### SPECint Rate 2006 Result

#### Sun Microsystems

Sun Fire X2250 (Intel Xeon X5272 3.4GHz)

**SPECint\_rate2006 = 88.1**

**SPECint\_rate\_base2006 = 74.9**

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Copies</th>
<th>SPECint Rate</th>
<th>SPECint Rate Base</th>
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<td>400.perlbench</td>
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<td>403.gcc</td>
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<td>473.astar</td>
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<td>483.xalancbmk</td>
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</tbody>
</table>

**CPU2006 license:** 6

**Test date:** Aug-2008

**Test sponsor:** Sun Microsystems

**Hardware Availability:** Aug-2008

**Tested by:** Sun Microsystems

**Software Availability:** Nov-2007

#### Hardware

- **CPU Name:** Intel Xeon X5272
- **CPU Characteristics:**
  - CPU MHz: 3400
  - 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 (4\*4GB Dual-rank PC2-6400 CL5-5-5 FB-DIMMs)
  - Disk Subsystem: SATA, 500 GB, 7200 RPM
  - Other Hardware: None

#### Software

- **Operating System:** SUSE Linux Enterprise Server 10 (x86_64) SP1, Kernel 2.6.16.46-0.12-smp
- **Compiler:** Intel C++ and Fortran Compiler for Linux32 and Linux64 version 10.1 Build 20070913
- **Auto Parallel:** Yes
- **File System:** ReiserFS
- **System State:** Multi-user, run level 3
- **Base Pointers:** 32-bit
- **Peak Pointers:** 32/64-bit
- **Other Software:** SmartHeap 8.1 32-bit Library for Linux Binutils 2.17.10.50

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### SPECint_rate_base2006 = 74.9

**CPU2006 license:** 6  
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### Results Table

<table>
<thead>
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<td>89.7</td>
</tr>
</tbody>
</table>

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

### Compiler Invocation Notes

OMP_NUM_THREADS set to number of cores
KMP_STACK_SIZE set to 64M
KMP_AFFINITY set to physical,0

### Operating System Notes

'ulimit -s unlimited' was used to set the stacksize to unlimited prior to run.

### Platform Notes

Default BIOS configuration used (includes this settings):
Hardware Prefetch : Enabled; Adjacent Sector Prefetch : Disabled

### Base Compiler Invocation

C benchmarks:
  icc

C++ benchmarks:
  icpc
Sun Microsystems
Sun Fire X2250 (Intel Xeon X5272 3.4GHz)

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Software Availability: Nov-2007

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/data1/SmartHeap_8.1/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/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
  462.libquantum: /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
Sun Microsystems
Sun Fire X2250 (Intel Xeon X5272 3.4GHz)

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Peak Portability Flags

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

Peak Optimization Flags

C benchmarks:

400.perlbench: -prof-gen(pass 1) -prof-use(pass 2) -fast -ansi-alias -prefetch
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 -no-prec-div -ansi-alias
456.hmmer: -fast -unroll2 -ansi-alias -opt-multi-version-aggressive
458.sjeng: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll4
462.libquantum: -fast -unroll14 -Ob0 -prefetch -opt-streaming-stores always -vec-guard-write -opt-malloc-options=3 -parallel -par-runtime-control
464.h264ref: -prof-gen(pass 1) -prof-use(pass 2) -fast -unroll2 -ansi-alias

C++ benchmarks:

471.omnetpp: -prof-gen(pass 1) -prof-use(pass 2) -xT -O3 -ipo -no-prec-div -ansi-alias -opt-ra-region-strategy=block -Wl,-z,muldefs -L/data1/SmartHeap_8.1/lib -lsmartheap
473.astar: -prof-gen(pass 1) -prof-use(pass 2) -xT -O3 -ipo -no-prec-div -ansi-alias -opt-ra-region-strategy=routine -Wl,-z,muldefs -L/data1/SmartHeap_8.1/lib -lsmartheap

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 [http://www.spec.org/cpu2006/flags/Intel-ic10-ia32-intel64-linux-flags.20090714.html](http://www.spec.org/cpu2006/flags/Intel-ic10-ia32-intel64-linux-flags.20090714.html)

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

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

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