Cisco Systems

Cisco UCS C240 M5 (Intel Xeon Platinum 8180, 2.50 GHz)

SPECompG\_peak2012 = Not Run
SPECompG\_base2012 = 23.1

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<td>13.9</td>
<td>42.9</td>
<td>43.7</td>
<td>19.6</td>
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</tbody>
</table>

Hardware

- CPU Name: Intel Xeon Platinum 8180
- CPU Characteristics: Intel Turbo Boost Technology up to 3.80 GHz
- CPU MHz: 2500
- CPU MHz Maximum: 3800
- FPU: Integrated
- CPU\(\)s enabled: 56 cores, 2 chips, 28 cores/chip, 2 threads/core
- Primary Cache: 32 KB I + 32 KB D on chip per core
- Secondary Cache: 1 MB I+D on chip per core
- L3 Cache: 38.5 MB I+D on chip per chip
- Memory: 384 GB (24 x 16 GB 2Rx4 PC4-2666V-R)
- Disk Subsystem: 1 X 800 GB SSD SAS
- Base Threads Run: 112

Software

- Operating System: SUSE Linux Enterprise Server 12 SP2 (x86\_64)
- Compiler: C/C++/Fortran: Version 18.0.0.082 of Intel Composer
- Auto Parallel: No
- System State: Run Level 3 (multi-user)
- Base Pointers: 64-bit
- Other Software: None
Cisco Systems
Cisco UCS C240 M5 (Intel Xeon Platinum 8180, 2.50 GHz)

SPECompG_peak2012 = Not Run
SPECompG_base2012 = 23.1

OMP2012 license: 9019
Test sponsor: Cisco Systems
Tested by: Cisco Systems
Maximum Peak Threads: --

Results Table

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<th>Base</th>
<th>Seconds</th>
<th>Ratio</th>
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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 $ $Date:: 2012-07-25 #$ $f8c0fe9e19c658963a1e67685e50647$
running on linux-0s5q Tue Jun 20 12:23:44 2017

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) Platinum 8180 CPU @ 2.50GHz
  2 "physical id"s (chips)
  112 "processors"
core, siblings (Caution: counting these is hw and system dependent. The following excerpts from /proc/cpuinfo might not be reliable. Use with caution.)
cpu cores : 28
siblings : 56
physical 0: cores 0 1 2 3 4 5 6 8 9 10 11 12 13 14 16 17 18 19 20 21 22 24
25 26 27 28 29 30
physical 1: cores 0 1 2 3 4 5 6 8 9 10 11 12 13 14 16 17 18 19 20 21 22 24
25 26 27 28 29 30
cache size : 39424 KB

Continued on next page
Platform Notes (Continued)

From /proc/meminfo
   MemTotal:       394863296 kB
   HugePages_Total:       0
   Hugepagesize:       2048 kB

From /etc/*release* /etc/*version*
    SuSE-release:
       SUSE Linux Enterprise Server 12 (x86_64)
       VERSION = 12
       PATCHLEVEL = 2
       # This file is deprecated and will be removed in a future service pack or release.
       # Please check /etc/os-release for details about this release.
    os-release:
       NAME="SLES"
       VERSION="12-SP2"
       VERSION_ID="12.2"
       PRETTY_NAME="SUSE Linux Enterprise Server 12 SP2"
       ID="sles"
       ANSI_COLOR="0;32"
       CPE_NAME="cpe:/o:suse:sles:12:sp2"

uname -a:
    Linux linux-0s5q 4.4.21-69-default #1 SMP Tue Oct 25 10:58:20 UTC 2016
       (9464f67) x86_64 x86_64 x86_64 GNU/Linux

run-level 3 Jun 20 12:20

SPEC is set to: /opt/omp2012

Filesystem     Type  Size  Used Avail Use% Mounted on
/dev/sdb2      xfs  700G  40G  661G  6%  /

Additional information from dmidecode:
    BIOS Cisco Systems, Inc. C240M5.3.1.0.275.0519172339 05/19/2017
    Memory:
       24x   16 GB
       24x 0xCE00 M393A2G40EB2-CTD 16 GB 2666 MHz 2 rank

(End of data from sysinfo program)

General Notes

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

BIOS settings notes:
   Transparent Huge Pages enabled with:
      echo always > /sys/kernel/mm/transparent_hugepage/enabled

BIOS settings notes:
   Intel Turbo Boost Technology (Turbo) : Enabled
   CPU performance set to Enterprise
   Power Performance Tuning set to OS
   SNC set to Disabled

Continued on next page
Cisco Systems
Cisco UCS C240 M5 (Intel Xeon Platinum 8180, 2.50 GHz)

SPECompG_peak2012 = Not Run
SPECompG_base2012 = 23.1

OMP2012 license: 9019
Test sponsor: Cisco Systems
Tested by: Cisco Systems

General Notes (Continued)

IMC Interleaving set to Auto
General OMP Library Settings
ENV_KMP_LIBRARY=turnaround
ENV_OMP_SCHEDULE=static
ENV_KMP_BLOCKTIME=200
ENV_KMP_STACKSIZE=702M
ENV_OMP_DYNAMIC=FALSE
ENV_OMP_NESTED=FALSE

========================================================================
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: -mcmode=medium
363.swim: -mcmode=medium
367.imagick: -std=c99

Base Optimization Flags

C benchmarks:
   -O3 -qopenmp -ipo -xHOST -ansi-alias

C++ benchmarks:
   -O3 -qopenmp -ipo -xHOST -ansi-alias

Fortran benchmarks:
   -O3 -qopenmp -ipo -xHOST -align array64byte
**Cisco Systems**

Cisco UCS C240 M5 (Intel Xeon Platinum 8180, 2.50 GHz)

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**OMP2012 license:** 9019  
**Test sponsor:** Cisco Systems  
**Tested by:** Cisco Systems  
**Test date:** Jun-2017  
**Hardware Availability:** Jul-2017  
**Software Availability:** Sep-2017

The flags file that was used to format this result can be browsed at [http://www.spec.org/omp2012/flags/Intel-ic13.0-linux64.20170711.00.html](http://www.spec.org/omp2012/flags/Intel-ic13.0-linux64.20170711.00.html)

You can also download the XML flags source by saving the following link:[http://www.spec.org/omp2012/flags/Intel-ic13.0-linux64.20170711.00.xml](http://www.spec.org/omp2012/flags/Intel-ic13.0-linux64.20170711.00.xml)