Voltaire and Synopsys Introduce High-Performance Compute Solution to Reduce Cycle Time for Semiconductor Mask Manufacturing

New Solution Combines Synopsys CATS®, Voltaire InfiniBand and High-Performance Storage from DataDirect Networks to Deliver Up To a 4X Performance Improvement

BILLERICA, Mass. and MOUNTAIN VIEW, Calif.– September 11, 2007 – Voltaire Ltd. (NASDAQ: VOLT), a leader in grid backbone solutions, and Synopsys, Inc. (NASDAQ: SNPS), a world leader in semiconductor design software, today announced they are developing a high-performance compute (HPC) cluster solution for semiconductor mask data-preparation (MDP) applications. The HPC solution, which consists of the Synopsys CATS® MDP solution running on a high-performance compute infrastructure with Voltaire InfiniBand and DataDirect Networks' storage, reduced MDP turnaround time by up to 4X compared to clusters using Gigabit Ethernet.

With advanced semiconductor design files rapidly approaching one terabyte (1TB) in size, controlling data processing efficiency and cycle time has emerged as a top challenge for the industry. The greatest impact is felt in the design data to manufacturing data translation step – also known as mask data prep. Synopsys, supplier of the industry-leading MDP solution CATS, is focused on developing new MDP solutions to help customers reduce design-to-mask data cycle time. Toward this end, Synopsys has teamed with Voltaire, other external suppliers and internal Synopsys IT resources to deliver next-generation, high-performance MDP compute solutions that are highly scalable and reliable.

Originally developed for Synopsys in-house testing and now available to customers, the new HPC solution delivers high-performance file I/O using the Lustre® parallel file system from Cluster File Systems (CFS), DataDirect Networks' S2A (Silicon Storage Appliance) and the Voltaire Grid Director™ 10 Gigabits/second InfiniBand switches, which use Mellanox Technologies' (NASDAQ: MLNX, TASE: MLNX) InfiniBand silicon solutions. Using the HPC solution, CATS has demonstrated up to a 4X improvement over Gigabit Ethernet-based solutions. In one case, a job was completed in four hours instead of the 16 hours typically required.

"We tested many different configurations to find the optimal performance for our CATS customers," said Fabio Angelillis, vice president of engineering, Silicon Engineering Group, Synopsys. "If you use an NFS-based system with Gigabit Ethernet, for example, at a certain point you become I/O-bound and cannot extract further performance from the file system. In contrast, with a parallel file system, high-performance storage and a Voltaire InfiniBand fabric, the application benefits from the aggregate performance of multiple file servers and can scale without significant performance degradation. This HPC solution has direct applicability to our customers depending upon their needs, and we look forward to customizing a solution for them."

"We are very pleased to innovate with Synopsys to target design cycle-time reduction for their semiconductor manufacturer customers," said Patrick Guay, senior vice president, marketing, Voltaire. "The CATS application utilizes distributed processing that needs to stay on disk and not slow down the processor. Voltaire's InfiniBand-based switches offer high bandwidth and low latency to keep overhead away from the processor, allowing more CPUs to be used for the application."

"Synopsys wanted to improve the storage constraints to optimize the performance of its technology-leading mask data prep application, CATS," said Josh Goldstein, vice president of product marketing for DataDirect Networks. "We believe that the DataDirect Networks S2A storage appliance can deliver the performance, scalability and streaming for low error rate mask data preparation with CATS to this solution."

"While process technologies continue to shrink, the CPU cycles required for EDA tools are expected to grow exponentially," said Peter J. Braam, founder, president and CEO, Cluster File Systems. "By using the Lustre parallel file system instead of NFS, the solution offers high performance, scalable storage with groundbreaking I/O throughput to enable new efficiencies for mask data preparation and CATS."

"We are excited to work with our partners to help bring this solution to market," said Thad Omura, vice president of product marketing at Mellanox Technologies, the InfiniBand silicon and HCA supplier that worked with Voltaire and Synopsys to develop and tune the optimal InfiniBand configuration for the solution. "InfiniBand's remote direct memory access (RDMA) feature that bypasses system processors during I/O and writes directly to disk is a key differentiator for this solution and brings new levels of performance to EDA tools."

Availability
Customers interested in the new HPC solution can contact Voltaire at 1-800-865-8247 or Synopsys at 508-263-8006 for more

information, including configuration, performance and support options.

BACUS
Synopsys and Voltaire will highlight the new solution at the SPIE Photomask Technology Symposium (BACUS), September 17-21, 2007, in Monterey, California.

About Synopsys
Synopsys, Inc. (Nasdaq:SNPS) is a world leader in electronic design automation (EDA) software for semiconductor design. The company delivers technology-leading system and semiconductor design and verification platforms, IC manufacturing and yield optimization solutions, semiconductor intellectual property and design services to the global electronics market. These solutions enable the development and production of complex integrated circuits and electronic systems. Through its comprehensive solutions, Synopsys addresses the key challenges designers and manufacturers face today, including power management, accelerated time to yield and system-to-silicon verification. Synopsys is headquartered in Mountain View, California, and has more than 60 offices located throughout North America, Europe, Japan and Asia. Visit Synopsys online at https://www.synopsys.com/.

About Voltaire
Founded in 1997, Voltaire Ltd. (NASDAQ: VOLT) is headquartered in Herzeliya, Israel, and has its U.S. headquarters in Billerica, Massachusetts. Voltaire designs and develops server and storage switching and software solutions that enable high-performance grid computing within the data center. Voltaire refers to its server and storage switching and software solutions as the Voltaire Grid Backbone™. Voltaire's products leverage InfiniBand technology and include director-class switches, multi-service switches, fixed-port configuration switches, Ethernet and Fibre Channel routers and standards-based driver and management software. Voltaire's solutions have been sold to a wide range of end customers including governmental, research and educational organizations, as well as enterprises in the manufacturing, oil and gas, entertainment, life sciences and financial services industries.

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