



SPEC® OMPG2012 Result

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Cray

(Test Sponsor: Indiana University)

Cray XE6

SPECompG_peak2012 = Not Run

SPECompG_base2012 = 3.38

OMP2012 license:3440A

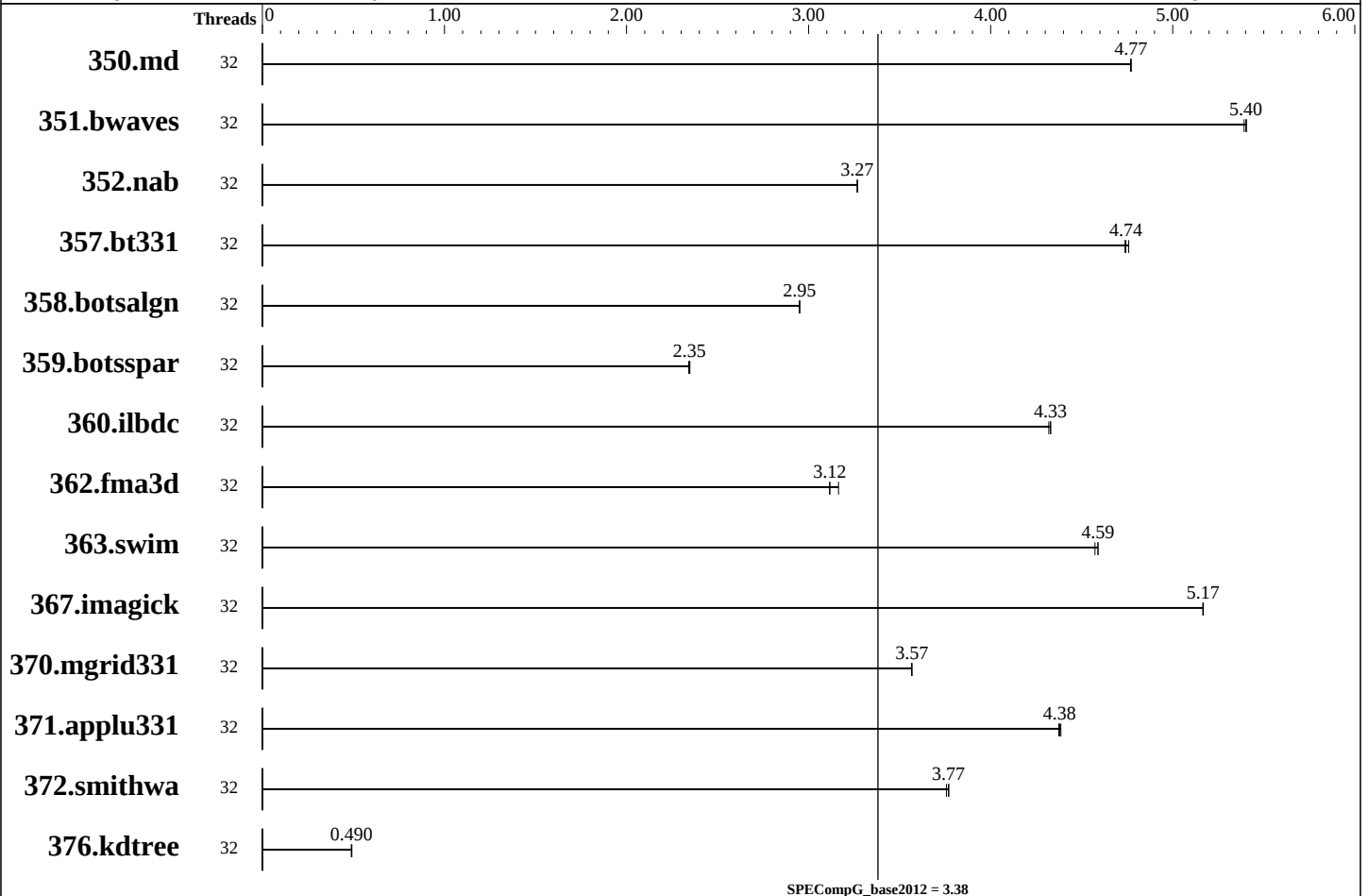
Test sponsor: Indiana University

Tested by: Indiana University

Test date: Aug-2014

Hardware Availability: Apr-2013

Software Availability: Jul-2014



Hardware

CPU Name: AMD Opteron 6380
CPU Characteristics: AMD Turbo CORE Technology up to 3.4GHz, Turbo CORE off
CPU MHz: 2500
CPU MHz Maximum: 3400
FPU: Integrated
CPU(s) enabled: 32 cores, 2 chips, 16 cores/chip
CPU(s) orderable: 1-2 chips
Primary Cache: 512 KB I on chip per chip, 64 KB I shared / 2 cores; 16 KB D on chip per core
Secondary Cache: 16 MB I+D on chip per chip, 2 MB shared / 2 cores
L3 Cache: 16 MB I+D on chip per chip, 8 MB shared / 8 cores
Other Cache: None
Memory: 64 GB (8 x 8 GB 2Rx4 PC3L-12800R-11, ECC)
Disk Subsystem: None
Other Hardware: None

