**Cisco Systems**

Cisco UCS B260 M4 (Intel Xeon E7-8890 v4, 2.20 GHz)

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<th>May-2016</th>
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</tr>
<tr>
<td>Software Availability:</td>
<td>Aug-2015</td>
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| SPECCompG_peak2012 = Not Run | SPECCompG_base2012 = 13.4 |

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**Hardware**

- CPU Name: Intel Xeon E7-8890 v4
- CPU Characteristics: Intel Turbo Boost Technology up to 3.40 GHz
- CPU MHz: 2200
- CPU MHz Maximum: 3400
- FPU: Integrated
- CPU(s) enabled: 48 cores, 2 chips, 24 cores/chip, 2 threads/core
- Primary Cache: 32 KB I + 32 KB D on chip per core
- Secondary Cache: 256 KB I+D on chip per core
- L3 Cache: 60 MB I+D on chip per chip
- Other Cache: None
- Memory: 256 GB (16 x 16 GB 2Rx4 PC4-2400T-R, running at 1600 MHz)
- Disk Subsystem: 1 X 400 GB SSD SAS
- Other Hardware: None
- Base Threads Run: 96

**Software**

- Operating System: Red Hat Enterprise Linux 6.7 (Santiago), Kernel 2.6.32-573.el6.x86_64
- Compiler: C/C++/Fortran: Version 16.0.0.109 of Intel Composer for Linux Build 20150815
- Auto Parallel: No
- File System: Linux ext3
- System State: Default
- Base Pointers: 64-bit
- Peak Pointers: 64-bit
- Other Software: None

Continued on next page
Cisco Systems

Cisco UCS B260 M4 (Intel Xeon E7-8890 v4, 2.20 GHz)

SPEC OMPG2012 Result

SPECompG_peak2012 = Not Run
SPECompG_base2012 = 13.4

OMP2012 license: 9019
Test sponsor: Cisco Systems
Test date: May-2016
Hardware Availability: Jul-2016
Tested by: Cisco Systems
Software Availability: Aug-2015
Minimum Peak Threads: --
Maximum Peak Threads: --

Results Table

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

Platform Notes

Sysinfo program /opt/omp2012/Docs/sysinfo
$Rev: 395 $ $Date:: 2012-07-25 #$ 8f8c0fe9e19c658963a1e67685e50647
running on RHEL Thu May 05 21:08:56 2016

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/omp2012/Docs/config.html#sysinfo

From /proc/cpuinfo

```
model name : Intel(R) Xeon(R) CPU E7-8890 v4 @ 2.20GHz
 2 "physical id"s (chips)
96 "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 : 24
  siblings : 48
  physical 0: cores 0 1 2 3 4 5 8 9 10 11 12 13 16 17 18 19 20 21 24 25 26 27 28 29
  physical 1: cores 0 1 2 3 4 5 8 9 10 11 12 13 16 17 18 19 20 21 24 25 26 27 28 29
  cache size : 61440 KB
```

Continued on next page
**Cisco Systems**
Cisco UCS B260 M4 (Intel Xeon E7-8890 v4, 2.20 GHz)

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**Platform Notes (Continued)**

From /proc/meminfo
- MemTotal: 264225480 kB
- HugePages_Total: 0
- Hugepagesize: 2048 kB

/usr/bin/lsb_release -d
- Red Hat Enterprise Linux Server release 6.7 (Santiago)

From /etc/*release* /etc/*version*
- redhat-release: Red Hat Enterprise Linux Server release 6.7 (Santiago)
- system-release: Red Hat Enterprise Linux Server release 6.7 (Santiago)

uname -a:
- Linux RHEL 2.6.32-573.el6.e16.x86_64 #1 SMP Wed Jul 1 18:23:37 EDT 2015 x86_64
- x86_64 x86_64 GNU/Linux

run-level 3 May 05 20:56

SPEC is set to: /opt/omp2012
- Filesystem Type Size Used Avail Use% Mounted on
  - /dev/sda1 ext4 367G 28G 321G 8% /

Additional information from dmidecode:
- BIOS Cisco Systems, Inc. EXM4.3.1.1.3.042620161123 04/26/2016
- Memory:
  - 16x 16 GB
  - 16x 0xCE00 M393A2G40EB1-CRC 16 GB 1600 MHz 2 rank
  - 32x NO DIMM NO DIMM

(End of data from sysinfo program)

**General Notes**

================================================================================
Transparent Huge Pages enabled with:
echo always > /sys/kernel/mm/redhat_transparent_hugepage/enabled

BIOS settings notes:
- Intel Turbo Boost Technology (Turbo) : Enabled
- CPU performance set to Enterprise
- Power Technology set to Performance
- Memory RAS configuration set to Maximum Performance
- Energy Performance BIAS setting set to OS

General OMP Library Settings
- ENV_KMP_LIBRARY=turnaround
- ENV_OMP_SCHEDULE=static
- ENV_KMP_BLOCKTIME=200
- ENV_KMP_STACKSIZE=8192M
- ENV_OMP_DYNAMIC=FALSE
- ENV_OMP_NESTED=FALSE

Continued on next page
Cisco Systems
Cisco UCS B260 M4 (Intel Xeon E7-8890 v4, 2.20 GHz)

SPECompG_peak2012 = Not Run
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OMP2012 license: 9019
Test sponsor: Cisco Systems
Tested by: Cisco Systems

Test date: May-2016
Hardware Availability: Jul-2016
Software Availability: Aug-2015

General Notes (Continued)

========================================================================

General base OMP Library Settings
ENV_KMP_AFFINITY=compact,1

Base Compiler Invocation

C benchmarks:
icc

C++ benchmarks:
icpc

Fortran benchmarks:
ifort

Base Portability Flags

350.md: -FR
357.bt331: -mmodel=medium
363.swim: -mmodel=medium
367.imagick: -std=c99

Base Optimization Flags

C benchmarks:
-O2 -openmp -ipo -xCORE-AVX2 -ansi-alias

C++ benchmarks:
-O2 -openmp -ipo -xCORE-AVX2 -ansi-alias

Fortran benchmarks:
-O2 -openmp -ipo -xCORE-AVX2 -align array64byte

The flags file that was used to format this result can be browsed at
http://www.spec.org/omp2012/flags/Intel-ic13.0-linux64.20140219.html

You can also download the XML flags source by saving the following link:
http://www.spec.org/omp2012/flags/Intel-ic13.0-linux64.20140219.xml
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Cisco UCS B260 M4 (Intel Xeon E7-8890 v4, 2.20 GHz)

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

Tested with SPEC OMP2012 v1.0.
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