**SPEC® CINT2006 Result**

**Dell Inc.**

**PowerEdge 2950 (Intel Xeon 5150, 2.66 GHz)**

**SPECint\_rate2006 = 64.3**

**SPECint\_rate\_base2006 = 56.2**

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**CPU2006 license:** 55

**Test sponsor:** Dell Inc.

**Test date:** Oct-2007

**Hardware Availability:** Sep-2007

**Tested by:** Dell Inc.

**Software Availability:** Nov-2007

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### Hardware

- **CPU Name:** Intel Xeon 5150
- **CPU Characteristics:** 1333 MHz system bus
- **CPU MHz:** 2666
- **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:** 4 MB I+D on chip per chip
- **L3 Cache:** None
- **Other Cache:** None
- **Memory:** 16 GB (8x2 GB 667 MHz ECC CL5 FB-DIMM)
- **Disk Subsystem:** 1 x 73 GB SAS 15k 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++ Compiler for Linux32 and Linux64 version 10.1 Build 20070725
- **Auto Parallel:** Yes
- **File System:** ReiserFS
- **System State:** Default
- **Base Pointers:** 32-bit
- **Peak Pointers:** 32/64-bit
- **Other Software:** SmartHeap library V8.1

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Standard Performance Evaluation Corporation
info@spec.org
http://www.spec.org/
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**Results Table**

<table>
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<th>Ratio</th>
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<td>4</td>
<td>393</td>
<td>70.2</td>
<td>394</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  
'/usr/bin/taskset' used to bind processes to CPUs

**Platform Notes**

BIOS Settings:  
Adjacent Cache Line Prefetch = Disabled (default Enabled)  
Hardware Prefetcher = Enabled (default Enabled)

**Base Compiler Invocation**

C benchmarks:  
  icc  
C++ benchmarks:  
  icpc
Dell Inc.
PowerEdge 2950 (Intel Xeon 5150, 2.66 GHz)

**SPECint_rate2006 = 64.3**

**SPECint_rate_base2006 = 56.2**

<table>
<thead>
<tr>
<th>CPU2006 license</th>
<th>Test date</th>
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<tbody>
<tr>
<td>55</td>
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</tr>
</tbody>
</table>

**Test sponsor:** Dell Inc.

**Hardware Availability:** Sep-2007

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**Base Portability Flags**

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

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**Base Optimization Flags**

**C benchmarks:**
- -fast
- -inline-calloc
- -opt-malloc-options=3

**C++ benchmarks:**
- -xT
- -ipo
- -O3
- -no-prec-div
- -Wl,-z,muldefs
- -L/home/cmplr/usr3/alrahate/cpu2006.1.0/lib -lsmartheap

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**Base Other Flags**

- 403.gcc: -Dalloca=_alloca

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**Peak Compiler Invocation**

**C benchmarks (except as noted below):**

- **icc**

  - 401.bzip2: /home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux64/bin/icc
  - -L/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux64/lib
  - -I/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux64/include

  - 456.hmmer: /home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux64/bin/icc
  - -L/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux64/lib
  - -I/home/cmplr/usr3/alrahate/compilers/ic10.1mainline/20070725/Linux64/include

**C++ benchmarks:**

- **icpc**

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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
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Hardware Availability: Sep-2007
Software Availability: Nov-2007

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
-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 -unroll4 -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/home/cmplr/usr3/alrahate/cpu2006.1.0/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/home/cmplr/usr3/alrahate/cpu2006.1.0/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
You can also download the XML flags source by saving the following link:
http://www.spec.org/cpu2006/flags/Intel-ic10-ia32-intel64-linux-flags.20090714.17.xml