SPEC® OMPG2012 Result

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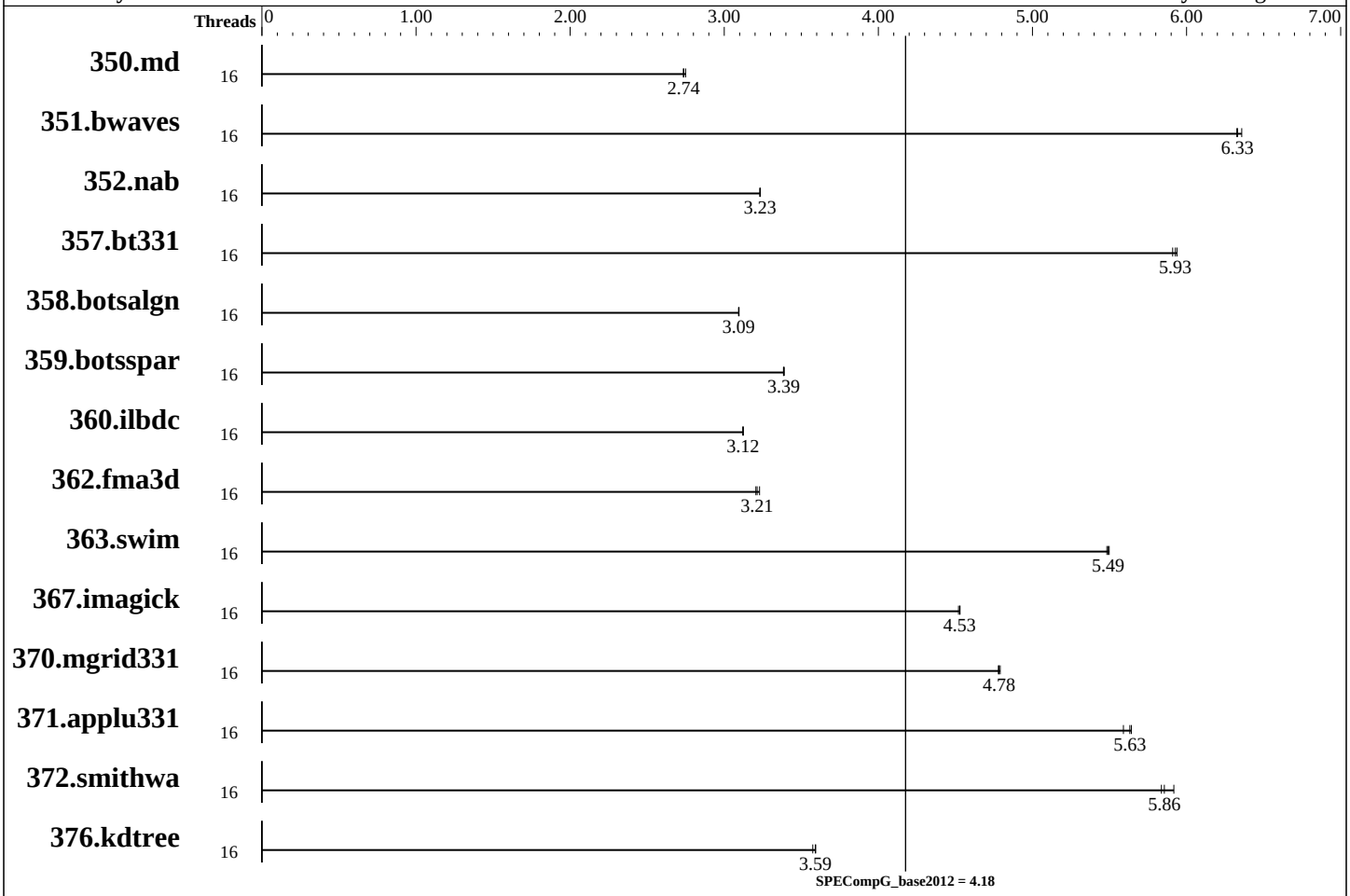
Intel
Intel G29051-202

SPECompG_peak2012 = Not Run

SPECompG_base2012 = 4.18

OMP2012 license: 13
Test sponsor: Intel
Tested by: Intel

Test date: Feb-2013
Hardware Availability: Mar-2012
Software Availability: Aug-2012



Hardware

CPU Name:	Intel Xeon E5-2670
CPU Characteristics:	
CPU MHz:	2600
CPU MHz Maximum:	3300
FPU:	Integrated
CPU(s) enabled:	16 cores, 2 chips, 8 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:	20 MB I+D on chip per chip
Other Cache:	None
Memory:	64 GB (8 x 8 GB 2Rx4 PC3-12800R-11, ECC)
Disk Subsystem:	Panasas ActiveStor 3050 Fileserver 64 disks, 250GB/disk, 16TB total, 4 Shelves connected via 1Gbps Ethernet
Other Hardware:	--

