# SPEC® OMPG2012 Result

**Cisco Systems**

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

<table>
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<th>SPECompG_peak2012 = Not Run</th>
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**OMPG2012 license:** 9019  
**Test Sponsor:** Cisco Systems  
**Tested by:** Cisco Systems

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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
- **CPU(s) orderable:** 1.2 Chips
- **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 18.0.0.128 of Intel Composer for Linux Build 20170811
- **Auto Parallel:** No
- **File System:** xfs
- **System State:** Run Level 3 (multi-user)
- **Base Pointers:** 64-bit
- **Peak Pointers:** Not Applicable
- **Other Software:** None

**Hardware Availability:** Oct-2017  
**Software Availability:** Sep-2017

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Standard Performance Evaluation Corporation  
info@spec.org  
http://www.spec.org/  
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Cisco Systems
Cisco UCS C240 M5 (Intel Xeon Platinum 8180, 2.50 GHz)

SPECompG_peak2012 = Not Run
SPECompG_base2012 = 23.5

OMP2012 license: 9019
Test sponsor: Cisco Systems
Tested by: Cisco Systems
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 /home/omp2012/Docs/sysinfo
$Rev: 395 $ $Date:: 2012-07-25 #$ 8f8c0fe9e19c658963a1e67685e50647
running on linux-nsv2 Sun Oct  8 12:05:26 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
Cisco Systems
Cisco UCS C240 M5 (Intel Xeon Platinum 8180, 2.50 GHz)

SPECompG_peak2012 = Not Run
SPECompG_base2012 = 23.5

Platform Notes (Continued)

From /proc/meminfo
   MemTotal:       394865508 kB
   HugePages_Total:       0
   Hugepagesize:       2048 kB

/usr/bin/lsb_release -d
   SUSE Linux Enterprise Server 12 SP2

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:
      (9464f67) x86_64 x86_64 x86_64 GNU/Linux
   run-level 3 Oct 8 11:48

SPEC is set to: /home/omp2012
   Filesystem     Type Size  Used Avail Use% Mounted on
   /dev/sda3      xfs  517G  381G  137G  74% /home

Additional information from dmidecode:
   BIOS Cisco Systems, Inc. C240M5.3.1.1a.0.0607170937 06/07/2017
   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 HyperThreading Technology set to Enabled
Continued on next page
Cisco Systems
Cisco UCS C240 M5 (Intel Xeon Platinum 8180, 2.50 GHz)

SPECompG_peak2012 = Not Run
SPECompG_base2012 = 23.5

OMP2012 license: 9019
Test sponsor: Cisco Systems
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General Notes (Continued)

CPU performance set to Enterprise
Power Performance Tuning set to OS
Sub Numa Clustering (SNC) set to Disabled
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

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) | SPECompG Peak2012 = Not Run  
| SPECompG Base2012 = 23.5

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

The flags files that were used to format this result can be browsed at

http://www.spec.org/omp2012/flags/Intel-ic18.0-linux64.html  
http://www.spec.org/omp2012/flags/Cisco-Platform-Settings-V1.2-revH.html

You can also download the XML flags sources by saving the following links:

http://www.spec.org/omp2012/flags/Intel-ic18.0-linux64.xml  
http://www.spec.org/omp2012/flags/Cisco-Platform-Settings-V1.2-revH.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.  
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