

IBM System x and DB2 achieve more than 2.3 million transactions per minute on TPC-C benchmark—setting industry milestone for x86-64 performance

IBM® System x®3850 X5 with MAX5 and DB2® delivers highest x86-64 performance score ever achieved on TPC-C benchmark

November 16, 2010 ... IBM has published the highest TPC-C performance result ever achieved by an x86-64 processor-based server. This new result demonstrates the leadership performance that is possible with the combined power of IBM's exclusive fifth-generation X-Architecture®, DB2 9.7, and the latest Intel® Xeon® 7500 Series processor technology.

The IBM System x3850 X5 server achieved 2,308,099 tpmC (transactions per minute C) at \$.64 USD / tpmC. (1) This TPC-C result beats—by more than 25%—the HP 4-processor result of 1,807,347 tpmC. (2)

The x3850 X5 achieved this tpmC result using DB2 9.7 and SUSE Linux® Enterprise Server 11 (SP1). The x3850 X5 server was configured with four Intel Xeon X7560 processors at 2.26GHz with 256KB L2 cache per core and 24MB shared L3 cache per processor (4 processors/32 cores/64 threads). The configuration included 1.5TB of memory using the IBM MAX5 for System x and eXFlash SSD storage.

IBM MAX5 for System x—an industry-first technology from IBM—is a scalable, 1U, memory expansion drawer that provides an additional 32 DIMM slots to the x3850 X5 with a memory controller for added performance and a node controller for scalability. MAX5 enables the x3850 X5 to expand memory independently of the processor. MAX5 increases the server's memory capacity by 50%, enabling the system to process more transactions per minute. Using MAX5 eliminates the need to buy another server to support memory-intensive workloads, and dramatically changes the economics of the x86 server market. Combining MAX5 memory expansion and eXFlash SSD technology can increase the system's memory and storage, delivering larger, faster databases and reducing the need for additional systems or external storage.

Results referenced are current as of November 16, 2010. To view all TPC results, visit www.tpc.org.

(1) The total solution availability for this TPC-C benchmark result is May 20, 2011.

(2) HP ProLiant DL580 G7 with the Intel Xeon Processor X7560 at 2.26GHz (4 processors/32 cores/64 threads), Microsoft SQL Server 2005 Enterprise x64 Edition SP3, Microsoft Windows Server 2008 R2 Enterprise Edition; 1,807,347 tpmC, \$.49 USD per tpmC, Availability Date of 10/15/10.

IBM, System x, DB2 and X-Architecture are registered trademarks of IBM Corporation.

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

Linux is a registered trademark of Linus Torvalds in the United States, other countries, or both.

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

TPC, TPC Benchmark, TPC-C and tpmC 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.