

## **Mellanox Maximizes Return on Investment for Engineering Manufacturing Designs**

**SANTA CLARA, Calif. & YOKNEAM, Israel** -- Mellanox[R] Technologies, Ltd. (NASDAQ:MLNX) (TASE:MLNX), a leading supplier of semiconductor-based server and storage interconnect products, today announced that InfiniBand-based clusters accelerate engineering productivity with software from ANSYS, Inc. while dramatically minimizing energy and system expenses. According to a recent performance evaluation using the new benchmark suite from ANSYS (which represents real-life workloads for engineering simulation), using InfiniBand may save tens of thousands of watts of power and thousands of dollars of spending by eliminating inefficient server CPU utilization resulting from I/O bottlenecks. At the same time, InfiniBand promotes optimum productivity and scaling. Engineering simulation is one of the larger market segments in high-performance computing and involved hundreds of thousands of server installations in 2007. According to IDC, the segment's 2005-2010 compound annual growth rate (CAGR) is more than 12 percent<sup>1</sup>.

"ANSYS customers will be very well served by the leading performance and scalability levels achieved with Mellanox ConnectX InfiniBand," said Chris Reid, vice president, marketing at ANSYS, Inc. "The combination of InfiniBand and our engineering simulation software helps our customers get more value from their analysis process, resulting in improved time to market and reduced engineering costs."

The performance evaluation was performed using FLUENT([R]) software from ANSYS at the Mellanox Cluster Center using Mellanox ConnectX IB 20Gb/s InfiniBand adapters and the latest AMD quad-core Opteron CPUs. The results, available on the ANSYS Web site ([www.ansys.com/benchmarks](http://www.ansys.com/benchmarks)), show that FLUENT technology scales almost linearly on multi-core cluster platforms when used with InfiniBand. Moreover, the tests emphasize the advantages of the InfiniBand interconnect in any size of cluster deployment, from two server nodes and beyond. In fact, InfiniBand-based clusters as small as three or four server nodes provide higher productivity than large-scale Gigabit Ethernet-based clusters.

The tests also showed that InfiniBand significantly reduces costs by speeding simulation time. When compared to Gigabit Ethernet results against the new benchmark suite from ANSYS, InfiniBand delivered up to a 40 percent increase in the number of simulations per day with only a two-server node system, an 80 percent increase with four server nodes, and almost a 150 percent increase with a seven-server node cluster. These results equate to a 60 percent savings in power costs and a 50 percent savings in system costs while maintaining the same or higher productivity.

"Today's multi-core clustered environments impose the highest demands for throughput and efficiency," said Earl Stahl, vice president, software engineering at AMD.

"Applications such as FLUENT software from ANSYS continue to demonstrate superior parallelism and scalability on AMD multi-core based clusters using Mellanox ConnectX InfiniBand interconnect technology."

According to the testing, FLUENT software has shown almost linear scalability and the capability to take full advantage of the leading-edge multi-core platforms when using InfiniBand. InfiniBand has been proven to maximize available compute capabilities for application usage and enables efficient scaling of additional servers for increasing application productivity.

"InfiniBand is the only standard interconnect for clusters that provides the needed performance characteristics for the majority of high-performance applications, along with the ability to scale with multi-core platforms," said Thad Omura, vice president of product marketing at Mellanox Technologies. "InfiniBand efficiency accelerates engineering design cycle time from months to days, and enables significant savings in cost and power consumption."

### **About ANSYS, Inc.**

ANSYS, Inc., founded in 1970, develops and globally markets engineering simulation software and technologies widely used by engineers and designers across a broad spectrum of industries. The Company focuses on the development of open and flexible solutions that enable users to analyze designs directly on the desktop, providing a common platform for fast, efficient and cost-conscious product development, from design concept to final-stage testing and validation. The Company and its global network of channel partners provide sales, support and training for customers. Headquartered in Canonsburg, Pennsylvania, U.S.A., with more than 40 strategic sales locations throughout the world, ANSYS, Inc. and its subsidiaries employ approximately 1,400 people and distribute ANSYS products through a network of channel partners in over 40 countries. Visit [www.ansys.com](http://www.ansys.com) for more information.

### **About Mellanox Cluster Center**

Mellanox Cluster Center, located in Santa Clara, California, offers an environment for developing, testing, benchmarking and optimizing products based on InfiniBand technology. The center provides a unique ability to access the latest InfiniBand technology, multi-core systems and InfiniBand based storage. More info can be found at <http://www.mellanox.com/applications/clustercenter.php>

### **About Mellanox**

Mellanox Technologies is a leading supplier of semiconductor-based, high-performance, InfiniBand and Ethernet connectivity products that facilitate data transmission between servers, communications infrastructure equipment and storage systems. The company's products are an integral part of a total solution focused on computing, storage and communication applications used in enterprise data centers, high-performance computing and embedded systems.