



SPEC® OMPG2012 Result

Copyright 2012-2014 Standard Performance Evaluation Corporation

Cray
(Test Sponsor: Indiana University)

SPECompG_peak2012 = Not Run

Cray XE6

SPECompG_base2012 = 3.92

OMP2012 license:3440A

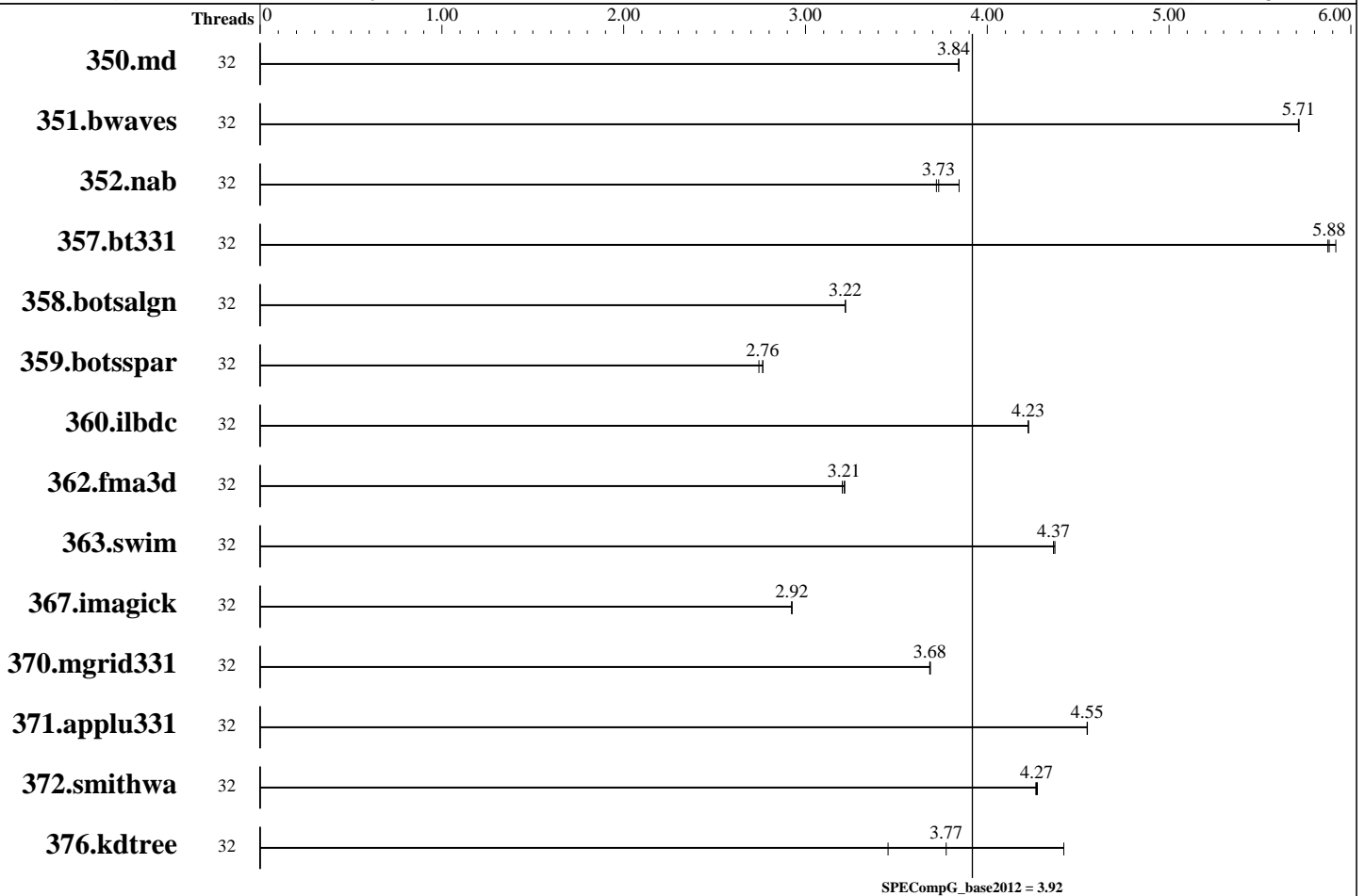
Test date: Feb-2014

Test sponsor: Indiana University

Hardware Availability: Apr-2013

Tested by: Indiana University

Software Availability: Aug-2013



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 4.1
 Kernel 2.6.32.59-0.7.1_1.0401.6845-cray_gem_c
 2.6.32.59-0.7.1_1.0401.6845-cray_gem_c
 Compiler: C/C++/Fortran: Version 13.7-0 of PGI compilers
 64-bit target on x86-64 Linux
 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>1205</u>	<u>3.84</u>	1205	3.84	1205	3.84							
351.bwaves	32	793	5.71	793	5.72	<u>793</u>	<u>5.71</u>							
352.nab	32	1012	3.84	1046	3.72	<u>1042</u>	<u>3.73</u>							
357.bt331	32	<u>806</u>	<u>5.88</u>	807	5.87	801	5.92							
358.botsalgn	32	<u>1351</u>	<u>3.22</u>	1351	3.22	1351	3.22							
359.botsspar	32	1913	2.74	1899	2.77	<u>1899</u>	<u>2.76</u>							
360.ilbdc	32	<u>843</u>	<u>4.23</u>	842	4.23	843	4.23							
362.fma3d	32	1187	3.20	<u>1183</u>	<u>3.21</u>	1181	3.22							
363.swim	32	1036	4.37	1038	4.36	<u>1038</u>	<u>4.37</u>							
367.imagick	32	2404	2.92	2403	2.93	<u>2403</u>	<u>2.92</u>							
370.mgrid331	32	1199	3.69	1200	3.68	<u>1200</u>	<u>3.68</u>							
371.applu331	32	1332	4.55	<u>1332</u>	<u>4.55</u>	1332	4.55							
372.smithwa	32	<u>1255</u>	<u>4.27</u>	1254	4.28	1256	4.27							
376.kdtree	32	<u>1192</u>	<u>3.77</u>	1303	3.45	1018	4.42							

