

Performance Brief

New e325 server delivers impressive compute-intensive performance

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The IBM® @serverTM 325, IBM's first AMD OpteronTM processor-based server, features outstanding computing power designed for high-performance computing. The e325 is a 1U, 2-way rack-optimized server ideal for customers needing leading 32-bit performance with an easy migration path to 64-bit computing at an affordable price.

The SPEC CPU2000 benchmark suites (1) were used to measure the e325 server's performance in a configuration that used two 2GHz AMD Opteron processors. (The SPECint2000 and SPECcfp2000 are used to measure speed using a single processor.)

SPEC CINT2000	SPEC CFP2000
SPECint_rate2000	SPECcfp_rate2000
27.5	27
SPECint2000	SPECcfp2000
1,239	1,231
System Hardware	
2 x 2GHz AMD Opteron Processor Model 246	
64KBI Primary Cache	
1024KB Secondary Cache	
4GB Memory	
1 x 40GB IDE Disk Drive	
Operating System and Compilers	
SuSE Linux SLES 8.0 for x86-64	
Portland Group 5.0-1 Fortran and Gnu gcc3.3 C/C++	

Results are current as of September 16, 2003. For all SPEC CPU2000 benchmark results, visit www.spec.org. The e325's scores have been submitted to SPEC for review and will be posted on their Web site upon successful completion of the review.

(1) SPEC CPU2000, a next-generation industry-standard CPU-intensive benchmark suite, provides a comparative measure of compute-intensive performance across the widest practical range of hardware. SPEC CPU2000 standardized benchmarks reflect advances in microprocessor technologies, compilers and applications that have taken place over the

last five years. SPEC CPU2000 measures system speed and throughput for single-processor, symmetric-multiprocessor, and cluster systems.

SPEC CPU2000 comprises two sets (or suites) of benchmarks: CINT2000 for measuring compute-intensive integer performance, and CFP2000 for compute-intensive floating point performance. The two suites measure the performance of a computer's processor, memory architecture and compiler. Run and reporting rules permit baseline and optimized (peak) results for the CINT2000 and CFP2000 suites. CINT2000 measures compute-intensive integer performance. The throughput metric, SPECint_rate2000, measures the number of tasks a computer can complete in a given amount of time. The speed metric, SPECint2000, measures how fast a machine completes the running of the CINT2000 suite. CFP2000 measures compute-intensive floating point performance. The throughput metric, SPECfp_rate2000, measures the number of tasks a computer can complete in a given amount of time. The speed metric, SPECfp2000, measures how fast a machine completes the running of the CFP2000 suite.

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