### Cray XC30 (Intel Xeon E5-2697 v2)

#### OMP2012 license:
- 3440A

#### Test sponsor:
- Indiana University

#### Tested by:
- Indiana University

#### SPECompG_peak2012 = Not Run
#### SPECompG_base2012 = 4.86

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**SPECompG_base2012 = 4.86**

### Hardware

- **CPU Name:** Intel Xeon E5-2697 v2
- **CPU Characteristics:**
  - Intel Turbo Boost Technology off, Hyper-Threading on
- **CPU MHz:** 2700
- **CPU MHz Maximum:** 2700
- **FPU:** Integrated
- **CPU(s) enabled:** 24 cores, 2 chips, 12 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:** 256 KB I+D on chip per core
- **L3 Cache:** 30 MB I+D on chip per chip
- **Other Cache:** None
- **Memory:** 64 GB (8 x 8 GB 2Rx4 PC3-14900R-13, ECC)
- **Disk Subsystem:** None
- **Other Hardware:** None
- **Base Threads Run:** 24

### Software

- **Operating System:** SUSE Linux Enterprise Server 11 SP3 (x86_64),
  - Cray Linux Environment 5.2
  - 3.0.101-0.46.1_1.0502.8871-cray_ari_c
- **Compiler:** C/C++/Fortran: Version 6.2.0 of gcc,
  - Build 20160822
- **Auto Parallel:** No
- **File System:** Lustre 2.5 (DDN SFA12K) over QDR InfiniBand
- **System State:** Run level 3 (multi-user)
- **Base Pointers:** 64-bit
- **Peak Pointers:** Not Applicable
- **Other Software:** None
**SPEC OMPG2012 Result**

(Cray Test Sponsor: Indiana University)

**Cray XC30 (Intel Xeon E5-2697 v2)**

**SPECompG_peak2012 = Not Run**

**SPECompG_base2012 = 4.86**

**OMP2012 license:** 3440A

**Test sponsor:** Indiana University

**Tested by:** Indiana University

**Minimum Peak Threads:** --

**Maximum Peak Threads:** --

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### Results Table

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</table>

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

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### Platform Notes

**Sysinfo program**

/N/dc2/projects/hpc/lijunj/spec/omp2012-1.1-run/bigred2plus2/Docs/sysinfo

Revision 563 of 2016-06-10 (097295389cfe6073d8c3b03fa376740a5)

runtime on nid00540 Fri Jul 14 15:24:11 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) CPU E5-2697 v2 @ 2.70GHz
- 2 "physical id"s (chips)
- 48 "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 : 12
  - siblings : 24
  - physical 0: cores 0 1 2 3 4 5 8 9 10 11 12 13
  - physical 1: cores 0 1 2 3 4 5 8 9 10 11 12 13
  - cache size : 30720 KB

Continued on next page
SPEC OMPG2012 Result

Cray
(Test Sponsor: Indiana University)

Cray XC30 (Intel Xeon E5-2697 v2)

SPECompG_peak2012 = Not Run
SPECompG_base2012 = 4.86

OMP2012 license: 3440A
Test sponsor: Indiana University
Tested by: Indiana University

Test date: Jul-2017
Hardware Availability: Apr-2013
Software Availability: Mar-2017

Platform Notes (Continued)

From /proc/meminfo
  MemTotal: 66072376 kB
  HugePages_Total: 0
  Hugepagesize: 2048 kB

/usr/bin/lsb_release -d
  SUSE Linux Enterprise Server 11 (x86_64)

From /etc/*release* /etc/*version*
  SuSE-release:
  SUSE Linux Enterprise Server 11 (x86_64)
  VERSION = 11
  PATCHLEVEL = 3

uname -a:
  Linux nid00540 3.0.101-0.46.1_1.0502.8871-cray_ari_c #1 SMP Mon Jun 26
  15:18:40 UTC 2017 x86_64 x86_64 x86_64 GNU/Linux

SPEC is set to: /N/dc2/projects/hpc/lijunj/spec/omp2012-1.1-run/bigred2plus2

Filesystem                             Type    Size  Used Avail Use% Mounted on
10.10.0.171@o2ib:10.10.0.172@o2ib:/dc2 lustre  5.3P  5.0P  160T  97% /N/dc2

Cannot run dmidecode; consider saying 'chmod +s /usr/sbin/dmidecode'
(End of data from sysinfo program)

General Notes

Environment Variables:
  OMP_STACKSIZE=1G
  ulimit -s unlimited

Base Compiler Invocation

C benchmarks:
  gcc

C++ benchmarks:
  g++

Fortran benchmarks:
  gfortran
**SPEC OMPG2012 Result**

**Cray**  
(Test Sponsor: Indiana University)

**Cray XC30 (Intel Xeon E5-2697 v2)**

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**OMP2012 license:** 3440A  
**Test date:** Jul-2017  
**Test sponsor:** Indiana University  
**Hardware Availability:** Apr-2013  
**Tested by:** Indiana University  
**Software Availability:** Mar-2017

### Base Portability Flags

- 350.md: `-ffree-form -fno-range-check`
- 357.bt331: `-mcmmodel=medium`
- 363.swim: `-mcmmodel=medium`
- 367.imagick: `-std=c99`

### Base Optimization Flags

**C benchmarks:**
- `-Ofast -march=native -fopenmp`

**C++ benchmarks:**
- `-Ofast -march=native -fopenmp`

**Fortran benchmarks:**
- `-Ofast -march=native -fopenmp`

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

You can also download the XML flags source by saving the following link:  
http://www.spec.org/omp2012/flags/gcc-linux64.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 v1.1.  
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