IBM posts SPEC MPI2007 results for new-generation x3550 M2

x3550 M2 delivers leadership scores for 8-core-per-node systems with 1, 2, 4 or 8 nodes

July 29, 2009 ... IBM® has published SPEC MPI®2007 benchmark scores for the IBM System x® 3550 M2 server. Demonstrating exceptional performance, the x3550 M2 server achieved leadership scores for 8-core-per-node systems with 1, 2, 4 or 8 nodes. These results include SPECmpiM™_base2007 scores of 2.06 for 1 node, 4.02 for 2 nodes, 7.70 for 4 nodes, and 14.0 for 8 nodes. (1)

The x3550 M2 also delivered a near-leadership 16-node SPECmpiM_base2007 score of 25.0—within 2% of the top 16-node score of 25.6. (2)
.
For the single-node result, the x3550 M2 was configured with the Quad-Core Intel® Xeon® Processor X5570 (2.93GHz, 256KB L2 cache per core, 8MB L3 cache per chip—8 cores/2 chips/4 cores per chip/16 threads) and 24GB of memory and ran Red Hat Enterprise Linux® 5.3. (3) See footnote 1 for links to the reports for the 2-, 4- and 8-node configurations.

The new x3550 M2 is a 2-socket, 1U rack server built with innovative IBM X-Architecture® that leverages Intel's Quick Path Interconnect (QPI) technology. Featuring power-optimized, high-performance with the latest Intel Xeon 5500 Series quad-and dual-core processor technology and a leadership, energy-efficient design with integrated advanced functionality, the x3550 M2 is designed for single or multiple business-critical applications hosting and virtualized, non-blade environments.

Results referenced are current as of July 29, 2009. View all published results at:
http://www.spec.org/mpi2007/results/res2009q3/

About SPEC MPI2007

The Standard Performance Evaluation Corporation designed the MPI2007 benchmark suite to measure the performance of parallel computing systems and clusters running scientific applications using the Message-Passing Interface (MPI).

SPEC® MPI2007 provides performance metrics that can be used to compare different hardware architectures (e.g., SMP, NUMA, clusters) and interconnects, processors, memory hierarchy, compilers, and MPI implementations. It tests performance based on actual end-user applications, instead of synthetic workloads or parallelized versions of sequential benchmarks. View the detailed description at http://www.spec.org/mpi2007/results/.

(1) View the published reports at:
1-node: http://www.spec.org/mpi2007/results/res2009q3/mpi2007-20090714-00142.pdf
2-node: http://www.spec.org/mpi2007/results/res2009q3/mpi2007-20090714-00144.pdf
4-node: http://www.spec.org/mpi2007/results/res2009q3/mpi2007-20090714-00146.pdf
8-node: http://www.spec.org/mpi2007/results/res2009q3/mpi2007-20090714-00148.pdf

(2) View the published reports at:
IBM 16 nodes: http://www.spec.org/mpi2007/results/res2009q3/mpi2007-20090714-00149.pdf
QLogic 16 nodes: http://www.spec.org/mpi2007/results/res2009q3/mpi2007-20090715-00159.pdf.

(3) The benchmarked system configuration is currently generally available.

IBM, System x and X-Architecture are registered trademarks of IBM Corporation.
Intel and Xeon are registered trademarks of Intel Corporation.
Linux is a registered trademark of Linus Torvalds in the United States, and other countries, or both.
Red Hat is a trademark of Red Hat, Inc.
SPEC and SPEC MPI are registered trademarks, and SPECmpiM is a trademark of the Standard Performance Evaluation Corporation (see http://www.spec.org/spec/trademarks.html for all SPEC trademarks and service marks).
All other company/product names and service marks may be trademarks or registered trademarks of their respective companies.