



# SPEC® OMPG2012 Result

Copyright 2012-2014 Standard Performance Evaluation Corporation

## SGI

SPECompG\_peak2012 = Not Run

SGI UV1000 (Intel Xeon E7-8837, 2.66GHz)

SPECompG\_base2012 = 29.9

OMP2012 license:14

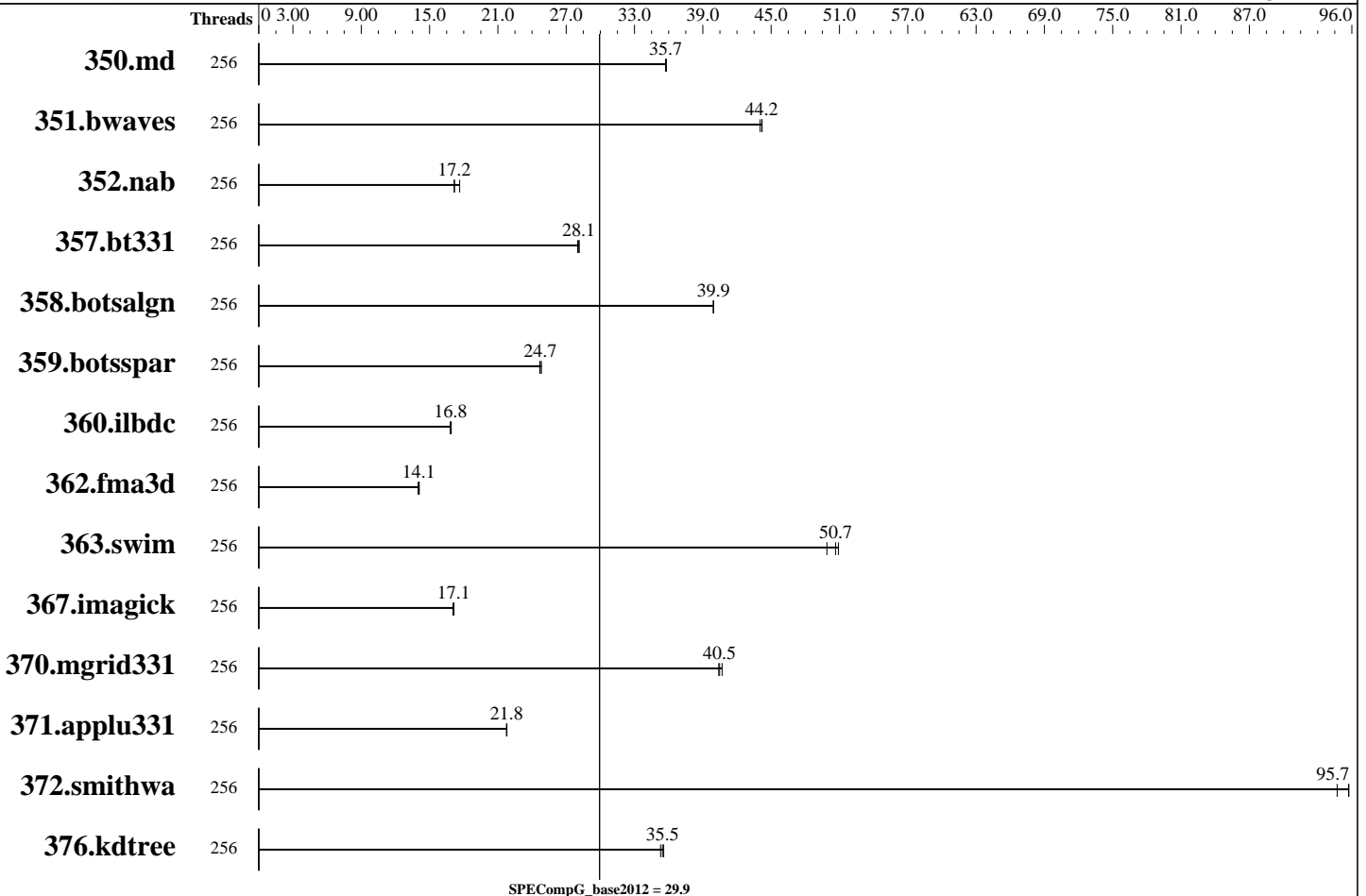
Test sponsor: SGI

Tested by: SGI

Test date: Sep-2012

Hardware Availability: Apr-2011

Software Availability: Aug-2012



### Hardware

CPU Name: Intel Xeon E7-8837  
 CPU Characteristics: Intel Turbo Boost Technology up to 2.80 GHz  
 CPU MHz: 2667  
 CPU MHz Maximum: 2800  
 FPU: Integrated  
 CPU(s) enabled: 256 cores, 32 chips, 8 cores/chip  
 CPU(s) orderable: 2-256 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: 24 MB I+D on chip per chip  
 Other Cache: None  
 Memory: 1 TB (256 x 4 GB 4Rx8 PC3-8500R-7, ECC)  
 Disk Subsystem: 10 x 1 TB SAS (Seagate Constellation ES, 7200RPM)  
 Other Hardware: Routed quad-plane fat tree topology  
 Base Threads Run: 256  
 Minimum Peak Threads: --

