SPEC CPU2006 Benchmark Result for System x3650 M5
Performance Benchmark Result (withdrawn product)

Lenovo System x3650 M5 delivers world-record two-processor rack server performance for compute-intensive applications

March 31, 2016... Lenovo today announces two top SPEC CPU2006 benchmark scores for the Lenovo System x3650 M5 2U rack server, using two high-performance Intel Xeon processors:

- Intel Xeon Processor E5-2699 v4 with 22 cores
- Intel Xeon Processor E5-2667 v4 with 16 cores

The x3650 M5 achieved a leadership SPECfp_rate_base2006 score using two Intel Xeon E5-2699 v4 processors (2.2 GHz, 55 MB L3 cache per processor, 2 processors with a total of 44 cores, 22 cores per processor (88 total threads), 256 GB of DDR4 PC4-2400T-R memory, and SUSE Linux Enterprise Server 12 SP1 (x86_64). (1) The SPECfp_rate_base2006 benchmark is ideal for measuring multi-threaded compute-intensive applications, such as High Performance Computing (HPC) workloads.

The x3650 M5 also achieved a leadership SPECfp_base2006 score using two Intel Xeon E5-2667 v4 processors (3.2 GHz, 25 MB L3 cache per processor, 2 processors with a total of 32 cores, 16 cores per processor (64 threads), 256 GB of DDR4 PC4-2400T-R memory, and SUSE Linux Enterprise Server 12 SP1 (x86_64). (1) The SPECfp_base2006 score is ideal for measuring single-threaded compute-intensive applications, such as High Frequency Trading (HFT) and other financial industry workloads.

The scores in the following tables are the first SPEC CPU2006 results published (SPEC CPU, SPECint, SPECfp) for the System x3650 M5 with the E5-2699 v4 and E5-2697 v4 processors respectively.

Table 1. Results with the E5-2699 v4 processor

SPEC CPU2006 Benchmark	Intel Xeon Processor E5-2699 v4 – 2.2GHz (22 cores)
SPECint_rate2006	1810
SPECint_rate_base2006	1740
SPECfp_rate2006	1130
SPECfp_rate_base2006	1100
SPECint_2006	74.7
SPECint_base2006	72.9
SPECfp_2006	126
SPECfp_base2006	118

Table 2. Results with the E5-2667 v4 processor

SPEC CPU2006 Benchmark	Intel Xeon Processor E5-2667 v4 – 3.2GHz (16 cores)
SPECint_2006	72.7
SPECint_base2006	69.4
SPECfp_2006	129
SPECfp_base2006	125

Optimized for big data and analytics, cloud computing, and business-critical enterprise workloads, the two-socket Lenovo System x3650 M5 2U rack server offers world-class performance and industry-leading reliability. It belongs to Lenovo's broad enterprise portfolio that spans from entry rack and tower servers to four and eight socket mission critical servers.

Lenovo servers, including the x3650 M5, have consistently achieved the highest reliability of all x86 servers in the industry. Predictive Failure Analysis and light path diagnostics facilitate easy serviceability and reduced downtime and costs. Lenovo XClarity, a best-in-class enterprise tool, helps simplify and centralize discovery, monitoring, configuration, alert handling and other management functionality over the servers' lifecycle.

In addition, the x3650 M5 supports open industry standards, such as operating systems, networking and storage fabrics, virtualization, and system management protocols, to fit easily within existing and future data center environments.

Results are current as of March 31, 2016. The scores have been submitted to SPEC for review and will be posted on their Web site upon successful completion of the review. View all published results at http://www.spec.org/cpu2006/results/.

(1) The x3650 M5 with the Intel Xeon Processor E5-2699 v4 and Intel Xeon Processor E5-2667 v4 is planned to be generally available March 31, 2016. The x3650 M5 as configured for this benchmark will be available March 31, 2016.

Related product families

Product families related to this document are the following:

- 2-Socket Rack Servers
- SPECcpu Benchmark Results

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