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AMD Beats Intel in Quad-Core Server Power Efficiency: Neal Nelson

CHICAGO - Recent tests by Neal Nelson, an independent computer performance expert, show that while some Quad-Core Intel Xeon based servers delivered up to 14 percent higher throughput, similarly configured Quad-Core AMD Opteron based servers consumed up to 41 percent less power. The test servers used 1 gigabyte memory modules at 4, 8 and 16 gigabyte main memory sizes.

"By themselves the Intel (NASDAQ: INTC) processor chips may use less power, but all current Intel Xeon servers require the use of Fully Buffered memory modules. These FB-memory modules appear to consume more power than the DDR-II memory modules used by the AMD (NYSE: AMD) based servers. The result is that in many cases an Opteron based server actually uses less total power than a Xeon based server," observed Neal Nelson, designer of the test.

These new test results were collected with Neal Nelson's Power Efficiency Benchmark which is a client server test where up to 500 world wide web users from 32 separate computers submit individual transactions to a server running the Apache2 web server software, the MySQL relational database and Novell's SUSE Linux Enterprise Server operating system. The benchmark has a complex multi-user load with a large memory footprint, a high volume of context switches, significant network traffic and substantial amounts of physical disk I/O.

"I am certain that these test results are correct," Nelson continued, "I am so certain that I have begun to offer my customers a money back guarantee if their real world experiences do not agree with my benchmark data."

The Nelson test results should not be confused with power usage test results from the Standard Performance Evaluation Corporation (SPEC). The SPECPower test has a single client machine feeding batches of 1,000 transactions to a small number of Java based application programs.. The SPECPower test has a small memory footprint, a low volume of context switches, simple network traffic and it performs no physical disk I/O. The SPEC test was created by a committee of computer vendor employees and SPEC offers no guarantee that their numbers will correlate to a customer's real world experiences.

The Nelson test was designed and executed entirely by the independent computer consulting firm of Neal Nelson & Associates. The quad core tests referenced above were not financed or sponsored by any outside company or group.

Nelson's firm has over 35 years experience providing data processing consulting services to some of the world's largest computer customers including the U.S. Army, U.S. Navy, the Internal Revenue Service, McDonalds, WalMart and Federal Express. Nelson's benchmarking laboratory is available to commercial and government users for independent computer performance tests.

More information about these test results can be found on the world wide web at http://www.worlds-fastest.com/wfz986.html. Information is also available by calling Neal Nelson & Associates at (847) 851-8900 or by sending an email request to neal@nna.com. Trademarks that may be mentioned in this document are the property of their owners.

Neal Nelson & Associates Neal Nelson, 847-851-8900 neal@nna.com