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Software

Operating System: SUSE Linux Enterprise Server 11 (x86_64), Cray Linux Environment 4.2
Kernel 2.6.32.59-0.7.1_1.0402.7496-cray_gem_c
Compiler: C/C++/Fortran: Version 8.3.1 of Cray Compiler Environment
Auto Parallel: No
File System: NFSv3 (IBM N5500 NAS) over Gb ethernet
System State: Multi-user, run level 3
Base Pointers: 64-bit
Peak Pointers: Not Applicable
Other Software: None



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Base Threads Run: 32

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	32	<u>971</u>	<u>4.77</u>	971	4.77	970	4.77							
351.bwaves	32	838	5.41	840	5.39	839	5.40							
352.nab	32	1190	3.27	1190	3.27	1190	3.27							
357.bt331	32	999	4.74	996	4.76	1000	4.74							
358.botsalgn	32	1474	2.95	1474	2.95	1474	2.95							
359.botsspar	32	2242	2.34	2238	2.35	2236	2.35							
360.ilbdc	32	824	4.32	822	4.33	822	4.33							
362.fma3d	32	1220	3.12	1219	3.12	1201	3.16							
363.swim	32	991	4.57	987	4.59	987	4.59							
367.imagick	32	1360	5.17	1361	5.17	1361	5.17							
370.mgrid331	32	1239	3.57	1239	3.57	1239	3.57							
371.applu331	32	1382	4.39	1384	4.38	1385	4.37							
372.smithwa	32	1422	3.77	1422	3.77	1427	3.76							
376.kdtree	32	9189	0.490	9155	0.492	9206	0.489							

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

Platform Notes

Sysinfo program /N/soft/mason/omp2012-1.0/omp2012_br2/Docs/sysinfo
\$Rev: 395 \$ \$Date:: 2012-07-25 #\$ 8f8c0fe9e19c658963a1e67685e50647
running on nid01041 Fri Aug 15 13:22:12 2014

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 : AMD Opteron(tm) Processor 6380

2 "physical id"s (chips)

32 "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 : 16

siblings : 16

physical 0: cores 0 1 2 3 4 5 6 7

physical 1: cores 0 1 2 3 4 5 6 7

cache size : 2048 KB

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Platform Notes (Continued)

From /proc/meminfo

MemTotal: 66178208 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 = 1

mazama-release:

Mazama Wed Aug 28 02:06:30 CDT 2013 on hssbld0 by bwdev

lsb-cray-mazama-7.1.0

uname -a:

Linux nid01041 2.6.32.59-0.7.1_1.0402.7496-cray_gem_c #1 SMP Wed Feb 26

05:58:57 UTC 2014 x86_64 x86_64 x86_64 GNU/Linux

SPEC is set to: /N/soft/mason/omp2012-1.0/omp2012_br2

Filesystem	Type	Size	Used	Avail	Use%	Mounted on
/N/soft	dvs	1.9T	1.6T	265G	86%	/N/soft

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

(End of data from sysinfo program)

General Notes

Software Environment:

OMP_NESTED=FALSE

Enables (TRUE) or disables (FALSE) nested parallelism.

OMP_DYNAMIC=FALSE

Enables (true) or disables (false) the dynamic adjustment of the number of threads.

OMP_NUM_THREADS=32

Sets the maximum number of threads to use for OpenMP parallel regions if no other value is specified in the program itself.

Base Compiler Invocation

C benchmarks:

CC

C++ benchmarks:

CC

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Base Compiler Invocation (Continued)

Fortran benchmarks:
ftn

Base Portability Flags

350.md: -f free

Base Optimization Flags

C benchmarks:
-O3 -h pragma=omp -hpic -dynamic

C++ benchmarks:
-O3 -h pragma=omp -hpic -dynamic

Fortran benchmarks:
-O3 -h omp -hpic -dynamic

The flags file that was used to format this result can be browsed at
<http://www.spec.org/omp2012/flags/iu-cray-8.3.html>

You can also download the XML flags source by saving the following link:
<http://www.spec.org/omp2012/flags/iu-cray-8.3.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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