

## FOR IMMEDIATE RELEASE

Media Contact:

media@chelsio.com Chelsio Communications 1-408-962-3600

## CHELSIO DEMONSTRATES 100 GIGABIT ISCSI PERFORMANCE AT STORAGE DEVELOPER CONFERENCE 2017

Chelsio T6 100 Gigabit Ethernet Adapters Set 2.8 Million IOPS and 15 Micro Second Latency for Landmark Performance for Industry-Standard Ethernet Storage Networking

**SUNNYVALE, CA – September 12, 2017 –** Chelsio Communications, Inc., a leading provider of high performance (1Gb/10Gb/25Gb/40Gb/50Gb/100Gb) Ethernet adapters and ASICs for storage networking, virtualized enterprise datacenters, cloud service installations, and cluster computing environments, today announced the ultra-performance iSCSI Ethernet storage offload capabilities of its line of T6 100GbE Unified Wire adapters at this year's Storage Developer Conference.

The demonstration shows Chelsio T6 dual-port 100GbE iSCSI offload adapters deliver 100 Gigabits-per-second (Gbps) line-rate and 2.8 Million I/O Per Second (IOPS) at 4KB I/O size enabling iSCSI enterprise-class storage target solutions to deliver extreme performance built with volume, off-the-shelf hardware and software components. With half of the processing resources of iSCSI target systems available even at maximum performance, latency delta of only 15  $\mu$ s between remote and local storage access, and a power rating of only 20W, Chelsio's T6 adapters provide significant performance and efficiency gains to datacenters with power hungry applications.

Showcasing the iSCSI hardware offload capabilities of the Chelsio T6 Unified Wire adapters, the demonstration shows how all-flash and hybrid storage array OEMs can easily enable such arrays with highest-performance iSCSI target capability that is fully compatible with the existing iSCSI ecosystem and seamlessly supports the routability, scalability and reach



advantages of iSCSI. The complete Chelsio T6 iSCSI benchmark paper detailing the hardware/software configuration used and results achieved is available <a href="here">here</a>.

Chelsio T6 100G Unified Wire adapters enable enterprise storage systems that are purpose-built to deliver optimized storage performance for various application workloads in mission-critical virtualized, private cloud environments. The extreme efficiency of T6-enabled storage systems lets IT departments balance ultra-performance, capacity and features with game-changing storage economics. Chelsio-enabled storage systems also easily integrate into diverse enterprise IT environments by enabling SAN and NAS deployments from the same array through iSCSI and TCP/IP protocol offload for iSCSI block-level protocol, as well as NFS and CIFS file-level protocols.

"With the explosive growth in All-Flash storage arrays the network is becoming a bottleneck," said Seamus Crehan, president of <u>Crehan Research</u>. "Chelsio's T6 100G Unified Wire solution with iSCSI offload alleviates this bottleneck with both high-throughput and IOPS enabling high-performance low-latency access to Flash storage."

"Our T6 Unified Wire adapters establish a groundbreaking performance bar for Ethernet storage by enabling a 100 Gbps line-rate and extreme IOPS performance for highly efficient iSCSI storage target solutions," said Kianoosh Naghshineh, CEO at Chelsio Communications. "T6 storage protocol offload technology allows 100 Gigabit Ethernet iSCSI to completely supersede proprietary storage fabrics, while enabling concurrent, future-proof deployment of new Ethernet storage protocols without forcing an infrastructure forklift upgrade. With transition to All-Flash arrays, all storage systems are essentially HPC systems and require offload technology to realize the Flash performance capabilities and value."

## **About Chelsio iSCSI**

Chelsio's Terminator 6 ASIC offers a high performance, robust fourth generation implementation of iSCSI protocol over 100G Ethernet. T6 delivers a low latency, low CPU



utilization, high bandwidth, and high IOPs implementation of the iSCSI protocol at 100Gb and beyond. It is the only robust iSCSI implementation in the industry that has not changed for a decade, allowing the benefit of years of quality assurance and the only industry solution that has scaled to 100Gb and beyond, and thus is ideally suited for Flash applications.

Chelsio's iSCSI implementation is in production with a variety of OEMs and support will be available from several distributions. It is a feature rich solution that enables turning on of the iSCSI digest protocol with no penalties, use of standard Ethernet frames, and support for T10 protocol. Chelsio's iSCSI is available either in full offload form using Chelsio's iSCSI stack, in partial offload form using the OEM's software stack, or support of all the standard iSCSI offerings in the common distributions.

## **About Chelsio Communications**

Chelsio is a recognized leader in high performance (1Gb/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 <a href="https://www.chelsio.com">www.chelsio.com</a>, and follow the company on <a href="mailto:Twitter">Twitter</a> and <a href="facebook">Facebook</a>.

###