Continued on next page

Software

Operating System:	Red Hat Enterprise Linux Server release 6.1(Santiago)
Compiler:	C/C++/Fortran: Version 13.0.0.079 of Intel Composer XE for Linux Build 20120731
Auto Parallel:	No
File System:	Linux ext3
System State:	Default
Base Pointers:	64-bit
Peak Pointers:	Not Applicable
Other Software:	None

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Base Threads Run: 16
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	16	1693	2.73	1684	2.75	**1691**	**2.74**							
351.bwaves	16	**716**	**6.33**	716	6.33	712	6.36							
352.nab	16	**1204**	**3.23**	1204	3.23	1203	3.23							
357.bt331	16	**800**	**5.93**	802	5.91	798	5.94							
358.botsalgn	16	**1406**	**3.09**	1406	3.09	1405	3.10							
359.botsspar	16	**1551**	**3.39**	1551	3.38	1549	3.39							
360.ilbdc	16	1140	3.12	1141	3.12	**1140**	**3.12**							
362.fma3d	16	**1183**	**3.21**	1186	3.21	1177	3.23							
363.swim	16	**825**	**5.49**	826	5.48	824	5.50							
367.imagick	16	1555	4.52	1552	4.53	**1553**	**4.53**							
370.mgrid331	16	**924**	**4.78**	925	4.78	923	4.79							
371.applu331	16	**1076**	**5.63**	1074	5.64	1084	5.59							
372.smithwa	16	906	5.92	**915**	**5.86**	918	5.84							
376.kdtree	16	1259	3.57	**1253**	**3.59**	1252	3.59							

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

Platform Notes

```
Sysinfo program /panfs/panfs2/home2/aknyaze1/OMP2012/1.0/Docs/sysinfo
$Rev: 395 $ $Date:: 2012-07-25 #$ 8f8c0fe9e19c658963a1e67685e50647
running on esg326 Fri Feb 15 21:57:34 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 : Intel(R) Xeon(R) CPU E5-2670 0 @ 2.60GHz
      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 : 8
      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 : 20480 KB
```

Continued on next page

Platform Notes (Continued)

```
From /proc/meminfo
   MemTotal:       66055220 kB
   HugePages_Total:       0
   Hugepagesize:       2048 kB

From /etc/*release* /etc/*version*
   redhat-release: Red Hat Enterprise Linux Server release 6.1 (Santiago)
   system-release: Red Hat Enterprise Linux Server release 6.1 (Santiago)
   system-release-cpe: cpe:/o:redhat:enterprise_linux:6server:ga:server

uname -a:
   Linux esg326 2.6.32-131.0.15.el6.x86_64.crt.1 #3 SMP Fri May 20 16:57:43 PDT
   2011 x86_64 x86_64 x86_64 GNU/Linux

run-level 3 Feb 14 10:15

SPEC is set to: /panfs/panfs2/home2/aknyaze1/OMP2012/1.0
   Filesystem     Type    Size  Used Avail Use% Mounted on
   panfs://36.107.212.1/home2
                  panfs     14T  9.0T  4.7T  66% /panfs/panfs2/home2

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

(End of data from sysinfo program)
```

General Notes

```
------------------------------------------------------------------------
BIOS settings notes:
  Intel Turbo Boost Technology (Turbo)  : Enabled

------------------------------------------------------------------------
General Notes and Enviroment variables
  ENV_KMP_LIBRARY=turnaround
  ENV_KMP_STACKSIZE=256M
  ENV_KMP_BLOCKTIME=infinite
  ENV_OMP_DYNAMIC=FALSE
  ENV_KMP_AFFINITY=compact,1

------------------------------------------------------------------------
base:gross:
  COPTIMIZE = -O3 -xAVX  -ipo1 -openmp -ansi-alias -shared-intel
  CXXOPTIMIZE = -O3 -xAVX -ipo1  -openmp -shared-intel
  FOPTIMIZE = -O3 -xAVX -ipo1  -openmp -shared-intel
```

Base Compiler Invocation

C benchmarks:
icc

C++ benchmarks:
icpc

Fortran benchmarks:
ifort

Base Portability Flags

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

Base Optimization Flags

C benchmarks:
-O3 -xAVX -ipo1 -openmp -ansi-alias -shared-intel

C++ benchmarks:
-O3 -xAVX -ipo1 -openmp -shared-intel

Fortran benchmarks:
-O3 -xAVX -ipo1 -openmp -shared-intel

The flags file that was used to format this result can be browsed at
http://www.spec.org/omp2012/flags/Intel-ic13.0-linux64.20130306.html

You can also download the XML flags source by saving the following link:
http://www.spec.org/omp2012/flags/Intel-ic13.0-linux64.20130306.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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