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 nid00929 Wed Feb 12 22:07:08 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: 66178284 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 nid00929 2.6.32.59-0.7.1_1.0401.6845-cray_gem_c #1 SMP Thu Nov 15

00:24:59 UTC 2012 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 1.7T 1.6T 41G 98% /N/soft

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

(End of data from sysinfo program)

General Notes

Environment:

ENV_OMP_NESTED=FALSE

OMP_NESTED=FALSE

OMP_DYNAMIC=FALSE

OMP_NUM_THREADS=32

threads = 32

Base Compiler Invocation

C benchmarks:

pgcc

C++ benchmarks:

pgCC

Fortran benchmarks:

pgfortran



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Base Portability Flags

350.md: -Mfree
357.bt331: -mcmmodel=medium
363.swim: -mcmmodel=medium

Base Optimization Flags

C benchmarks:

-fast -mp -Mipa=fast -Mipa=inline -Msmartalloc=huge -Mfprelaxed

C++ benchmarks:

-fast -mp -Mipa=fast -Mipa=inline -Msmartalloc=huge -Mfprelaxed

Fortran benchmarks:

350.md: -fast -mp -Mipa=fast -Mipa=inline -Msmartalloc=huge
-Mfprelaxed

351.bwaves: Same as 350.md

357.bt331: -fast -mp -Mipa=fast -Mipa=inline -Msmartalloc=huge
-Mfprelaxed -Bdynamic(*)

360.ilbdc: Same as 350.md

362.fma3d: Same as 350.md

363.swim: Same as 357.bt331

370.mgrid331: Same as 350.md

371.applu331: Same as 350.md

(*) Indicates an optimization flag that was found in a portability variable.

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

http://www.spec.org/omp2012/flags/pgi2013_linux_flags.html

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

http://www.spec.org/omp2012/flags/pgi2013_linux_flags.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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