## SPEC® CINT2006 Result

<table>
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<tr>
<th>Dell Inc.</th>
<th>SPECint®_rate2006 = Not Run</th>
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<tr>
<td>PowerEdge R320 (Intel Xeon E5-2430, 2.20 GHz)</td>
<td>SPECint_rate_base2006 = 205</td>
</tr>
</tbody>
</table>

### CPU2006 license: 55
Test date: Apr-2013
Test sponsor: Dell Inc.
Tested by: Dell Inc.

### Software
Operating System: Red Hat Enterprise Linux Server release 6.3 (Santiago)
Compiler: C/C++: Version 13.0.0.133 of Intel C++ Studio XE for Linux
Auto Parallel: No

### Hardware
CPU Name: Intel Xeon E5-2430
CPU Characteristics: Intel Turbo Boost Technology up to 2.70 GHz
CPU MHz: 2200
FPU: Integrated
CPU(s) enabled: 6 cores, 1 chip, 6 cores/chip, 2 threads/core
CPU(s) orderable: 1 chip
Primary Cache: 32 KB I + 32 KB D on chip per core
Secondary Cache: 256 KB I+D on chip per core
L3 Cache: 15 MB I+D on chip per chip
Other Cache: None
Memory: 48 GB (6 x 8 GB 2Rx4 PC3-12800R-11, ECC, running at 1333 MHz)
Disk Subsystem: 2 x 300 GB 10000 RPM SAS, RAID 0
Other Hardware: None

### SPECint Rate Performance

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Copies</th>
<th>SPECint_rate_base2006</th>
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<td>400.perlbench</td>
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<td>115</td>
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<tr>
<td>401.bzip2</td>
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<td>113</td>
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<td>403.gcc</td>
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SPECint_rate_base2006 = 205
Dell Inc.

PowerEdge R320 (Intel Xeon E5-2430, 2.20 GHz)

SPECint_rate2006 = Not Run
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Results Table

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

Submit Notes

The numactl mechanism was used to bind copies to processors. The config file option 'submit' was used to generate numactl commands to bind each copy to a specific processor. For details, please see the config file.

Operating System Notes

Stack size set to unlimited using "ulimit -s unlimited"

Platform Notes

Sysinfo program /root/cpu2006-1.2/config/sysinfo.rev6818
$Rev: 6818 $ $Date:: 2012-07-17 #$ e86d102572650a6e4d596a3cee98f191
running on R320 Fri Apr 5 13:39:35 2013

This section contains SUT (System Under Test) info as seen by some common utilities. To remove or add to this section, see:
http://www.spec.org/cpu2006/Docs/config.html#sysinfo

From /proc/cpuinfo
model name : Intel(R) Xeon(R) CPU E5-2430 0 @ 2.20GHz
  1 "physical id"s (chips)
  12 "processors"
cores, siblings (Caution: counting these is hw and system dependent. The following excerpts from /proc/cpuinfo might not be reliable. Use with caution.)
cpu cores : 6
siblings : 12

Continued on next page
Dell Inc.

PowerEdge R320 (Intel Xeon E5-2430, 2.20 GHz)

**SPEC CINT2006 Result**

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**SPECint_rate_base2006 = 205**

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- **Test sponsor:** Dell Inc.
- **Test date:** Apr-2013
- **Tested by:** Dell Inc.
- **Hardware Availability:** Mar-2013
- **Software Availability:** Dec-2012

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**Platform Notes (Continued)**

- physical 0: cores 0 1 2 3 4 5
- cache size : 15360 KB

From /proc/meminfo
- MemTotal: 49380516 kB
- HugePages_Total: 0
- Hugepagesize: 2048 kB

```
/usr/bin/lsb_release -d
Red Hat Enterprise Linux Server release 6.3 (Santiago)
```

From /etc/*release* /etc/*version*
- redhat-release: Red Hat Enterprise Linux Server release 6.3 (Santiago)
- system-release: Red Hat Enterprise Linux Server release 6.3 (Santiago)

```
uname -a:
Linux R320 2.6.32-279.el6.x86_64 #1 SMP Wed Jun 13 18:24:36 EDT 2012 x86_64
x86_64 x86_64 GNU/Linux
run-level 3 Apr 5 13:37
```

**General Notes**

Environment variables set by runspec before the start of the run:
- LD_LIBRARY_PATH = "/root/cpu2006-1.2/libs/32:/root/cpu2006-1.2/libs/64:/root/cpu2006-1.2/sh"

Binaries compiled on a system with 1x Core i7-860 CPU + 8GB memory using RHEL5.5
- Transparent Huge Pages enabled with:
- echo always > /sys/kernel/mm/redhat_transparent_hugepage/enabled
- Filesystem page cache cleared with:
- echo 1 > /proc/sys/vm/drop_caches
- runspec command invoked through numactl i.e.:
- numactl --interleave=all runspec <etc>
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Base Compiler Invocation

C benchmarks:
  icc  -m32

C++ benchmarks:
  icpc -m32

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 -opt-prefetch -opt-mem-layout-trans=3

C++ benchmarks:
  -xSSE4.2 -ipo -O3 -no-prec-div -opt-prefetch -opt-mem-layout-trans=3
  -Wl,-z,muldefs -L/sh -lsmartheap

Base Other Flags

C benchmarks:
  403.gcc: -Dalloca=_alloca

The flags files that were used to format this result can be browsed at
http://www.spec.org/cpu2006/flags/Intel-ic13-official-linux64.html
http://www.spec.org/cpu2006/flags/Dell-Platform-Settings-V1.2-revA.20120410.00.html

You can also download the XML flags sources by saving the following links:
http://www.spec.org/cpu2006/flags/Intel-ic13-official-linux64.xml
http://www.spec.org/cpu2006/flags/Dell-Platform-Settings-V1.2-revA.20120410.00.xml
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Tested with SPEC CPU2006 v1.2.