Wire adapter, with PCI Express 3.0 host bus interface, optimized for storage, cloud computing, HPC, virtualization and other data center applications in an Open Compute Project and Storage environment.

This adapter, based on the fifth-generation (T5) technology from Chelsio provides the highest performance and efficiency, dramatically lowers host-system CPU communications overhead and frees up host CPU cycles for useful applications. As a result, the system benefits from higher bandwidth, lower latency and reduced power consumption.

Open Compute Project is a rapidly growing community of engineers to design and enable the delivery of the most efficient server, storage and data center hardware designs for scalable computing.

The Unified Wire Solution
The T520-OCP-SO shares the high bandwidth and low latency architecture of other T5 products. It forms the basis of high performance server adapter designs with a full suite of stateless offloads, including LRO, LSO, RSS, virtualization, traffic management and security.

The T520-OCP-SO supports IEEE 802.3ad link aggregation/failover features, as well as patented inter-adapter failover techniques that make it ideal for critical network applications requiring redundancy and high-availability capabilities.

T520-OCP-SO also includes an integrated Traffic Manager for robust flow control, traffic management, and QoS.

T520-OCP-SO Ethernet-only networking reduces the infrastructure costs in network adapters, cables, switches, rack space, power, equipment, spare management tools, planning, networking staff and installation.
Fifth-Generation ASIC
The T5 is Chelsio’s fifth-generation ASIC. With support for the 8 Gbps Gen 3 data rate, the T5 ASIC PCIe interface provides 64 Gbps of raw bandwidth to the server. T5 also provides support for PCIe SR-IOV virtualization with embedded virtual switch.

Packet Switching and Routing
T520-OCP-SO integrates a high performance packet switch, which allows switching traffic from any of the input ports to any of the output ports (wire-to-wire) and from any of the output ports to any of the input ports (host-to-host).

Robust, Proven Solution
Subjected to thousands of hours of compatibility testing, over a decade of stress testing by several OEM test suites and production deployment in servers, storage systems and cluster computing, Chelsio’s robust technology delivers proven performance in a wide range of environments.

Software Drivers
Chelsio offers a full suite of protocol software drivers with the T520-OCP-SO adapters. See www.chelsio.com/support for the latest information.

Ordering Information
Model: T520-OCP-SO
Physical Interface: 10GBASE-SR or LR*
Connector: LC Duplex
Media: MMF or SMF

Accessories
SM10G-SR: 10G short-reach SFP+ optic module
TAPCABLE1M: Twinax passive cable, 1M
SM10G-LR: 10G long-reach SFP+ optic module
TAPCABLE3M: Twinax passive cable, 3M
SRCABLE3M: Fibre optic cable, 10GBASE-SR, 3M
TAPCABLE5M: Twinax passive cable5M
LRCABLE3M: Fibre optic cable, 10GBASE-LR, 3M

*Optics sold separately. Only Chelsio-supplied modules may be used.

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