



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 = 4.86

OMP2012 license:3440A

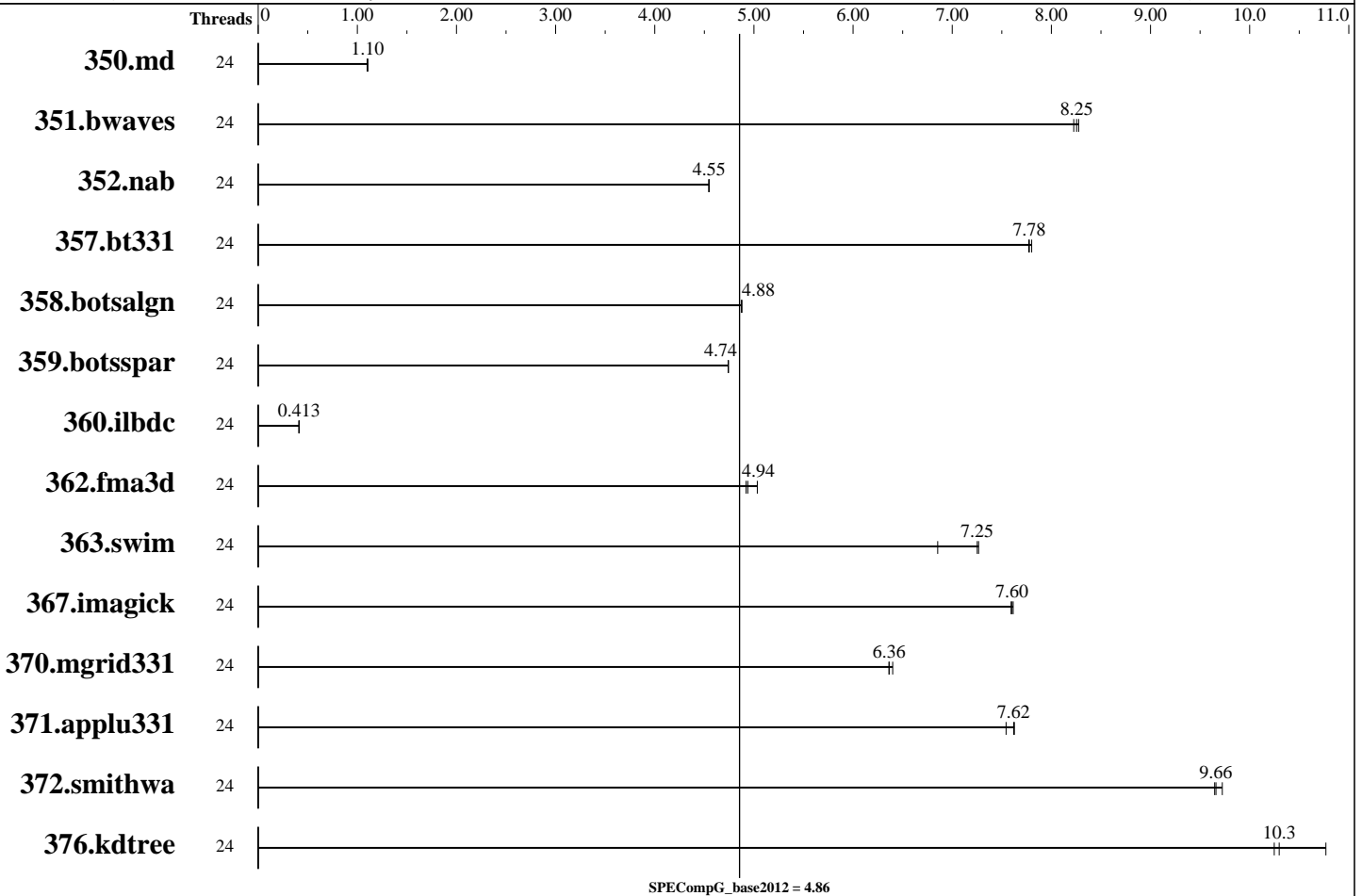
Test sponsor: Indiana University

Tested by: Indiana University

Test date: Jul-2017

Hardware Availability: Apr-2013

Software Availability: Mar-2017



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

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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 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



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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	24	4185	1.11	4214	1.10	4196	1.10							
351.bwaves	24	549	8.25	551	8.23	547	8.28							
352.nab	24	856	4.54	855	4.55	855	4.55							
357.bt331	24	609	7.78	610	7.77	608	7.80							
358.botsalgn	24	892	4.88	892	4.88	892	4.88							
359.botsspar	24	1107	4.74	1107	4.74	1107	4.74							
360.ilbdc	24	8704	0.409	8594	0.414	8614	0.413							
362.fma3d	24	772	4.92	769	4.94	755	5.03							
363.swim	24	661	6.85	623	7.27	625	7.25							
367.imagick	24	926	7.59	923	7.61	925	7.60							
370.mgrid331	24	695	6.36	691	6.40	695	6.36							
371.applu331	24	795	7.63	803	7.54	795	7.62							
372.smithwa	24	556	9.65	551	9.72	555	9.66							
376.kdtree	24	418	10.8	437	10.3	439	10.2							

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/bigred2plus2/Docs/sysinfo
Revision 563 of 2016-06-10 (097295389cf6073d8c3b03fa376740a5)
running 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
```

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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/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



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Base Portability Flags

350.md: -ffree-form -fno-range-check
357.bt331: -mmodel=medium
363.swim: -mmodel=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.

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