FOR IMMEDIATE RELEASE

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

CHELSIO WELCOMES MICROSOFT VALIDATION OF iWARP/RDMA FOR HIGH-ROI SCALING OF MICROSOFT CLOUD DEPLOYMENTS

SUNNYVALE, CA – January 29, 2018 – Chelsio Communications, Inc., a leading provider of high performance Ethernet adapters and ASICs for storage networking, virtualized enterprise datacenters, cloud service installations, and cluster computing environments, today announced that the iWARP/RDMA capability of its line of Terminator 5 & 6 (T5 & T6) 1/10/25/40/50/100 Gigabit Ethernet (GbE) Unified Wire adapters has been independently validated by Microsoft as enabling efficient and cost-effective scaling of Microsoft cloud deployments without requiring or recommending support of Data Center Bridging (DCB) capabilities by network infrastructure switches.

Chelsio T5 and T6 iWARP/RDMA adapters enable building very efficient, high performance, Microsoft cloud deployments very quickly. iWARP works with any legacy Ethernet switch, thereby enabling incremental Windows Server 2016 Storage Spaces Direct (S2D) installations without requiring a concurrent forklift upgrade of the switch infrastructure, or the entire datacenter. This ability to work with any non-DCBX switch, allows use of the most cost effective new or existing switch infrastructure with the least amount of support, while enabling an immediate plug-and-play deployment. In addition, Microsoft's support of iWARP protocol since Windows Server 2012-R2 release, has allowed for years of testing for a very robust, tested, deployment with iWARP. Chelsio Unified Wire adapters have achieved Microsoft "Certified for Windows Server 2016" and "Certified for Microsoft Software-Defined Datacenter (SDDC)" hardware certifications.

"Chelsio's T5 & T6 based solutions with full support of iWARP enable high-performance Microsoft cloud installations without requiring a concurrent upgrade of the switch infrastructure and help customers to efficiently and cost-effectively scale their Microsoft cloud environments to derive the full benefit of cloud computing," said Kianoosh Naghshineh, CEO at Chelsio Communications. "This independent validation represents the unique value delivered by iWARP/RDMA to help customers simplify and accelerate their journey to the cloud."

Siddhartha Roy, Group PM Manager, Windows Server, Microsoft Corp. said, "Windows Server 2016 Storage Spaces Direct brings cloud architecture and high-performance computing prowess to the software-defined datacenter (SDDC). iWARP RDMA adapters offer enhanced S2D networking and dramatically reduce the IT infrastructure total cost of ownership."

Jeff Byrne, Senior Analyst & Consultant, Taneja Group said, "Windows Server 2016 Storage Spaces Direct is a major, innovative step in the software-defined storage market. We view Microsoft's recommendation for iWARP as the preferred RDMA networking option as key to ROI optimization for Windows Server-based software-defined datacenters."

"RDMA has been evolving as a server storage I/O protocol for over a decade and with software-defined storage solutions is now becoming a commonplace", said Greg Schulz, Senior Analyst, Server StorageIO and author of "Software Defined Data Infrastructure Essentials". "Vendors such as Chelsio are enabling software-defined storage solutions such as Microsoft Storage Spaces Direct leveraging iWARP RDMA for environments which need to scale and have the need for server I/O speed without complexities of RoCE based approaches."

"We assess Microsoft's recommendation of iWARP as the preferred RDMA networking option as greatly improving Storage Spaces Direct networking and dramatically reducing the IT infrastructure total cost of ownership," said Paul Schnackenburg, President at Expert IT Solutions, a Windows Server-focused IT consultancy. "Chelsio iWARP adapters leverage

existing Ethernet infrastructure for Storage Spaces Direct without the limitations, complexity and costs challenges for scaling high performance Software Defined Datacenters."

"Ethernet network adapters with CPU offload capabilities, such as memory access (including iWARP and RoCE), will be in high demand as growth of datacenter computation continues to outpace the gen-on-gen CPU performance improvements," said Vladimir Galabov, senior analyst of cloud and datacenter research practice for IHS Markit, a global business information provider. "In a recent IHS Markit report*, offload Ethernet adapters were expected to have a 5YR CAGR of 27% to 2021, signaling a strong need for efficient and cost-effective scaling of their DC infrastructure."

Additional Resources

Additional information regarding Microsoft's recommendation regarding RDMA networking deployment in a network switch-independent means is available in the following Microsoft-published documents:

- [The Evolution of RDMA in Windows: now extended to Hyper-V Guests](#)
- [Hyper-converged solution using Storage Spaces Direct in Windows Server 2016](#)

Additional information regarding hardware certification for Chelsio Terminator 5 & 6 (T5 & T6) 1/10/25/40/50/100 Gigabit Ethernet (GbE) iWARP (RDMA/TCP) enabled Unified Wire adapters for deploying Microsoft Windows Server based software-defined storage (SDS) with Lenovo and Dell server platforms is available in the following vendor-published documents:

- [Microsoft Storage Spaces Direct (S2D) Deployment Guide](#) (Lenovo Press)
- [Dell Storage with Microsoft Storage Spaces Support Matrix](#)

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 www.chelsio.com, and follow the company on Twitter and Facebook.

<div align="center">###</div>