SPEC® OMPG2012 Result

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Intel

Intel G29051-202

SPECompG_peak2012 = Not Run

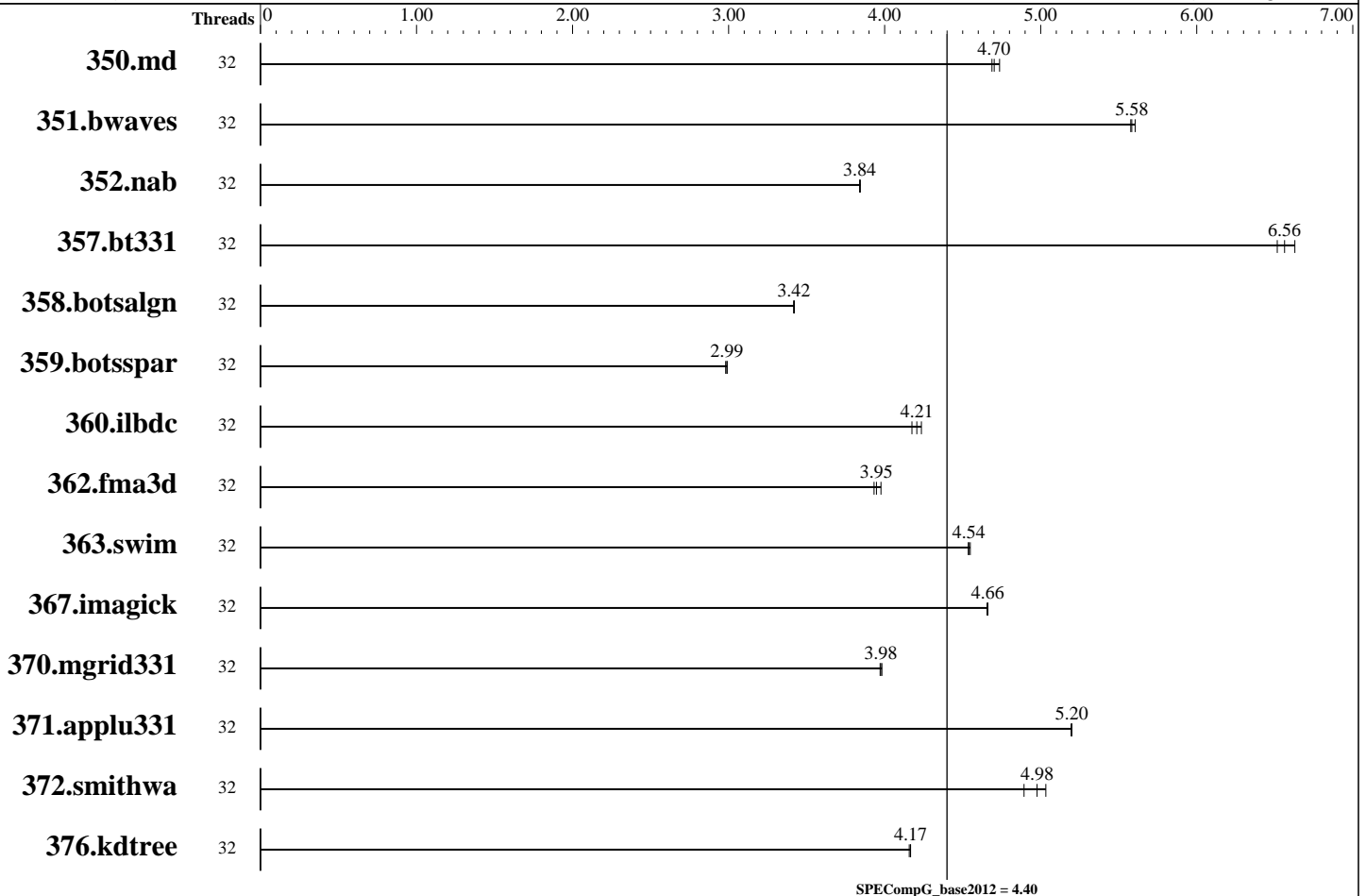SPECompG_base2012 = 4.40

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

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

Benchmark	Threads	Result
350.md	32	4.70
351.bwaves	32	5.58
352.nab	32	3.84
357.bt331	32	6.56
358.botsalgn	32	3.42
359.botsspar	32	2.99
360.ilbdc	32	4.21
362.fma3d	32	3.95
363.swim	32	4.54
367.imagick	32	4.66
370.mgrid331	32	3.98
371.applu331	32	5.20
372.smithwa	32	4.98
376.kdtree	32	4.17

SPECompG_base2012 = 4.40

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: 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	**985**	**4.70**	988	4.69	978	4.74							
351.bwaves	32	812	5.58	**811**	**5.58**	808	5.61							
352.nab	32	1012	3.84	**1013**	**3.84**	1013	3.84							
357.bt331	32	**722**	**6.56**	727	6.52	715	6.63							
358.botsalgn	32	**1272**	**3.42**	1273	3.42	1271	3.42							
359.botsspar	32	1755	2.99	**1757**	**2.99**	1761	2.98							
360.ilbdc	32	841	4.24	**846**	**4.21**	853	4.17							
362.fma3d	32	**963**	**3.95**	966	3.93	956	3.98							
363.swim	32	**998**	**4.54**	999	4.54	996	4.55							
367.imagick	32	1508	4.66	1510	4.66	**1508**	**4.66**							
370.mgrid331	32	1113	3.97	**1112**	**3.98**	1110	3.98							
371.applu331	32	1165	5.20	1167	5.19	**1166**	**5.20**							
372.smithwa	32	1065	5.03	1095	4.89	**1077**	**4.98**							
376.kdtree	32	1080	4.17	**1080**	**4.17**	1082	4.16							

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 esg015 Fri Feb 15 22:14:39 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
```

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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 esg015 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 15 00:37

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,0

=========================================================================
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
```

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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`

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

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