CHELSIO DELIVERS NVGRE OFFLOAD FOR MICROSOFT CLOUD PLATFORM SYSTEM

With support for NVGRE and RDMA, Chelsio offers complete connectivity solution for Microsoft’s Cloud

SUNNYVALE, Calif., (October 30, 2014) – Chelsio Communications, the leading provider of 40Gb Ethernet (40GbE) Unified Wire Adapters and ASICs, announced today that its T5 adapters, used for storage networking within Microsoft’s new Cloud Platform System (CPS), can also be used for front-end network connectivity, with support for Network Virtualization using Generic Routing Encapsulation (NVGRE) offload. Offloading NVGRE encapsulated frames allows all stateless NIC offloads to be preserved, resulting in line-rate performance and low CPU utilization for virtualized networks.

This announcement follows upon the recent unveiling of Chelsio’s T5 selection by Microsoft to provide the Remote Direct Memory Access (RDMA) capability for the low latency and high efficiency storage fabric within CPS. The T5-based adapters’ support for NVGRE offload for Windows Server 2012 R2 delivers high performance network virtualization to tenant networks in Windows cloud environments.

The selection of Chelsio for CPS storage validates the leading high performance capabilities of its iWARP RDMA capable T5 adapters. iWARP is the open IETF standard for RDMA that enables Ethernet networks to achieve high bandwidth, low latency and high efficiency communications using ubiquitous, standard TCP/IP infrastructure, for all Ethernet deployments including clusters, wide area networks and clouds. Chelsio’s T5 adapters leverage the proven, fifth generation design of its high performance Terminator ASIC architecture, and support a wide range of storage, networking and virtualization standards.

“The Chelsio T5 adapters selected to provide storage connectivity within CPS are also capable of offloading the processing of NVGRE encapsulated frames such that stateless offloads are preserved, resulting in line-rate performance. By combining both iWARP RDMA and NVGRE support, Chelsio uniquely enables customers to use a single vendor for all applications in a CPS install, resulting in a simpler, more cost effective supply chain,” said Kianoosh Naghshineh, CEO, Chelsio Communications. “With the combined efficiencies of Chelsio’s iWARP RDMA and NVGRE offload, customers can fully realize the benefits of the new Microsoft CPS platform to consolidate their servers, reduce power consumption, while maintaining the performance levels their applications require. The CAPEX and OPEX savings due to improved efficiency enable the deployment of more scalable and more powerful IT infrastructures.”
“Microsoft’s Cloud Platform System has uniquely combined RDMA support and NVGRE offload to enable a very efficient cloud implementation,” said Saqib Jang, President of Margalla Communications. “By using offload technologies, the Microsoft cloud can use fewer servers to support the same number of tenants as a typical cloud, resulting in significant savings while maintaining the desired quality of service levels.”

**Supporting Resources**

- Read the white paper [NVGRE Offload for Windows Server 2012 R2](#) to learn how Chelsio delivers high performance network virtualization for Windows hyper-scale cloud environments.
- Learn more about [iWARP](#), the RDMA standard for Ethernet based Cloud and Data Center networks.
- [Microsoft support of iWARP announcement](#)
- [CPS Latency with iWARP](#)
- [CPS performance benchmarks](#)

**About Chelsio T5 Adapters**

Chelsio’s T5 adapters are based upon the fifth generation of its high performance Terminator ASIC architecture. They are RDMA-capable Unified Wire adapters that simultaneously offload NVGRE, iSCSI, FCoE, RDMA and sockets applications, along with traffic management and QoS. Designed for data, storage and high performance clustering applications, Chelsio T5 adapters are available today at 40Gbps speeds with iWARP RDMA and NVGRE offload.

**About Chelsio Communications, Inc.**

Chelsio Communications is leading the convergence of networking, storage and clustering interconnects and I/O virtualization with its robust, high-performance and proven Unified Wire technology. Featuring a highly scalable and programmable architecture, Chelsio is shipping multi-port 10 Gigabit Ethernet (10GbE) and 40GbE adapter cards, delivering the low latency and superior throughput required for high-performance compute and storage applications. For more information, visit the company online at [www.chelsio.com](http://www.chelsio.com).

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