CHELSIO DELIVERS 10/25/40/50/100GbE UNIFIED WIRE LINE OF PROTOCOL OFFLOAD ADAPTERS

100 Gbps Line Rate, High IOPS Performance for iSCSI, SMB Direct, and NVMe over Fabrics

SUNNYVALE, CA – October 18, 2016 – Chelsio Communications, Inc., a leading provider of high performance (10Gb/25Gb/40Gb/50Gb/100Gb) Ethernet Unified Wire Adapters and ASICs for storage networking, virtualized enterprise datacenters, cloud service installations, and cluster computing environments, today announced the immediate availability of the Terminator 6 (T6) 10/25/40/50/100Gb Ethernet (GbE) network adapters based on the sixth generation of its hyper-virtualized Unified Wire ASIC architecture.

The T6 powered adapters are the industry's highest performance Ethernet interfaces, scaling to deliver 100Gbps wire speed bandwidth, ultra low latency and high message processing capacity. With a comprehensive suite of offloaded storage, compute and networking protocols – including iWARP (RDMA/TCP), TCP/IP, UDP/IP, NVMe over Fabrics, iSCSI Offload and FCoE with T10-DIX; Terminator 6 (T6) enables network convergence and provides unprecedented performance in virtualized environments, while dramatically increasing host system efficiency and lowering communication overhead.

Support for integrated TLS/SSL, DTLS, IPsec and SMB 3.X crypto in the T6 adapters allows for tremendous differentiation for the end product. For example, T6 adapters are capable of encrypting/decrypting network data at line rate and in an in-line fashion (with or without integrated TCP Offload Engine), while concurrently doing encryption/decryption of storage data in a co-processor mode, thus enabling concurrent secure communication and secure

storage, all for the price and power of a typical NIC.

"The Terminator 6 adapter product line is an important evolutionary step for Chelsio, bringing all the offload, virtualization, and switching capabilities of the existing T5 product line to 100Gbps performance levels," said Bob Wheeler, Principal Analyst at The Linley Group. "The introduction of integrated encryption within a NIC price and power envelope should further the migration towards secure cloud networks and storage."

The new T6 adapters enable fabric consolidation by simultaneously supporting TCP/IP and UDP/IP socket applications, RDMA applications and SCSI applications at wire speed, over legacy switching infrastructure, thereby allowing InfiniBand and Fibre Channel applications to run unmodified and concurrently over standard Ethernet in BSD, Linux and Windows environments. They run all the host software of its predecessor, T5, as-is, thus enabling leveraging of all the prior software investment. They offer all the features of T5, and in addition adds support for integrated offload of IPsec, TLS/SSL, DTLS and SMB 3.X crypto.

"The Terminator series truly has an impressive and unique architecture – low latency, low power, high performance, flexible and programmable, and above all, readily scalable. After 6 generations of refinement, T6 silicon has gone to production on first try similar to the T5 before it" said Kianoosh Naghshineh, CEO of Chelsio Communications. "Our current T5 customers have been able to readily leverage their software investment and migrate to 100Gb with little effort, and at low power, thus leveraging older platforms and existing software. Given the industry has to repeat this cycle again in 24 months at the next speed of Ethernet, this software stability, maintenance of power envelope at successive speeds, and first pass success of silicon are paramount. Only Chelsio can offer this confidence of roadmap to customers."

The adapters are in two groups: Unified Wire and Server Offload. Unified Wire cards run the full suite of features. Server Offload adapters are high value stateless offload cards with full offload capability for a limited number of connections to be delivered in 2Q17.

The following are the currently available T6 adapters. All adapters have a low profile form factor, and all have a PCI Express 3.0 Gen3 host bus interface.

SKU	Type	Ports	Speed	PCIe	Power
T6225-CR	Unified Wire	2	1/10/25	x8	13W
T6225-LL-CR	Unified Wire Low Latency	2	1/10/25	x8	16W
T6225-SO-CR	Server Offload	2	1/10/25	x8	10W
T62100-LP-CR	Unified Wire	2	40/50/100	x16	19W
T62100-SO-CR	Server Offload	2	40/50/100	x16	16W

More Details

T6 ASIC Architecture: T6 ASIC Architecture White Paper

T6 Encryption Offload: T6 Crypto White Paper

T6 ASIC Product Brief: T6 ASIC Product Brief

T6 Adapter Product Selector: T6 Adapter Product Selector

T6 Adapter Product Briefs: T6 Adapter Product Briefs

T6 Adapters walkthrough Video: T6 Adapter Videos

Availability and Pricing

The new T6 adapters are sampling now and will be in volume production in December. The cards are list priced from $599 to $1199 depending on the SKU. All software is included without a licensing fee. Linux and FreeBSD software are available in source form.

About Chelsio Communications

Chelsio is a recognized leader in high performance (10Gb/25Gb/40Gb/50Gb/100Gb) Ethernet adapters for networking and storage within virtualized enterprise datacenters, public and private hyperscale clouds, and cluster computing environments. With a clear emphasis on

performance and delivering the only robust offload solution, as opposed to simple speeds and feeds, Chelsio has set itself apart from the competition. The Chelsio Unified Wire fully offloads all protocol traffic, providing no-compromise performance with high packet processing capacity, sub-microsecond hardware latency and high bandwidth. Visit the company at www.chelsio.com, and follow the company on Twitter and Facebook.

###