Continued on next page

### Software

Operating System: SUSE Linux Enterprise Server 11 (x86\_64) SP1 2.6.32.46-0.3.1.3592.0.PTF-default  
 Compiler: C/C++/Fortran: Version 13.0 of Intel Composer XE 2013 Build 20120731;  
 Auto Parallel: No  
 File System: xfs  
 System State: Run level 3 ( Multi-user )  
 Base Pointers: 64-bit  
 Peak Pointers: Not Applicable  
 Other Software: sgi-accelerate-release: SGI Accelerate 1.3, Build 705rp1.sles11-1110302109  
 sgi-foundation-release: SGI Foundation Software 2.5, Build 705rp1.sles11-1110302109



# SPEC OMPG2012 Result

Copyright 2012-2014 Standard Performance Evaluation Corporation

## SGI

SPECompG\_peak2012 = Not Run

SGI UV1000 (Intel Xeon E7-8837, 2.66GHz)

SPECompG\_base2012 = 29.9

OMP2012 license:14

Test sponsor: SGI

Tested by: SGI

Test date: Sep-2012

Hardware Availability: Apr-2011

Software Availability: Aug-2012

Maximum Peak Threads: --

## Results Table

Benchmark	Base							Peak						
	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
350.md	256	129	35.8	<b><u>130</u></b>	<b><u>35.7</u></b>	130	35.7							
351.bwaves	256	103	44.0	102	44.2	<b><u>103</u></b>	<b><u>44.2</u></b>							
352.nab	256	227	17.2	<b><u>226</u></b>	<b><u>17.2</u></b>	220	17.6							
357.bt331	256	<b><u>169</u></b>	<b><u>28.1</u></b>	169	28.0	168	28.1							
358.botsalgn	256	109	39.9	109	39.9	<b><u>109</u></b>	<b><u>39.9</u></b>							
359.botsspar	256	211	24.8	<b><u>212</u></b>	<b><u>24.7</u></b>	213	24.7							
360.ilbdc	256	211	16.9	212	16.8	<b><u>211</u></b>	<b><u>16.8</u></b>							
362.fma3d	256	272	14.0	270	14.1	<b><u>270</u></b>	<b><u>14.1</u></b>							
363.swim	256	90.8	49.9	89.0	50.9	<b><u>89.4</u></b>	<b><u>50.7</u></b>							
367.imagick	256	412	17.1	<b><u>410</u></b>	<b><u>17.1</u></b>	410	17.1							
370.mgrid331	256	109	40.4	<b><u>109</u></b>	<b><u>40.5</u></b>	109	40.7							
371.applu331	256	<b><u>278</u></b>	<b><u>21.8</u></b>	278	21.8	279	21.8							
372.smithwa	256	<b><u>56.0</u></b>	<b><u>95.7</u></b>	56.0	95.7	56.6	94.7							
376.kdtree	256	128	35.3	<b><u>127</u></b>	<b><u>35.5</u></b>	127	35.6							

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

## Submit Notes

The config file option 'submit' was used.

## General Notes

### Software Environment:

```

export KMP_AFFINITY=disabled
export KMP_STACKSIZE=200M
export KMP_SCHEDULE=static,balanced
export OMP_DYNAMIC=FALSE
limit -s unlimited

```

For all benchmarks threads were bound to cores using the following submit command:

```
dplace -x2 $command
```

This binds threads in order of creation, beginning with the master thread on logical cpu 0, the first slave thread on logical cpu 1, and so on. The -x2 flag instructs dplace to skip placement of the lightweight OpenMP monitor thread, which is created prior to the slave threads.



# SPEC OMPG2012 Result

Copyright 2012-2014 Standard Performance Evaluation Corporation

**SGI**

SPECompG\_peak2012 = Not Run

SGI UV1000 (Intel Xeon E7-8837, 2.66GHz)

SPECompG\_base2012 = 29.9

OMP2012 license:14

Test sponsor: SGI

Tested by: SGI

Test date: Sep-2012

Hardware Availability: Apr-2011

Software Availability: Aug-2012

## Base Compiler Invocation

C benchmarks:

icc

C++ benchmarks:

icpc

Fortran benchmarks:

ifort

## Base Portability Flags

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

## Base Optimization Flags

C benchmarks:

-O3 -xSSE4.2 -ipo1 -openmp -ansi-alias -mcmmodel=medium  
-shared-intel

C++ benchmarks:

-O3 -xSSE4.2 -ipo1 -openmp -ansi-alias -mcmmodel=medium  
-shared-intel

Fortran benchmarks:

-O3 -xSSE4.2 -ipo1 -openmp -mcmmodel=medium -shared-intel

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

<http://www.spec.org/omp2012/flags/SGI-OMP2012-ic13.html>

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

<http://www.spec.org/omp2012/flags/SGI-OMP2012-ic13.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](mailto:webmaster@spec.org).

Tested with SPEC OMP2012 v21.  
Report generated on Tue Jul 22 13:35:37 2014 by SPEC OMP2012 PS/PDF formatter v541.  
Originally published on 16 October 2012.