IBM System x iDataPlex dx360 M2 delivers leadership 2-processor score for SPECpower_ssj2008 benchmark

dx360 M2 demonstrates 8% improvement in power efficiency over previous leadership 2-processor score

August 4, 2009 ... IBM has published a SPECpower® benchmark result for the IBM® System x® iDataPlex™ dx360 M2 server. Demonstrating exceptional performance per watt, the dx360 M2 server achieved a Performance to Power Ratio of 2,231 overall ssj_ops/watt on the SPECpower_ssj™2008 benchmark. (1)

Using the new Quad-Core Intel® Xeon® Processor L5530 and a 900-watt high-efficiency power supply, the dx360 M2 has demonstrated that it can deliver outstanding performance and reduce energy consumption in the data center.

The dx360 M2's score is nearly 17% higher than the 1,909 overall ssj_ops/watt achieved by the HP ProLiant DL170h G6 with the Quad-Core Intel Xeon Processor L5520 (8 cores/2 chips/4 cores per chip). (2)

Compared to its previous score of 2,066 achieved with the Intel Xeon X5570, the dx360 M2's score represents a power-efficiency improvement of nearly 8%. (3) Notably, the dx360 M2's new score demonstrates up to 40% better performance per watt than HP and Dell 2-processor systems also configured with the Quad-Core Intel Xeon Processor X5570. For example, the dx360 M2's score demonstrates:

- 40% more performance per watt than the HP ProLiant DL360 G6 with the Quad-Core Intel Xeon Processor X5570 (8 cores/2 chips/4 cores per chip)—1,586 overall ssj_ops/watt.

- 20% more performance per watt than the Dell PowerEdge R610 with the Quad-Core Intel Xeon Processor X5570 (8 cores/2 chips/4 cores per chip)—1,844 overall ssj_ops/watt. (4)

IBM System x iDataPlex is an innovative data center solution for High Performance Computing (HPC) clusters, Enterprise Cloud environments, and Web 2.0 applications where there are requirements to reduce power and cooling costs, and conserve physical space. It represents a new approach for usable density through innovation at the node-, rack-, and data center levels.

Result referenced is current as of August 4, 2009, and has been submitted to SPEC® for review. Upon successful review, the result will be posted at www.spec.org. View all published results at www.spec.org/power_ssj2008/results/power_ssj2008.html.

(1) IBM System x iDataPlex dx360 M2 was configured with the Quad-Core Intel Xeon Processor L5530 (2.4GHz with 256KB L2 cache per core and 8MB L3 cache per processor—8 cores/2 chips/4 cores per chip) and 8GB of memory (4 x 2GB 2Rx8 1Gbit PC3-10600 DDR3 1333 LP RDIMM), one 900-watt high-efficiency powered supply, and ran IBM J9 Java™6 Runtime Environment and Microsoft® Windows® Server 2008 Datacenter x64 Edition. The dx360 M2 as configured for the benchmark is planned to be generally available September 18, 2009.

(2) The statement of comparison is based on the best-performing, 2U 2-processor HP system with published results. Competitive benchmark result stated above reflects results published on www.spec.org as of August 4, 2009. View all published results at www.spec.org/power_ssj2008/results/.

(3) IBM System x iDataPlex dx360 M2 with the Quad-Core Intel Xeon Processor X5570 (2.93GHz with 256KB L2 cache per core and 8MB L3 cache per processor—8 cores/2 chips/4 cores per chip), 12GB of DDR3 PC3-10600R memory, IBM J9 Java 6 Runtime Environment, and Microsoft Windows Server 2008 Datacenter x64 Edition.

(4) The statements of comparison are based on the best-performing HP and Dell systems using the Quad-Core Intel Xeon Processor X5570. Competitive benchmark results stated above reflect results published on www.spec.org as of August 4, 2009. View all published results at www.spec.org/power_ssj2008/results/.