



## Virginia Tech Selects Mellanox Technology to Create the World's Largest InfiniBand Cluster

### *Huge Cluster to Utilize Industry Standard 10Gb/sec InfiniBand Technology*

SANTA CLARA, CALIFORNIA, and YOKNEAM, ISRAEL - Sep 02, 2003 - Mellanox® Technologies Ltd., the leader in InfiniBand™ silicon, today announced that Virginia Tech has selected Mellanox InfiniBand interconnect technology for a new high-node count high performance computing cluster. This cluster features Mellanox InfiniScale™ 96-port 10Gb/sec switches and InfiniHost™ dual port host channel adapters interconnecting Apple G5 systems. The scalability and performance of this cluster will enable Virginia Tech with one of the most powerful computing facilities in the world, and breaks new ground by using inexpensive, commodity servers and industry standard interconnect components supporting open standards.

"The choice of InfiniBand as the interconnect for this cluster filled a critical missing piece in creating a world class cluster, based solely upon industry standard computing components," says Hassan Aref, dean of Virginia Tech's College of Engineering. "Unlike its predecessors, InfiniBand is an industry standard and it provides the fastest high performance interconnect available today."

The cluster will support Virginia Tech's many scientific research projects. Virginia Tech researchers will benefit from the new supercomputing facilities as they expand their understanding of nanoscale electronics, chemistry, aerodynamics, molecular statics, computational acoustics, molecular modeling and other topics.

The Virginia Tech cluster will feature 24 Mellanox 96-Port switches. Each switch has 1.92 Terabits of bandwidth that enable this cluster with over 44 Terabits of total bandwidth. The Infini-

Band architecture was designed by the top server companies to provide a highly reliable fabric and Mellanox has designed their InfiniBand HCA cards and switches to the highest possible enterprise data center class reliability standards. These capabilities align well with Virginia Tech's goal of establishing greater reliability for this new clustered supercomputing facility. The Mellanox InfiniBand products also support the cluster's 64-bit capabilities.

"Virginia Tech's decision to deploy InfiniBand is further proof that using an industry standard interconnect is a wise choice," said Eyal Waldman, CEO of Mellanox Technologies. "Not only does InfiniBand offer a complete solution with the scalability for huge clusters but it also has the flexibility to address many standard compute platforms, that now includes Apple."

"As applications scale to 64-bit platforms, like the dual-G5, it is very clear that clustered scalability requires InfiniBand performance," said Michael Kagan, CTO for Mellanox. "The higher compute power that these platforms generate place more stressful communication traffic between the nodes, making it imperative to use an interconnect like InfiniBand that delivers 10Gb/sec bandwidth at ultra low latencies. In addition, the native 64-bit addressing within InfiniBand ensures a clear upgrade path to the future since today's 10Gb/sec and the next-generation 30Gb/s InfiniBand hardware will both utilize the same common software."

### **About InfiniBand Architecture**

InfiniBand Architecture is the only 10 Gb/sec ultra low latency clustering, communication, storage and embedded interconnect in the market today. InfiniBand, based on an industry standard, provides the most robust data center interconnect solution available with reliability, availability, serviceability and manageability features designed from the ground up. These parameters greatly reduce total cost of ownership for the data center. Low cost InfiniBand silicon that supports 10 Gb/sec RDMA transfers is shipping today providing eight times the bandwidth of Ethernet and three times the bandwidth of proprietary clustering interconnects. With an approved specification for 30 Gb/sec, InfiniBand is at least a generation ahead of competing fabric technologies today and in the foreseeable future.

## About Mellanox

Mellanox is the leading supplier of InfiniBand semiconductors, providing complete solutions including switches, host channel adapters, and target channel adapters to the server, communications, data storage, and embedded markets. Mellanox Technologies has delivered more than 100,000 InfiniBand ports over two generations of 10 Gb/sec InfiniBand devices including the InfiniBridge, InfiniScale and InfiniHost devices. Mellanox InfiniBand interconnect solutions today provide over eight times the performance of Ethernet, and over three times the performance of proprietary interconnects. The company has strong backing from corporate investors including Dell, IBM, Intel Capital, Quanta Computers, Sun Microsystems, and Vitesse as well as, strong venture backing from Bessemer Venture Partners, Raza Venture Management, Sequoia Capital, US Venture Partners, and others. The company has major offices located in Santa Clara, CA, Yokneam and Tel Aviv Israel.

For more information visit Mellanox website at [www.mellanox.com](http://www.mellanox.com)

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