Cisco Systems
Cisco UCS C260 M2 (Intel Xeon E7-2850, 2.00 GHz)

**SPEC** has determined that this result is not in compliance with the **SPEC CPU2006** run and reporting rules. Specifically, the result does not meet the 3 month availability requirement in the **SPEC CPU2006** run rules, because the tested processor was not supported on this platform within three months of publication.

<table>
<thead>
<tr>
<th>Copies</th>
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<tbody>
<tr>
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<td>483.xalancbmk</td>
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</table>

**Hardware**

- **CPU Name:** Intel Xeon E7-4850
- **CPU Characteristics:** Intel Turbo Boost Technology up to 2.40 GHz
- **CPU(s) enabled:** 20 cores, 2 chips, 10 cores/chip, 2 threads/core
- **CPU(s) orderable:** 1.2 chips
- **Primary Cache:** 32 KB I + 32 KB D on chip per core

**Software**

- **Operating System:** Red Hat Enterprise Linux Server release 6.1 (Santiago)
  2.6.32-131.0.15.el6.x86_64
- **Compiler:** C/C++: Version 12.1.0.225 of Intel C++ Studio XE for Linux
  No
- **File System:** ext4
- **System State:** Run level 3 (multi-user)
SPEC has determined that this result is not in compliance with the SPEC CPU2006 run and reporting rules. Specifically, the result does not meet the 3 month availability requirement in the SPEC CPU2006 run rules, because the tested processor was not supported on this platform within three months of publication.

Results Table

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<tr>
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<th>Ratio</th>
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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.
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Operating System Notes

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

Platform Notes

Sysinfo program /opt/cpu2006/config/sinfo.rev6800
$Rev: 6800 $ $Date:: 2011-10-11 #$ 6f2ebdff5032aaa42e583f96b07f99d3
running on localhost.localdomain Tue Jan 10 19:34:15 2012

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 E7- 4850 @ 2.00GHz
  2 "physical id" (chips)
  40 "processes"
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 : 10
  siblings : 20
  physical 0: cores 0 1 2 8 9 16 17 18 24 25
  physical 1: cores 0 1 2 8 9 16 17 18 24 25
  cache size : 24576 KB

From /proc/meminfo
  MemTotal: 529190812 kB
  PagePages_Total: 0
  Hugepagesize: 2048 kB

From /usr/bin/lsb_release -d
  Red Hat Enterprise Linux Server release 6.1 (Santiago)

From /etc/*release* /etc/*version*
  redhat-release: Red Hat Enterprise Linux Server release 6.1 (Santiago)
  system-release: Red Hat Enterprise Linux Server release 6.1 (Santiago)

Continued on next page

Non-Compliant
Cisco Systems
Cisco UCS C260 M2 (Intel Xeon E7-2850, 2.00 GHz)

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

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Platform Notes (Continued)

uname -a:
Linux localhost.localdomain 2.6.32-15-2.6.32-15.15.15.x86_64 #1 SMP Tue May 10
15:42:40 EDT 2011 x86_64 x86_64 x86_64 GNU/Linux

run-level 3 Jan 10 19:28

SPEC is set to: /opt/cpu2006

Additional information from dmidecode:

General Notes

Environment variables set runspec before the start of the run:
LD_LIBRARY_PATH = "/opt/cpu2006/libs/32:/opt/cpu2006/libs/64"

Binaries compiled on a system with 1x Core i7-860 CPU + 8GB
memory using RHEL5.
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>

Base Compiler Invocation

C benchmarks:
  icc  -m32

C++ benchmarks:
  icpc -m32
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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 -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/smartheap -lsmartheap

Base Other Flags
C benchmarks: 
403.gcc: -Dalloca=_alloca

Peak Compiler Invocation
C benchmarks (except as noted below):
16d: -m32
400.perlbench: icc -m64
401.bzip2: icc -m64
456.hmmer: icc -m64

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Peak Compiler Invocation (Continued)

458.sjeng: icc -m64
C++ benchmarks:
icpc -m32

Peak Portability Flags

400.perlbench: -DSPEC_CPU_LP64 -DSPEC_CPU_LINUX_X64
401.bzip2: -DSPEC_CPU_LP64
456.hmmer: -DSPEC_CPU_LP64
458.sjeng: -DSPEC_CPU_LP64
462.libquantum: -DSPEC_CPU_LINUX
483.xalancbmk: -DSPEC_CPU_LINUX

Peak Optimization Flags

C benchmarks:
400.perlbench: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
-base_peak -no-prec-div(pass 2) -prof-use(pass 2)
-auto-ilp32
401.bzip2: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
-O3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)
-opt-prefetch -auto-ilp32 -ansi-alias
403.gcc: -xSSE4.2 -ipo -O3 -no-prec-div
429.mcf: basepeak = yes
445.gobmk: -xSSE4.2(pass 2) -prof-gen(pass 1) -prof-use(pass 2)
-ansi-alias -opt-mem-layout-trans=3

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SPEC CINT2006 Result

Cisco Systems

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SPECint_rate2006 = NC
SPECint_rate_base2006 = NC

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

Test date: Jan-2012
Hardware Availability: May-2011
Software Availability: Oct-2011

SPEC has determined that this result is not in compliance with the SPEC CPU2006 run and reporting rules. Specifically, the result does not meet the 3 month availability requirement in the SPEC CPU2006 run rules, because the tested processor was not supported on this platform within three months of publication.

Peak Optimization Flags (Continued)

456.hmmer: -xSSE4.2 -ipo -o3 -no-prec-div -unroll2 -auto-ilp32

458.sjeng: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
-o3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)
-unroll2 -auto-ilp32

462.libquantum: basepeak = yes

464.h264ref: -xSSE4.2(pass 2) -prof-gen(pass 1) -ipo(pass 2)
-o3(pass 2) -no-prec-div(pass 2) -prof-use(pass 2)
-unroll2 -ansi-alias

C++ benchmarks:

471.omnetpp: -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 -rt-ra-region-strategy=block -Wl,-z,muldefs
-L/smartheap -lsmartheap

473.astar: basepeak = yes

483.xalancbmk: basepeak = yes

Peak Other Flags

C benchmarks:

401.gcc: -Dalloca=_alloca

The flags files that were used to format this result can be browsed at
http://www.spec.org/cpu2006/flags/Intel-ic12.1-official-linux64.20111122.html
http://www.spec.org/cpu2006/flags/Cisco-Platform-Settings-V1.2.html
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SPECint_rate2006 = NC
SPECint_rate_base2006 = NC

CPU2006 license: 9019
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You can also download the XML flags sources by saving the following links:
http://www.spec.org/cpu2006/flags/Intel-ic12.1-official-linux64.20111122.xml
http://www.spec.org/cpu2006/flags/Cisco-Platform-Settings-V1.2.xml

Non-Compliant