Mellanox Delves into 10G Ethernet

Mellanox Technologies, best known as a provider of high-speed InfiniBand interconnect technology, is delving into Ethernet for the first time.

At the Interop conference in Las Vegas, starting May 21, Mellanox executives will detail the company's first 10 Gigabit Ethernet adaptor chips and NICs (network interface cards).

These adaptor products, said Dan Tuchler, senior director of product management for the Santa Clara, Calif., company, will offer 17.6G bps of throughput along with support for multicore processors from Intel and Advanced Micro Devices that will allow traffic to spread evenly across the cores in high-intensity compute environments.

The NICs and adaptor chips will also support a range of virtualization products, including current releases from VMware as well as open-source Xen-based hypervisor technology. The new adaptors also work with the virtualization technology used in Intel and AMD chips, which will provide faster I/O processing with a virtual environment.

While Mellanox has worked with the top-tier OEMs in the past to provide InfiniBand technology, the company is delving into Ethernet at a time when several of its partners have also started to expand their own offerings.

In the past six months, Sun Microsystems said that it would start including its own 10G networking technology, called Neptune, across its hardware product line. Hewlett-Packard and IBM are also offering 10G technology and looking to expand their own offerings.

The new Mellanox adaptor products will not require external memories or interface support devices, which Tuchler said will make the company's Ethernet products work best with low-power blade systems, as well as volume LAN and motherboard designs, which will compliment Intel and AMD multicore processors.

The two Ethernet adaptors also support standard TCP/IP protocols as well as iSCSI technology for storage.

Mellanox is offering the Ethernet NICs either as a dual-port CX4 copper wiring module or in a single- or dual-port SR (short range) and LR (long range) XFP fiber module design. With a PCI Express x8 host interface, the NIC offers 20G bps of bi-directional throughput.

The adaptor chip also offers a maximum of 20G bps of throughput when used with a PCI Express x8 interface.

Both the chips and the NICs, which will be sold under the name ConnectX EN, will also support both Microsoft Windows and Linux drivers along with the VMware hypervisor.

The price for the adaptor cards, when sold in volume, is $182. The dual-port CX4 copper 10G interface, when sold in volume, is $405. The pricing for the NIC that supports the SR and LR XFP fiber module is available only upon request, the company said.