IBM posts leadership 4-socket performance result on TPC-E benchmark

x3850 M2 delivers excellent performance using Microsoft Windows Server 2008 and SQL Server 2008

February 27, 2008 ... IBM® has published a leadership 4-processor performance result on the TPC-E benchmark. The IBM System x[™] 3850 M2 server, leveraging IBM's exclusive fourthgeneration X-Architecture® and powered by the Quad-Core Intel® Xeon® Processor X7350, has delivered 479.51 tpsE (transactions per second E) at \$1,591.20 USD / tpsE. (1) The tpsE is the total number of trade-result transactions *per second* that the server can sustain over a period of time.

The x3850 M2's 479.51 tpsE result was achieved using Microsoft® SQL Server 2008 and Microsoft Windows® Server 2008 Enterprise x64 Edition. The x3850 M2 server was configured with the Quad-Core Intel Xeon Processor X7350 at 2.93GHz with 2 x 4MB L2 cache per processor (4 processors/16 cores/16 threads). The x3850 M2 accessed the SQL Server database via the IBM System Storage™ DS4800 Fibre Channel storage subsystem.

Notably, the configured system also used the Emulex 8Gb FC Single-Port HBA for IBM System x, a new Fibre Channel adapter that supports MSI-X (Message Signaled Interrupts-eXtended). (2) The MSI-X architecture, when paired with Microsoft Windows 2008 and MSI-X enabled storage drivers, can improve system performance by localizing interrupts and I/O processing.

This new performance result is a 14% performance improvement over the previous result of 419.80 tpsE, demonstrating that the IBM System x3850 M2, using IBM's exclusive X-Architecture, is the perfect platform to take advantage of the latest advances in Windows Server 2008, SQL Server 2008, and the new Emulex 8Gb FC Single-Port HBA for IBM System x. (3)

The business model for TPC-E is that of a brokerage firm, for which the database schema, data population, transactions, and implementation rules have been designed to be broadly representative of modern OLTP systems. The TPC-E benchmark, launched by the Transaction Processing Performance Council in March 2007, is designed to enable clients to more objectively measure and compare performance and price of various OLTP systems.

Results referenced are current as of February 27, 2008. To view all TPC results, visit www.tpc.org.

- (1) IBM System x3850 M2 with the Quad-Core Intel Xeon Processor X7350 2.93GHz (4 processors/16 cores/16 threads), 479.51 tpsE, \$1,591.20 USD / tpsE, total solution availability of August 30, 2008.
- (2) The Emulex 8Gb FC Single-Port HBA for IBM System x will be orderable from IBM on May 13, 2008, and generally available June 30, 2008.
- (3) IBM System x3850 M2 with the Quad-Core Intel Xeon Processor X7350 2.93GHz (4 processors/16 cores/16 threads), 419.80 tpsE, \$1,527.25 USD / tpsE, total solution availability of December 7, 2007.

IBM, System x, X-Architecture, and System Storage are trademarks or registered trademarks of International Business Machines Corporation.

Intel and Xeon are trademarks or registered trademarks of Intel Corporation.

Microsoft and Windows are registered trademarks of Microsoft Corporation in the United States and/or other countries.

Emulex is a trademark or registered trademark of Emulex Corporation.

TPC, TPC Benchmark, TPC-E and tpsE are trademarks of the Transaction Processing Performance Council.

All other company/product names and service marks may be trademarks or registered trademarks of their respective companies.