SPEC® OMPG2012 Result

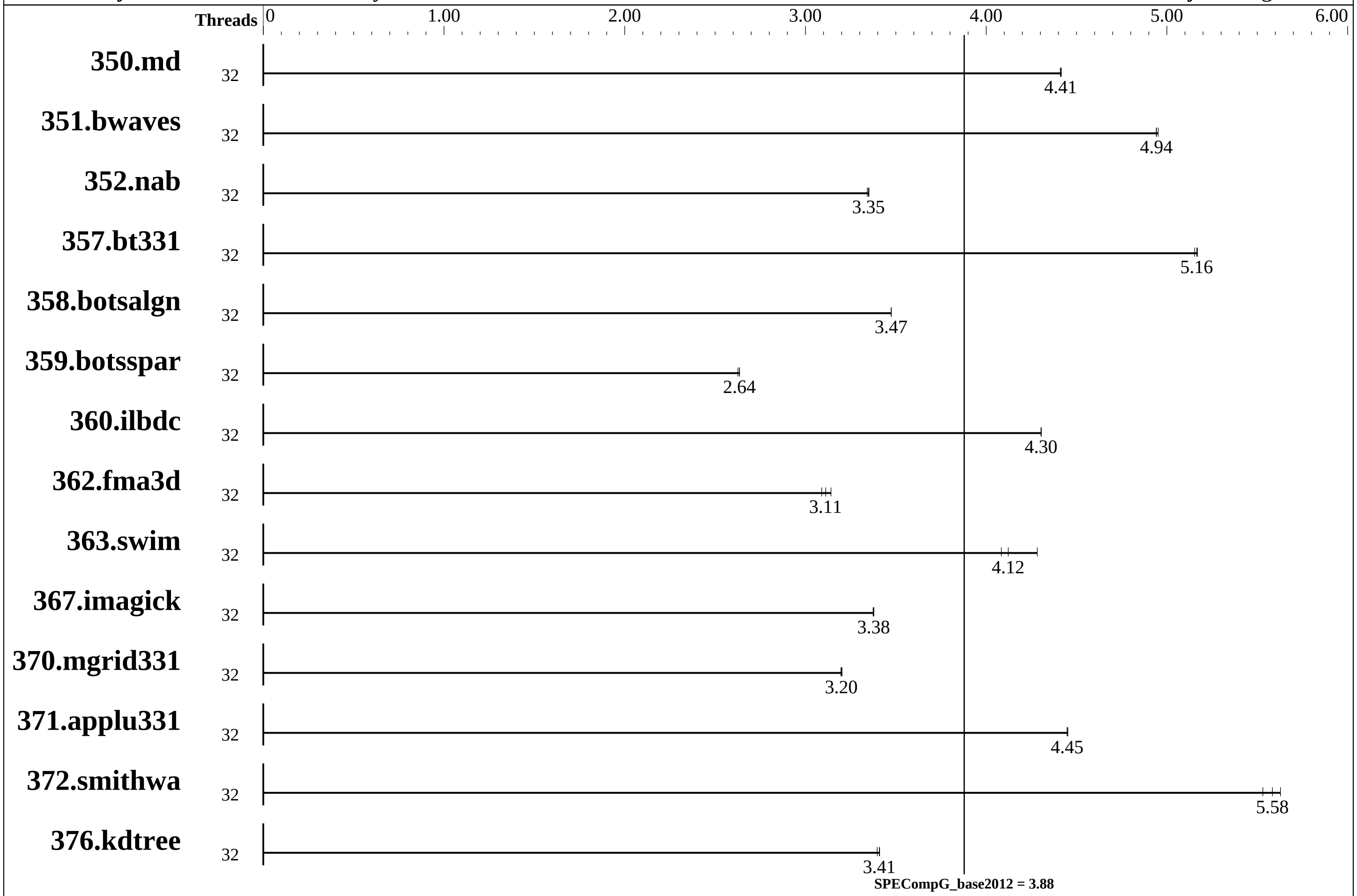
Cray
(Test Sponsor: Indiana University)

