Cisco Systems

Cisco UCS C460 M2 (Intel Xeon E7-8867L, 2.13 GHz)

<table>
<thead>
<tr>
<th>SPECint®_rate2006 = 1040</th>
<th>SPECint_rate_base2006 = 983</th>
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<tr>
<td>CPU2006 license: 9019</td>
<td>Test date: Jan-2012</td>
</tr>
<tr>
<td>Test sponsor: Cisco Systems</td>
<td>Hardware Availability: May-2011</td>
</tr>
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</tbody>
</table>

Hardware
- CPU Name: Intel Xeon E7-8867L
- CPU Characteristics: Intel Turbo Boost Technology up to 2.53 GHz
- CPU MHz: 2133
- FPU: Integrated
- CPU(s) enabled: 40 cores, 4 chips, 10 cores/chip, 2 threads/core
- CPU(s) orderable: 1,2,3,4 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: 30 MB I+D on chip per chip
- Other Cache: None
- Memory: 1 TB (64 x 16 GB 4Rx4 PC3-8500R-9, ECC)
- Disk Subsystem: 600 GB SAS 10K RPM
- Other Hardware: None

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
- 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 V9.01
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CPU2006 license: 9019
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Results Table

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</table>

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 /opt/cpu2006/config/sysinfo.rev6800
$Rev: 6800 $ $Date:: 2011-10-11 $6f2ebdf5f032aaa42e583f96b07f99d3 running on localhost.localdomain Wed Dec 26 22:04:07 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-L8867 @ 2.13GHz
  4 "physical id"s (chips)
  80 "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 : 10
siblings : 20

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Platform Notes (Continued)

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
physical 2: cores 0 1 2 8 9 16 17 18 24 25
physical 3: cores 0 1 2 8 9 16 17 18 24 25

cache size : 30720 KB

From /proc/meminfo
  MemTotal: 1058715304 kB
  HugePages_Total: 0
  Hugepagesize: 2048 kB

/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)

uname -a:
  Linux localhost.localdomain 2.6.32-131.0.15.el6.x86_64 #1 SMP Tue May 10
  15:42:40 EDT 2011 x86_64 x86_64 x86_64 GNU/Linux

run-level 3 Dec 26 21:58

SPEC is set to: /opt/cpu2006
  Filesystem Type Size Used Avail Use% Mounted on
  /dev/sda1 ext4 550G 60G 462G 12% /

Additional information from dmidecode:

(End of data from sysinfo program)

General Notes

Environment variables set by 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 RHEL5.5
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.:
umactl --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/smartheap -lsmartheap

Base Other Flags

C benchmarks:
403.gcc: -Dalloca=_alloca

Peak Compiler Invocation

C benchmarks (except as noted below):
icc -m32

400.perlbench: icc -m64
401.bzip2: icc -m64
456.hmmer: icc -m64
458.sjeng: icc -m64

C++ benchmarks:
icpc -m32
Cisco Systems
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Peak Portability Flags

- DSPEC_CPU_LP64
- DSPEC_CPU_LINUX_X64

Peak Optimization Flags

C benchmarks:

- DSPEC_CPU_LP64
- DSPEC_CPU_LINUX

C++ benchmarks:

- DSPEC_CPU_LP64
- DSPEC_CPU_LINUX

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Peak Optimization Flags (Continued)

483.xalancbmk: basepeak = yes

Peak 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-ic12.1-official-linux64.20111122.html
http://www.spec.org/cpu2006/flags/Cisco-Platform-Settings-V1.2.html

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

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

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