Acer Incorporated

Acer Altos G540 M2 (Intel Xeon E5502)

**SPECint®_rate2006 = 70.8**

**SPECint_rate_base2006 = 66.2**

**CPU2006 license:** 97

**Test sponsor:** Acer Incorporated

**Tested by:** Acer Incorporated

**Hardware**

- **CPU Name:** Intel Xeon E5502
- **CPU Parameters:**
  - **CPU MHz:** 1867
  - **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:** 256 KB I+D on chip per core
  - **L3 Cache:** 4 MB I+D on chip per chip
  - **Other Cache:** None
  - **Memory:** 24 GB (6 x 4 GB Registered ECC DDR3-1333)
  - **Disk Subsystem:** 320 GB SATA, 7200RPM
  - **Other Hardware:** None

**Operating System:** SUSE Linux Enterprise Server 10 (x86_64) SP2, Kernel 2.6.16.60-0.21-smp

**Compiler:** Intel C++ Compiler 11.0 for Linux Build 20090131 Package ID: l_cproc_p_11.0.080

**File System:** ReiserFS

**System State:** Run level 3 (multi-user)

**Base Pointers:** 32-bit

**Peak Pointers:** 32/64-bit

**Other Software:** Microquill SmartHeap V8.1 Binutils 2.18.50.0.7.20080502
## SPEC CINT2006 Result

**Acer Incorporated**

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**Test sponsor:** Acer Incorporated  
**Tested by:** Acer Incorporated  
**Test date:** Apr-2009  
**Hardware Availability:** Mar-2009  
**Software Availability:** Feb-2009  

## Results Table

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</tbody>
</table>

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

## Submit Notes

The config file option 'submit' was used.  
numactl was used to bind copies to the cores.

## Operating System Notes

'ulimit -s unlimited' was set for stacksize unlimited

## Platform Notes

BIOS setting  
Hardware Prefetcher: Enabled  
Adjacent Cache Line Prefetch: Enabled

## Base Compiler Invocation

C benchmarks:  
*icc*

C++ benchmarks:  
*icpc*
## SPEC CINT2006 Result

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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:**
- `-xSSE4.2 -ipo -O3 -no-prec-div -static -inline-calloc`
- `-opt-malloc-options=3 -opt-prefetch`

**C++ benchmarks:**
- `-xSSE4.2 -ipo -O3 -no-prec-div -opt-prefetch -Wl,-z,muldefs`
- `-L/spec/cpu2006.1.1/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/Compiler/11.0/080/bin/intel64/icc`
  - 456.hmmer: `/opt/intel/Compiler/11.0/080/bin/intel64/icc`
  - 458.sjeng: `/opt/intel/Compiler/11.0/080/bin/intel64/icc`

**C++ benchmarks (except as noted below):**
- `icpc`
  - 473.astar: `/opt/intel/Compiler/11.0/080/bin/intel64/icpc`

### Peak Portability Flags

- 400.perlbench: `-DSPEC_CPU_LINUX_IA32`
- 401.bzip2: `-DSPEC_CPU_LP64`
- 456.hmmer: `-DSPEC_CPU_LP64`

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Peak Portability Flags (Continued)

458.sjeng: -DSPEC_CPU_LP64  
462.libquantum: -DSPEC_CPU_LINUX  
473.astar: -DSPEC_CPU_LP64  
483.xalancbmk: -DSPEC_CPU_LINUX

Peak Optimization Flags

C benchmarks:

400.perlbench: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2) -no-prec-div(pass 2) -static(pass 2) -prof-use(pass 2) -ansi-alias -opt-prefetch

401.bzip2: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2) -no-prec-div(pass 2) -static(pass 2) -prof-use(pass 2) -opt-prefetch -ansi-alias -auto-ilp32

403gcc: -xSSE4.2 -ipo -O3 -no-prec-div -static -inline-calloc -opt-malloc-options=3

429.mcf: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2) -no-prec-div(pass 2) -static(pass 2) -prof-use(pass 2) -opt-prefetch

445.gobmk: -xSSE4.2 -ipo -O3 -no-prec-div -static -unroll2 -ansi-alias -auto-ilp32

456.hmmer: -xSSE4.2 -ipo -O3 -no-prec-div -static -unroll12 -ansi-alias -auto-ilp32

458.sjeng: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2) -no-prec-div(pass 2) -static(pass 2) -prof-use(pass 2) -unroll14 -auto-ilp32

462.libquantum: -xSSE4.2 -ipo -O3 -no-prec-div -static -opt-malloc-options=3 -opt-prefetch

464.h264ref: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2) -no-prec-div(pass 2) -static(pass 2) -prof-use(pass 2) -unroll12 -ansi-alias

C++ benchmarks:

471.omnetpp: basepeak = yes

473.astar: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2) -O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2) -ansi-alias -opt-ra-region-strategy=routine -auto-ilp32 -Wl,-z,muldefs -L/spec/cpu2006.1.1/lib -lsmartheap64

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### Peak Optimization Flags (Continued)

483.xalancbmk: basepeak = yes

### 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:
http://www.spec.org/cpu2006/flags/Intel-ic11.0-int-linux64-revA.20090710.02.xml

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For other inquiries, please contact webmaster@spec.org.

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