## SPEC® CINT2006 Result

### Cisco Systems

Cisco UCS B200 M4 (Intel Xeon E5-2630 v3 @ 2.40GHz)

<table>
<thead>
<tr>
<th>SPECint®_rate2006</th>
<th>Not Run</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECint_rate_base2006</td>
<td>660</td>
</tr>
</tbody>
</table>

**CPU2006 license:** 9019  
**Test sponsor:** Cisco Systems  
**Tested by:** Cisco Systems  
**Test date:** Dec-2014  
**Hardware Availability:** Sep-2014  
**Software Availability:** Nov-2013

### Hardware

- **CPU Name:** Intel Xeon E5-2630 v3  
- **CPU Characteristics:** Intel Turbo Boost Technology up to 3.20 GHz  
- **CPU MHz:** 2400  
- **FPU:** Integrated  
- **CPU(s) enabled:** 16 cores, 2 chips, 8 cores/chip, 2 threads/core  
- **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:** 20 MB I+D on chip per chip  
- **Other Cache:** None  
- **Memory:** 128 GB (8 x 16 GB 2Rx4 PC4-2133P-R, running at 1866 MHz)  
- **Disk Subsystem:** 1 x 600GB SAS, 10K RPM  
- **Other Hardware:** None

### Software

- **Operating System:** Red Hat Enterprise Linux Server release 6.5 (Santiago)  
- **Compiler:** C/C++: Version 14.0.0.080 of Intel C++ Studio XE for Linux  
- **Auto Parallel:** No  
- **File System:** ext4  
- **System State:** Run level 3 (multi-user)  
- **Base Pointers:** 32-bit  
- **Peak Pointers:** 32/64-bit  
- **Other Software:** Microquill SmartHeap V10.0

---

### Copies

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Copies</th>
</tr>
</thead>
<tbody>
<tr>
<td>400.perlbench</td>
<td>32</td>
</tr>
<tr>
<td>401.bzip2</td>
<td>32</td>
</tr>
<tr>
<td>403.gcc</td>
<td>32</td>
</tr>
<tr>
<td>429.mcf</td>
<td>32</td>
</tr>
<tr>
<td>445.gobmk</td>
<td>32</td>
</tr>
<tr>
<td>456.hmmer</td>
<td>32</td>
</tr>
<tr>
<td>458.sjeng</td>
<td>32</td>
</tr>
<tr>
<td>462.libquantum</td>
<td>32</td>
</tr>
<tr>
<td>464.h264ref</td>
<td>32</td>
</tr>
<tr>
<td>471.omnetpp</td>
<td>32</td>
</tr>
<tr>
<td>473.astar</td>
<td>32</td>
</tr>
<tr>
<td>483.xalancbmk</td>
<td>32</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Results</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECint_rate_base2006</td>
<td>660</td>
</tr>
</tbody>
</table>

---

Cisco Systems

Copyright 2006-2014 Standard Performance Evaluation Corporation
SPEC CINT2006 Result

Cisco Systems
Cisco UCS B200 M4 (Intel Xeon E5-2630 v3 @ 2.40GHz)

**SPECint_rate2006 = Not Run**
SPECint_rate_base2006 = 660

CPU2006 license: 9019
Test sponsor: Cisco Systems
Tested by: Cisco Systems

Test date: Dec-2014
Hardware Availability: Sep-2014
Software Availability: Nov-2013

---

### Results Table

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Copies</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Copies</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>400.perlbench</td>
<td>32</td>
<td>634</td>
<td>493</td>
<td>631</td>
<td>496</td>
<td>631</td>
<td>495</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>401.bzip2</td>
<td>32</td>
<td>956</td>
<td>323</td>
<td>958</td>
<td>322</td>
<td>956</td>
<td>323</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>403.gcc</td>
<td>32</td>
<td>509</td>
<td>506</td>
<td>509</td>
<td>506</td>
<td>512</td>
<td>503</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>429.mcf</td>
<td>32</td>
<td>322</td>
<td>907</td>
<td>321</td>
<td>909</td>
<td>322</td>
<td>906</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>445.gobmk</td>
<td>32</td>
<td>775</td>
<td>433</td>
<td>776</td>
<td>433</td>
<td>776</td>
<td>433</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>456.hmmer</td>
<td>32</td>
<td>312</td>
<td>957</td>
<td>323</td>
<td>925</td>
<td>313</td>
<td>955</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>458.sjeng</td>
<td>32</td>
<td>444</td>
<td>459</td>
<td>445</td>
<td>459</td>
<td>445</td>
<td>458</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>462.libquantum</td>
<td>32</td>
<td>987</td>
<td>6720</td>
<td>98.4</td>
<td>6740</td>
<td>99.4</td>
<td>6670</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>464.h264ref</td>
<td>32</td>
<td>938</td>
<td>755</td>
<td>943</td>
<td>751</td>
<td>921</td>
<td>769</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>471.omnetpp</td>
<td>32</td>
<td>550</td>
<td>363</td>
<td>556</td>
<td>360</td>
<td>553</td>
<td>362</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>473.astar</td>
<td>32</td>
<td>620</td>
<td>362</td>
<td>615</td>
<td>365</td>
<td>620</td>
<td>363</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>483.xalancbmk</td>
<td>32</td>
<td>300</td>
<td>736</td>
<td>300</td>
<td>735</td>
<td>299</td>
<td>737</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