Cray XE6

SPECompG_peak2012 = Not Run

SPECompG_base2012 = 3.88

OMP2012 license:	3440A	**Test date:**	Oct-2013
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 on
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

Continued on next page

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 13.1.3 of Intel Composer XE 2013 for Linux Build 20120607
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

Cray
(Test Sponsor: Indiana University)

Cray XE6

SPECompG_peak2012 = Not Run

SPECompG_base2012 = 3.88

OMP2012 license: 3440A
Test sponsor: Indiana University
Tested by: Indiana University

Test date: Oct-2013
Hardware Availability: Apr-2013
Software Availability: Aug-2013

Base Threads Run: 32
Minimum Peak Threads: --
Maximum Peak Threads: --

Results Table

	Base							Peak						
Benchmark	**Threads**	**Seconds**	**Ratio**	**Seconds**	**Ratio**	**Seconds**	**Ratio**	**Threads**	**Seconds**	**Ratio**	**Seconds**	**Ratio**	**Seconds**	**Ratio**
350.md	32	1048	4.42	**1049**	**4.41**	1050	4.41							
351.bwaves	32	917	4.94	915	4.95	**917**	**4.94**							
352.nab	32	1164	3.34	**1162**	**3.35**	1161	3.35							
357.bt331	32	917	5.17	**918**	**5.16**	920	5.15							
358.botsalgn	32	1252	3.47	1252	3.47	**1252**	**3.47**							
359.botsspar	32	1999	2.63	**1992**	**2.64**	1992	2.64							
360.ilbdc	32	**827**	**4.30**	827	4.30	827	4.31							
362.fma3d	32	**1221**	**3.11**	1230	3.09	1210	3.14							
363.swim	32	1058	4.28	**1099**	**4.12**	1109	4.08							
367.imagick	32	2081	3.38	2083	3.37	**2082**	**3.38**							
370.mgrid331	32	**1382**	**3.20**	1383	3.20	1380	3.20							
371.applu331	32	1362	4.45	**1362**	**4.45**	1361	4.45							
372.smithwa	32	**960**	**5.58**	952	5.63	969	5.53							
376.kdtree	32	**1320**	**3.41**	1319	3.41	1325	3.40							

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 nid00013 Fri Oct 25 08:47:32 2013

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
```

Continued on next page

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 Oct 31 02:36:27 CDT 2012 on hssbld0 by bwdev
      lsb-cray-mazama-7.0.0

uname -a:
   Linux nid00013 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  1.5T  111G  94% /N/soft

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

(End of data from sysinfo program)
```

General Notes

```
Environment:
    KMP_SCHEDULE=static,balanced
    KMP_BLOCKTIME=infinite
    KMP_LIBRARY=throughput
    KMP_STACKSIZE=31m
    ENV_OMP_NESTED=FALSE
    OMP_NESTED=FALSE
    OMP_DYNAMIC=FALSE
    OMP_NUM_THREADS=32
    threads = 32
```

Base Compiler Invocation

C benchmarks:
    icc

Continued on next page

Base Compiler Invocation (Continued)

C++ benchmarks:
`icpc`

Fortran benchmarks:
`ifort`

Base Portability Flags

350.md: `-free`
367.imagick: `-std=c99`

Base Optimization Flags

C benchmarks:
`-O3 -ansi-alias -no-prec-div -openmp -shared-intel -mcmodel=medium`

C++ benchmarks:
`-O3 -ansi-alias -no-prec-div -openmp -shared-intel -mcmodel=medium`

Fortran benchmarks:
`-O3 -no-prec-div -openmp -shared-intel -mcmodel=medium`

The flags file that was used to format this result can be browsed at
http://www.spec.org/omp2012/flags/Intel-ic13.0-linux64.20131127.html

You can also download the XML flags source by saving the following link:
http://www.spec.org/omp2012/flags/Intel-ic13.0-linux64.20131127.xml

For questions about this result, please contact the tester.
For other inquiries, please contact webmaster@spec.org.

Tested with SPEC OMP2012 v1.0.
Report generated on Tue Jul 22 13:37:32 2014 by SPEC OMP2012 PS/PDF formatter v541.
Originally published on 27 November 2013.