IBM posts SPEC CPU2006 scores for new blade server using quad-core AMD Opteron processor

February 10, 2009 ... The IBM® BladeCenter® LS42 is an enterprise-class, 2- or 4-socket blade that features the quad-core AMD Opteron™ Model 8376 HE processor at 2.3GHz with 2MB L2 cache with a 1GHz interprocessor HyperTransport bus. (1) The BladeCenter chassis and the IBM BladeCenter LS42 combine high-density design points with high performance and advanced server functions. With rich systems management and control, these dense products can double the processing power in a 7U, 8U, or 9U rack space, when compared with 1U thin servers.

AMD Opteron 64-bit technology enables the processor to run newly written 64-bit code and address larger amounts of memory, while still supporting full native 32-bit instruction sets. These new blade servers can run legacy 32-bit applications and can deliver improved performance for scientific and technical computing applications, and HPC and telecommunications applications.

In measurements with SPEC® CPU2006, the LS42 blade achieved leadership SPECint®2006, SPECfp®2006, and SPECfp_rate_base2006 scores for a 2-socket blade, configured with the AMD Opteron Model 8376 HE processor (2.3GHz, 512KB L2 cache per core—2 processors/8 cores/8 threads). Scores on other members of the benchmark suite are competitive.

The LS42 achieved leadership SPECint_rate_base2006 and SPECfp_rate2006 scores for a 4-socket blade, configured with the AMD Opteron Model 8376 HE processor (2.3GHz, 512KB L2 cache per core—4 processors/16 cores/16 threads). Scores on other members of the benchmark suite are competitive.

SPEC CPU2006 Benchmark	IBM BladeCenter LS42 AMD Opteron Model 8376 HE (2 x 2.3GHz)	IBM BladeCenter LS42 AMD Opteron Model 8376 HE (4 x 2.3GHz)
SPECint2006	18.3	17.2
SPECint_rate2006	119	215
SPECint_rate_base2006	99.9	179
SPECfp2006	21.7	20.1
SPECfp_rate2006	108	187
SPECfp_rate_base2006	95.9	167

These scores are the first SPEC CPU2006 results published for the LS42 blade model using the quad-core AMD Opteron Model 8376 HE processor. These results were achieved using SUSE Linux® Enterprise Server 10 SP2 x64.

Results are current as of February 10, 2009. 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 www.spec.org.

(1) Planned availability for the LS42 blade model using the quad-core AMD Opteron Model 8376 processor at 2.3GHz is March 9, 2009.