Acer Incorporated

Acer Altos R720 (Intel Xeon X5260)

SPECint®_rate2006 = 81.0
SPECint_rate_base2006 = 69.4

CPU2006 license: 97
Test sponsor: Acer Incorporated
Tested by: Acer Incorporated
Test date: Mar-2008
Hardware Availability: Nov-2007
Software Availability: Nov-2007

Hardware

CPU Name: Intel Xeon X5260
CPU Characteristics: 1333MHz system bus
CPU MHz: 3333
FPU: Integrated
CPU(s) enabled: 4 cores, 2 chips, 2 cores/chip
CPU(s) orderable: 1, 2 chips
Primary Cache: 32 KB I + 32 KB D on chip per core
Secondary Cache: 6 MB I+D on chip per chip
L3 Cache: None
Other Cache: None
Memory: 16 GB (8 x 2048MB ECC FR-DIMM DDR2-667 CL5-5-5-5)
Disk Subsystem: 1 x 73GB 10000PRM SAS HDD
Other Hardware: None

Software

Operating System: SuSE Linux Enterprise Server 10 SP1 (x86_64)
Compiler: Intel C++ Compiler 10.1 for Linux
Auto Parallel: Yes
File System: ReiserFS
System State: Multi-user, level 3
Base Pointers: 32-bit
Peak Pointers: 32/64-bit
Other Software: Microquill SmartHeap V8.1
Binutils 2.17.50.0.15

Software Availability: Nov-2007
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Results Table

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</table>

Results appear in the order in which they were run. Bold underlined text indicates a median measurement.

General Notes

This result was measured on the Acer Altos R520. The Altos R720 and Altos R520 are electronically equivalent.

All benchmarks compiled in 32-bit mode except 401.bzip2 and 456.hmmer, for peak, are compiled in 64-bit mode.

BIOS Settings
- Hardware Prefetcher set to ON
- Adjacent Cache Line Prefetch set to ON

All results but peak 462.libquantum used taskset to bind processes to cores.

"ulimit -s unlimited" was set for stacksize unlimited

OMP_NUM_THREADS set to number of cores

Base Compiler Invocation

C benchmarks:
- icc

C++ benchmarks:
- icpc
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Base Portability Flags

400.perlbench: -DSPEC_CPU_LINUX_IA32
462.libquantum: -DSPEC_CPU_LINUX
483.xalancbmk: -DSPEC_CPU_LINUX

Base Optimization Flags

C benchmarks:
- fast -inline-calloc -opt-malloc-options=3
C++ benchmarks:
- -xT -ipo -O3 -no-prec-div -Wl,-z,muldefs
- -L/spec/users/rahul/cpu2006.1.0/lib -lsmartheap

Base Other Flags

C benchmarks:
403.gcc: -Dalloca=_alloca

Peak Compiler Invocation

C benchmarks (except as noted below):
icc

401.bzip2: /opt/intel/cce/10.1.008/bin/icc
- L/opt/intel/cce/10.1.008/lib
- I/opt/intel/cce/10.1.008/include

456.hmmer: /opt/intel/cce/10.1.008/bin/icc
- L/opt/intel/cce/10.1.008/lib
- I/opt/intel/cce/10.1.008/include

C++ benchmarks:
icpc

Peak Portability Flags

400.perlbench: -DSPEC_CPU_LINUX_IA32
401.bzip2: -DSPEC_CPU_LP64
456.hmmer: -DSPEC_CPU_LP64
462.libquantum: -DSPEC_CPU_LINUX

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**Peak Portability Flags (Continued)**

483.xalancbmk: –DSPEC_CPU_LINUX

**Peak Optimization Flags**

C benchmarks:

- 400.perlbench: –prof-gen(pass 1) –prof-use(pass 2) -fast -ansi-alias
- 401.bzip2: –prof-gen(pass 1) –prof-use(pass 2) -fast -prefetch
- 403.gcc: –fast -inline-calloc –opt-malloc-options=3
- 429.mcf: –fast -prefetch
- 445.gobmk: –prof-gen(pass 1) –prof-use(pass 2) -xT -O2 -ipo
- 458.sjeng: –prof-gen(pass 1) –prof-use(pass 2) -fast -unroll4
- 462.libquantum: –fast -unroll4 -Ob0 -prefetch
- 464.h264ref: –prof-gen(pass 1) –prof-use(pass 2) -fast -unroll2

C++ benchmarks:

- 471.omnetpp: –prof-gen(pass 1) –prof-use(pass 2) -xT -O3 -ipo
- 473.astar: –prof-gen(pass 1) –prof-use(pass 2) -xT -O3 -ipo

483.xalancbmk: basepeak = yes
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Peak Other Flags

C benchmarks:
403.gcc: -Dalloca=_alloca

The flags file that was used to format this result can be browsed at

You can also download the XML flags source by saving the following link:

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For questions about this result, please contact the tester.
For other inquiries, please contact webmaster@spec.org.

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