- CPU performance set to HPC
- Power Technology set to Custom
- Processor Power State C6 set to Disabled
- Energy Performance BIAS setting set to Balanced Performance
- Memory RAS configuration set to Maximum Performance
- Snoop Mode set to Early Snoop
- Sysinfo program /opt/cpu2006-1.2/config/sysinfo.rev6818

$Rev: 6818 $ $Date:: 2012-07-17 #$ e86d102572650a6e4d596a3cee98f191 running on rhe165 Mon Dec 1 12:36:29 2014

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 E5-2630 v3 @ 2.40GHz
  2 "physical id"s (chips)
```

Continued on next page
Platform Notes (Continued)

32 "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 : 8
- siblings : 16
- physical 0: cores 0 1 2 3 4 5 6 7
- physical 1: cores 0 1 2 3 4 5 6 7
- cache size : 20480 KB

From /proc/meminfo

MemTotal: 131884584 kB
HugePages_Total: 0
Hugepagesize: 2048 kB

/usr/bin/lsb_release -d

Red Hat Enterprise Linux Server release 6.5 (Santiago)

From /etc/*release* /etc/*version*

redhat-release: Red Hat Enterprise Linux Server release 6.5 (Santiago)
system-release: Red Hat Enterprise Linux Server release 6.5 (Santiago)

uname -a:
Linux rhel65 2.6.32-431.el6.x86_64 #1 SMP Sun Nov 10 22:19:54 EST 2013 x86_64
   x86_64 x86_64 GNU/Linux

run-level 3 Dec 1 12:34

SPEC is set to: /opt/cpu2006-1.2

Additional information from dmidecode:
- BIOS Cisco Systems, Inc. B200M4.2.2.3c.0.101420141352 10/14/2014
- Memory:
  - 8x 0xCE00 M393A2G40DB0-CPB 16 GB 1866 MHz 2 rank
  - 16x NO DIMM NO DIMM

(End of data from sysinfo program)

General Notes

Environment variables set by runspec before the start of the run:

LD_LIBRARY_PATH = "/opt/cpu2006-1.2/libs/32:/opt/cpu2006-1.2/libs/64:/opt/cpu2006-1.2/sh"

Binaries compiled on a system with 1x Core i7-860 CPU + 8GB
memory using RedHat EL 6.4
Transparent Huge Pages enabled with:
- echo always > /sys/kernel/mm/redhat_transparent_hugepage/enabled
- Filesystem page cache cleared with:
Cisco Systems
Cisco UCS B200 M4 (Intel Xeon E5-2630 v3 @ 2.40GHz)

SPECint_rate2006 = Not Run
SPECint_rate_base2006 = 660

CPU2006 license: 9019
Test sponsor: Cisco Systems
Tested by: Cisco Systems
Test date: Dec-2014
Hardware Availability: Sep-2014
Software Availability: Nov-2013

General Notes (Continued)

```
echo 1> /proc/sys/vm/drop_caches
runspec command invoked through numactl i.e.: 
numactl --interleave=all runspec <etc>
```

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:
-xCORE-AVX2 -ipo -O3 -no-prec-div -opt-prefetch
- opt-mem-layout-trans=3
C++ benchmarks:
-xCORE-AVX2 -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-ic14.0-official-linux64.20140128.html
http://www.spec.org/cpu2006/flags/Cisco-Platform-Settings-V1.2-revC.html

You can also download the XML flags sources by saving the following links:
http://www.spec.org/cpu2006/flags/Intel-ic14.0-official-linux64.20140128.xml
http://www.spec.org/cpu2006/flags/Cisco-Platform-Settings-V1.2-revC.xml
## Cisco Systems

Cisco UCS B200 M4 (Intel Xeon E5-2630 v3 @ 2.40GHz)

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECint_rate2006</td>
<td>Not Run</td>
</tr>
<tr>
<td>SPECint_rate_base2006</td>
<td>660</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CPU2006 license</th>
<th>9019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test sponsor</td>
<td>Cisco Systems</td>
</tr>
<tr>
<td>Tested by</td>
<td>Cisco Systems</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Test date</th>
<th>Dec-2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware Availability</td>
<td>Sep-2014</td>
</tr>
<tr>
<td>Software Availability</td>
<td>Nov-2013</td>
</tr>
</tbody>
</table>

SPEC and SPECint are registered trademarks of the Standard Performance Evaluation Corporation. All other brand and product names appearing in this result are trademarks or registered trademarks of their respective holders.

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

Tested with SPEC CPU2006 v1.2.
Originally published on 16 December 2014.