



# SPEC® OMPG2012 Result

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**Cray**

(Test Sponsor: Indiana University)

**SPECompG\_peak2012 = Not Run**

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

**SPECompG\_base2012 = 6.60**

OMP2012 license:3440A

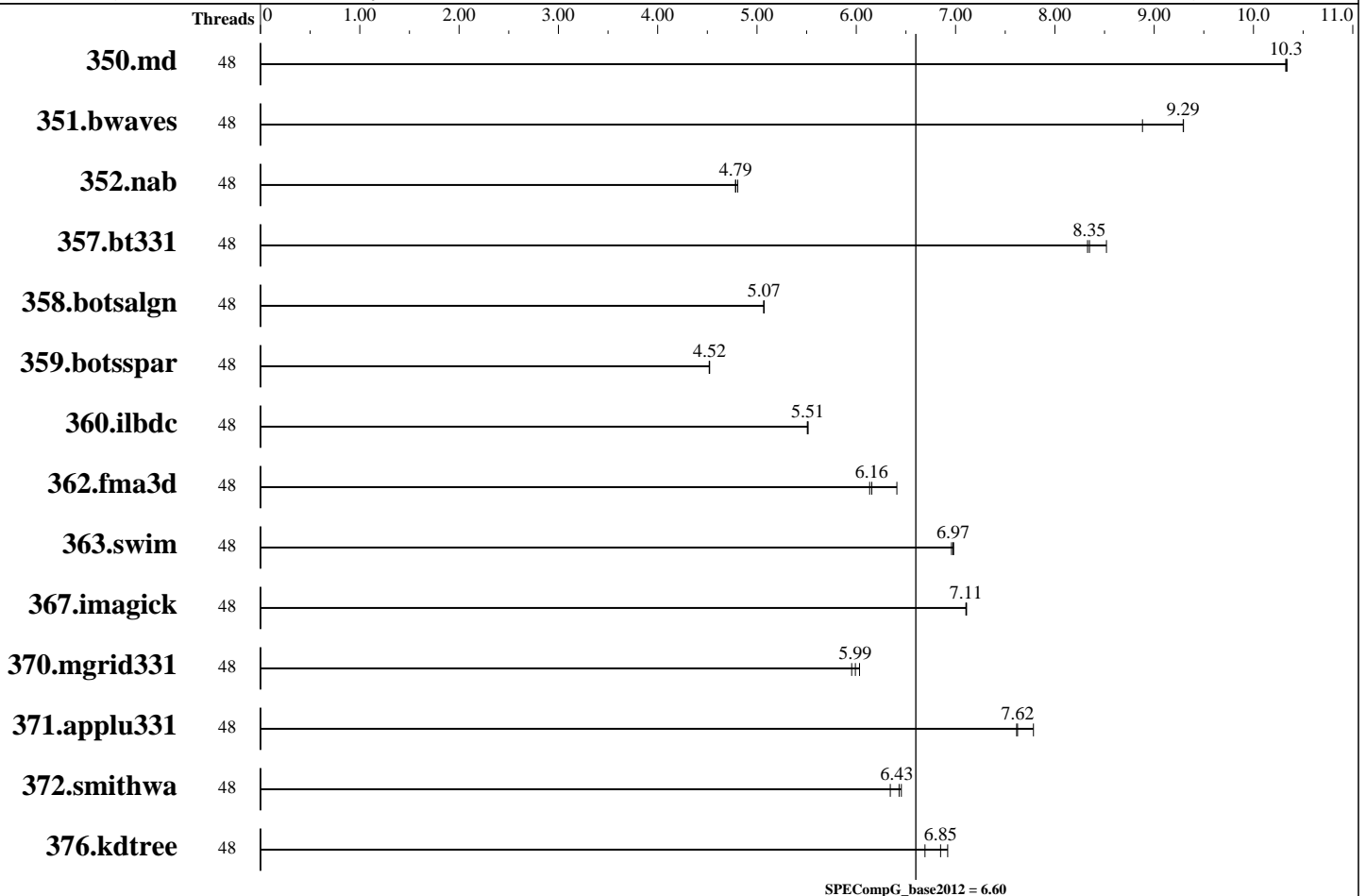
Test sponsor: Indiana University

Tested by: Indiana University

Test date: Jul-2017

Hardware Availability: Apr-2013

Software Availability: Dec-2016



## 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: 48

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## 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 8.5.5 of Cray Programming Environment  
 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



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Minimum Peak Threads: --

Maximum Peak Threads: --

## Results Table

Benchmark	Base						Peak							
	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
350.md	48	448	10.3	<b>448</b>	<b>10.3</b>	448	10.3							
351.bwaves	48	487	9.30	510	8.88	<b>487</b>	<b>9.29</b>							
352.nab	48	813	4.78	<b>813</b>	<b>4.79</b>	809	4.81							
357.bt331	48	556	8.52	<b>568</b>	<b>8.35</b>	569	8.33							
358.botsalgn	48	858	5.07	858	5.07	<b>858</b>	<b>5.07</b>							
359.botsspar	48	<b>1161</b>	<b>4.52</b>	1161	4.52	1162	4.52							
360.ilbdc	48	646	5.51	<b>646</b>	<b>5.51</b>	646	5.51							
362.fma3d	48	<b>617</b>	<b>6.16</b>	619	6.13	593	6.41							
363.swim	48	649	6.98	651	6.96	<b>650</b>	<b>6.97</b>							
367.imagick	48	<b>989</b>	<b>7.11</b>	990	7.10	989	7.11							
370.mgrid331	48	742	5.95	733	6.03	<b>738</b>	<b>5.99</b>							
371.applu331	48	778	7.78	<b>795</b>	<b>7.62</b>	796	7.61							
372.smithwa	48	<b>833</b>	<b>6.43</b>	831	6.45	845	6.34							
376.kdtree	48	<b>657</b>	<b>6.85</b>	650	6.92	672	6.69							

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

## Platform Notes

Sysinfo program

/N/dc2/projects/hpc/lijunj/spec/omp2012-1.1-run/bigred2plus-cray3/Docs/sysinfo  
Revision 563 of 2016-06-10 (097295389cf6073d8c3b03fa376740a5)  
running on nid00540 Wed Jul 26 03:01:14 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
```

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## 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/bigred2plus-cray3

Filesystem	Type	Size	Used	Avail	Use%	Mounted on
10.10.0.171@o2ib:10.10.0.172@o2ib:/dc2	lustre	5.3P	4.9P	323T	94%	/N/dc2

Cannot run dmidecode; consider saying 'chmod +s /usr/sbin/dmidecode'

(End of data from sysinfo program)

## General Notes

Environment Variables:

ENV\_OMP\_THREAD\_STACK\_SIZE=1073741824

ulimit -s unlimited

## Base Compiler Invocation

C benchmarks:

cc

C++ benchmarks:

CC

Fortran benchmarks:

ftn



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## Base Portability Flags

```
350.md: -f free
357.bt331: -hpic -hdynamic
363.swim: -hpic -hdynamic
367.imagick: -hc99
```

The flags file that was used to format this result can be browsed at

<http://www.spec.org/omp2012/flags/cray.html>

You can also download the XML flags source by saving the following link:

<http://www.spec.org/omp2012/flags/cray.xml>

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For questions about this result, please contact the tester.  
For other inquiries, please contact [webmaster@spec.org](mailto:webmaster@spec.org).

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