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

SPECompG_peak2012 = Not Run
SPECompG_base2012 = 22.0

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

Test date: Jun-2017
Hardware Availability: Jul-2017
Software Availability: May-2017

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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
Other Cache: None
Memory: 384 GB (24 x 16 GB 2Rx4 PC4-2666V-R)
Disk Subsystem: 1 X 800 GB SSD SAS
Other Hardware: None
Base Threads Run: 112
Minimum Peak Threads:

Software
Operating System: SUSE Linux Enterprise Server 12 SP2 (x86_64)
Compiler: C/C++/Fortran: Version 17.0.4.196 of Intel Composer for Linux Build 20170411
Auto Parallel: No
File System: xfs
System State: Run Level 3 (multi-user)
Base Pointers: 64-bit
Peak Pointers: Not Applicable
Other Software: None

Continued on next page
Cisco Systems

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

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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 #S 8f8c0fe9e19c658963a1e67685e50647
running on linux-0s5q Mon Jun 19 11:21:18 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"
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 : 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
**Cisco Systems**

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

**SPEC OMPG2012 Result**

**SPECompG_peak2012 = Not Run**

**SPECompG_base2012 = 22.0**

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

---

**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 19 11:20

- SPEC is set to: /opt/omp2012
  - Filesystem     Type Size Used Avail Use% Mounted on
  - /dev/sdb2      xfs  700G  29G  672G   5% /

- Additional information from dmidecode:
  - BIOS Cisco Systems, Inc. C240M5.3.1.0.275.0519172339 05/19/2017
  - Memory:
    - 24x 16 GB
    - 24x 0xC600 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 = 22.0

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=8192M
ENV_OMP_DYNAMIC=FALSE
ENV_OMP_NESTED=FALSE

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:
  -O3 -openmp -ipo -xCORE-AVX2 -ansi-alias

C++ benchmarks:
  -O3 -openmp -ipo -xCORE-AVX2 -ansi-alias

Fortran benchmarks:
  -O3 -openmp -ipo -xCORE-AVX2 -align array64byte
Cisco Systems
Cisco UCS C240 M5 (Intel Xeon Platinum 8180, 2.50 GHz)

SPECompG_peak2012 = Not Run
SPECompG_base2012 = 22.0

OMP2012 license: 9019
Test sponsor: Cisco Systems
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Test date: Jun-2017
Hardware Availability: Jul-2017
Software Availability: May-2017

The flags file that was used to format this result can be browsed at
http://www.spec.org/omp2012/flags/Intel-ic13.0-linux64.20140219.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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For questions about this result, please contact the tester.
For other inquiries, please contact webmaster@spec.org.

Tested with SPEC OMP2012 v1.0.