Dolphin Demonstrates 300ns Latency Across PCI Express® Network at IDF

Dolphin adds Intel® Xeon® NTB support to PCI Express® network products, delivering ultra-low latency

San Francisco, August 18, 2015: Dolphin Interconnect Solutions demonstrated today a record low application latency of 300 nanoseconds at IDF 2015. Dolphin achieved this record by adding Intel® Xeon® Non Transparent Bridging (NTB) support to its existing PCI Express network product. In addition, Dolphin announced a new PCIe® 3.0 host adapter, the PXH810 Host Adapter, which achieves 540 nanoseconds of latency at 64Gbps wire speeds.

PCI Express networks combine standard PCIe physical layers, across backplanes and cables, with non-transparent bridging functions to create a high-speed low latency network. Dolphin’s PCI Express middleware software enables communication across this network using shared memory APIs, sockets, or TCP/IP protocols. The result is a high-speed low latency network that enables standard and custom applications to take advantage of PCIe performance.

“Dolphin has developed high performance low latency shared memory, sockets and TCI/IP network software since 1992,“ said Hugo Kohmann, CEO of Dolphin Interconnect Solution. “By combining this software developed by our very experienced engineering team with PCIe3.0 technology and non-transparent bridging, we now deliver a world-class solution for performance oriented applications.”

Dolphin has shipped PCI Express network products since 2010 to financial, scientific, and embedded customers based on PCIe 2.0 technology. The new PXH810 host adapter and Intel® Xeon® NTB support enhances PCI Express networking performance.
“The PCI Express specification delivers high performance with low power features,” said Al Yanes, PCI-SIG chairman and president. “Network products and host adapters such as these from Dolphin that leverage PCIe 3.0 technology contribute to the continued expansion of the PCIe ecosystem.”

Intel® NTB functionality is available in some Intel® CPUs. By supporting these CPUs, Dolphin anticipates the creation of new more powerful systems based on PCI Express networking. The combination of Intel systems and Dolphin software will deliver the lowest application latency available today, starting at 300 nanoseconds. Dolphin software is available for licensing to OEMs and Dolphin plans to release its own scalable Intel NTB solution based on PCI Express technology over cable products in Q4 2015.

The new PXH810 adapter card is a network interface card for standard servers and workstations. The PXH810 delivers 540 nanoseconds of latency and 6750 Megabytes/s of data throughput end to end for networked applications. Combined with the Dolphin’s IXS600 Switch based on the PCIe architecture, the PXH810 Adapter creates a larger PCI Express network. Dolphin will start shipping PXH810 Adapter cards in mid-September. A 128 Gbps version of the Adapter card will be available by the end of 2015.

Headquartered in Oslo, Norway Dolphin Interconnect Solutions is the leader in PCI Express networking solutions and software.

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