# SPEC® OMPG2012 Result

Copyright 2012-2014 Standard Performance Evaluation Corporation

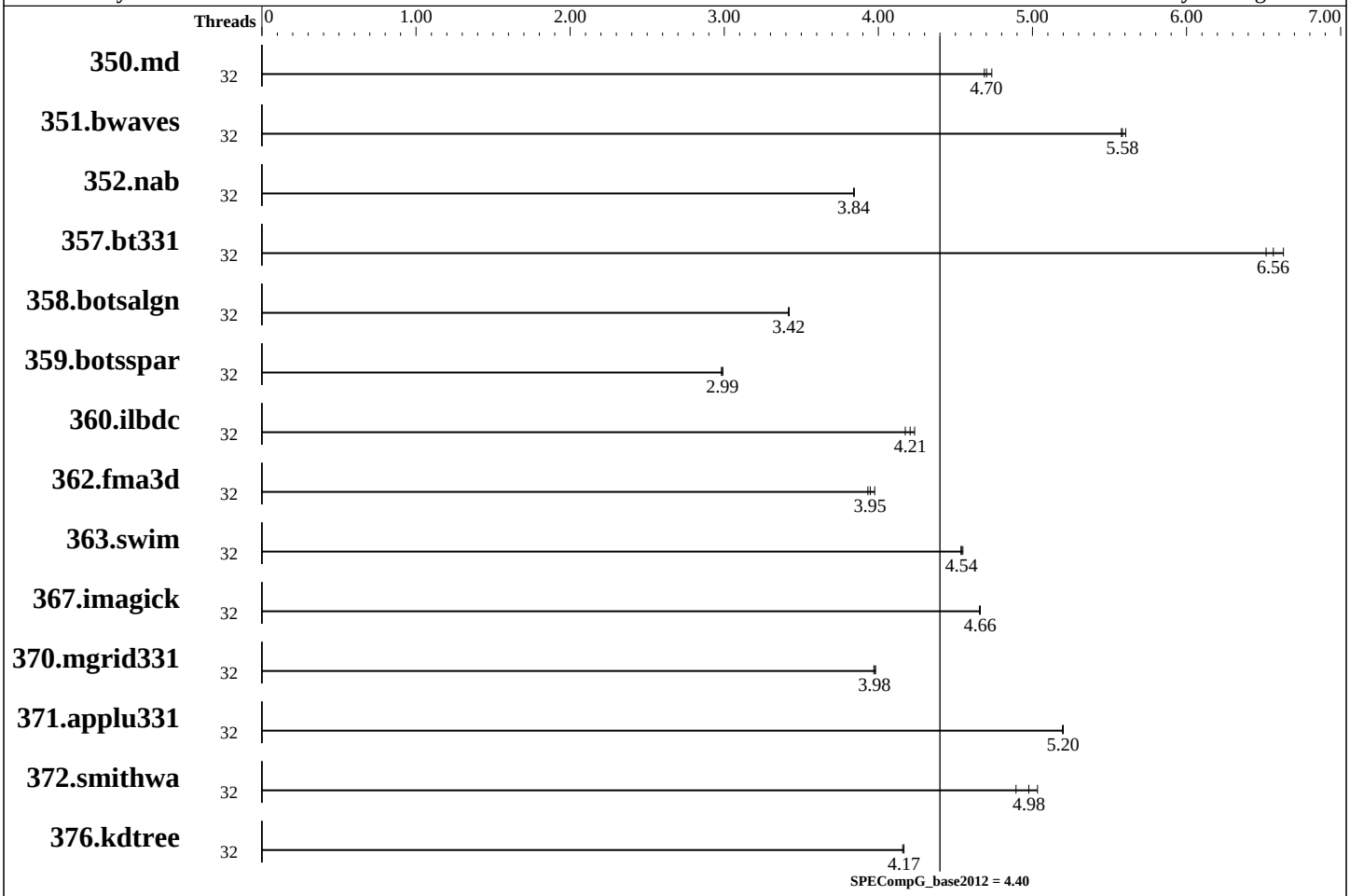
## Intel
## Intel G29051-202

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




### 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 |

# SPEC OMPG2012 Result

Copyright 2012-2014 Standard Performance Evaluation Corporation

## 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

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
```

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 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
```

## 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


SPEC is a registered trademark of the Standard Performance Evaluation Corporation. All other brand and product names appearing in this result are trademarks or registered trademarks of their respective holders.


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 13:36:36 2014 by SPEC OMP2012 PS/PDF formatter v541.
Originally published on 6 March 2013.