



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 = 6.98

OMP2012 license:3440A

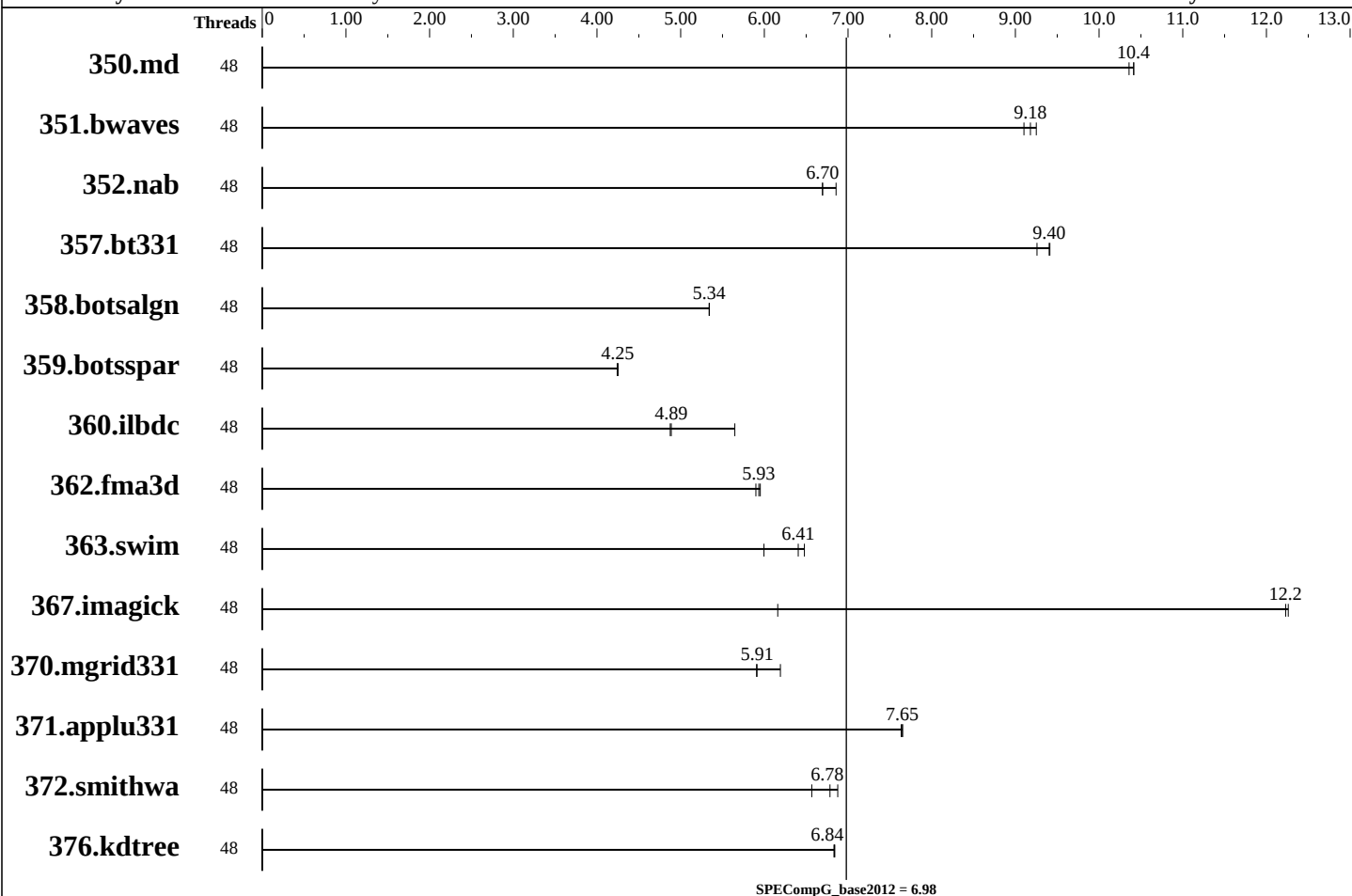
Test sponsor: Indiana University

Tested by: Indiana University

Test date: Jun-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: 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 17.0.2.174 of Intel Parallel Studio XE for Linux Build 20170213
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	<u>445</u>	<u>10.4</u>	445	10.4	447	10.4							
351.bwaves	48	490	9.25	<u>493</u>	<u>9.18</u>	498	9.10							
352.nab	48	<u>581</u>	<u>6.70</u>	581	6.70	567	6.86							
357.bt331	48	504	9.41	<u>504</u>	<u>9.40</u>	512	9.26							
358.botsalgn	48	814	5.34	<u>814</u>	<u>5.34</u>	814	5.34							
359.botsspar	48	1238	4.24	1235	4.25	<u>1236</u>	<u>4.25</u>							
360.ilbdc	48	730	4.88	630	5.65	<u>728</u>	<u>4.89</u>							
362.fma3d	48	644	5.90	<u>640</u>	<u>5.93</u>	638	5.95							
363.swim	48	756	6.00	<u>707</u>	<u>6.41</u>	699	6.48							
367.imagick	48	1141	6.16	<u>575</u>	<u>12.2</u>	573	12.3							
370.mgrid331	48	714	6.19	748	5.91	<u>748</u>	<u>5.91</u>							
371.applu331	48	792	7.65	794	7.64	<u>792</u>	<u>7.65</u>							
372.smithwa	48	816	6.57	779	6.88	<u>790</u>	<u>6.78</u>							
376.kdtree	48	<u>658</u>	<u>6.84</u>	658	6.84	659	6.83							

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/Docs/sysinfo

Revision 563 of 2016-06-10 (097295389cf6073d8c3b03fa376740a5)

running on nid00536 Sun Jun 18 07:38:40 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 nid00536 3.0.101-0.46.1_1.0502.8871-cray_ari_c #1 SMP Sat Oct 22

15:27:12 UTC 2016 x86_64 x86_64 x86_64 GNU/Linux

SPEC is set to: /N/dc2/projects/hpc/lijunj/spec/omp2012-1.1-run/bigred2plus

Filesystem	Type	Size	Used	Avail	Use%	Mounted on
10.10.0.171@o2ib:/dc2	lustre	5.3P	5.0P	190T	97%	/N/dc2

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

(End of data from sysinfo program)

General Notes

Environment Variables:

KMP_STACKSIZE=1G

ulimit -s unlimited

Base Compiler Invocation

C benchmarks:

icc

C++ benchmarks:

icpc

Fortran benchmarks:

ifort



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Base Portability Flags

350.md: -free
357.bt331: -mcmodel=medium
363.swim: -mcmodel=medium
367.imagick: -std=c99

Base Optimization Flags

C benchmarks:

-ansi-alias -qopenmp -ipo -O3 -no-prec-div -no-prec-sqrt
-fp-model fast=2 -xHost

C++ benchmarks:

-ansi-alias -qopenmp -ipo -O3 -no-prec-div -no-prec-sqrt
-fp-model fast=2 -xHost

Fortran benchmarks:

-qopenmp -ipo -O3 -no-prec-div -no-prec-sqrt -fp-model fast=2
-xHost

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

<http://www.spec.org/omp2012/flags/Intel-ic17-linux64.html>

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

<http://www.spec.org/omp2012/flags/Intel-ic17-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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