

# Netlist's Hypercloud Technology Faster Than LRDIMM on Next Generation Servers: Testing Validates the Speed Advantage of Hypercloud

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Patented HyperCloud Technology Enables 1333 MT/s Memory Speeds on Future Intel(R) Xeon(R) E5 Family Based Two-Processor Servers While LRDIMM Only Enables 1066 MT/s

IRVINE, CA -- (Marketwire) -- 12/13/11 -- Netlist, Inc. (NASDAQ: NLST), a designer and manufacturer of high-performance memory subsystems, today announced results of side-by-side testing of its HyperCloud? modules versus LRDIMM (load reduced dual inline memory module). The test results confirmed that HyperCloud is able to achieve 1333 MT/s (mega transfers per second) memory speeds while LRDIMM is only able to achieve 1066 MT/s.

The memory speed benefit is an important enabling factor for increased application performance for the many enterprises that engage in memory intensive high performance computing (HPC) simulations, securities transactions and analytics for memory databases. This speed advantage will also be a key contributing factor in the decisions by major OEM server manufacturers to adopt HyperCloud for future generation of servers.

The testing was performed on identical systems at 3 DIMMs per channel (DPC) populated on future Intel® Xeon® E5 family based two-processor servers. HyperCloud is the patented high-performance virtual dual rank (2vR) RDIMM which overcomes traditional memory bottlenecks that limit server memory capacity and bandwidth.

"The fundamental difference between HyperCloud and LRDIMM is that HyperCloud is based on a distributed buffer architecture that reduces long data path delays by utilizing multiple small buffers located along the bottom (connector) edge of the module reducing the lengths of data signal paths between the data buffer and DRAMs," stated Dr. Hyun Lee, Chief Technology Officer, Netlist. "The LRDIMM, in contrast, uses a single buffer architecture that has longer data signal trace lengths between the DRAM and connector because all the data signals have to pass through a single buffer (register) and back out to DRAM."

Additional information on Netlist's Virtual Dual Rank HyperCloud RDIMMs can be found at [www.netlist.com/hypercloud](http://www.netlist.com/hypercloud).

## **About Netlist:**

Netlist, Inc. designs and manufactures high-performance, logic-based memory subsystems for server and storage applications for cloud computing. Netlist's flagship products include HyperCloud?, a patented memory technology that breaks traditional memory barriers, NVvault? family of products that enables data retention during power interruption, EXPRESSvault?, a PCI Express backup/recovery solution for cache data protection and a robust portfolio of high performance and specialty memory subsystems including HyperStream, VLP (very low profile) DIMMs and Planar-X RDIMMs.

Netlist develops technology solutions for customer applications in which high-speed, high-capacity, small form factor and heat dissipation are key requirements for system memory. These customers include OEMs that design and build tower servers, rack-mounted servers, blade servers, high-performance computing clusters, engineering workstations and telecommunications equipment. Founded in 2000, Netlist is headquartered in Irvine, CA with manufacturing facilities in Suzhou, People's Republic of China. Learn more at [www.netlist.com](http://www.netlist.com).

**Safe Harbor Statement:**

This news release contains forward-looking statements regarding future events and the future performance of Netlist. These forward-looking statements involve risks and uncertainties that could cause actual results to differ materially from those expected or projected. These risks and uncertainties include, but are not limited to, risks associated with the launch and commercial success of our products, programs and technologies; the success of product partnerships; continuing development, qualification and volume production of EXPRESSvault?, NVvault?, HyperCloud?, HyperStream and VLP Planar-X RDIMM; the rapidly-changing nature of technology; risks associated with intellectual property, including the costs and unpredictability of litigation over infringement of our intellectual property and the possibility of the Company's patents being re-examined by the United States Patent and Trademark office; volatility in the pricing of DRAM ICs and NAND; changes in and uncertainty of customer acceptance of, and demand for, our existing products and products under development, including uncertainty of and/or delays in product orders and product qualifications; delays in the Company's and its customers' product releases and development; introductions of new products by competitors; changes in end-user demand for technology solutions; the Company's ability to attract and retain skilled personnel; the Company's reliance on suppliers of critical components; fluctuations in the market price of critical components; evolving industry standards; and the political and regulatory environment in the People's Republic of China. Other risks and uncertainties are described in the Company's quarterly report on Form 10-Q for the quarter ended October 1, 2011, and subsequent filings with the U.S. Securities and Exchange Commission made by the Company from time to time. Except as required by law, Netlist undertakes no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

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