



# SPEC® OMPG2012 Result

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## SGI

SPECompG\_peak2012 = Not Run

SGI UV20 (Intel Xeon E5-4617, 2.9 GHz)

SPECompG\_base2012 = 6.73

OMP2012 license:14

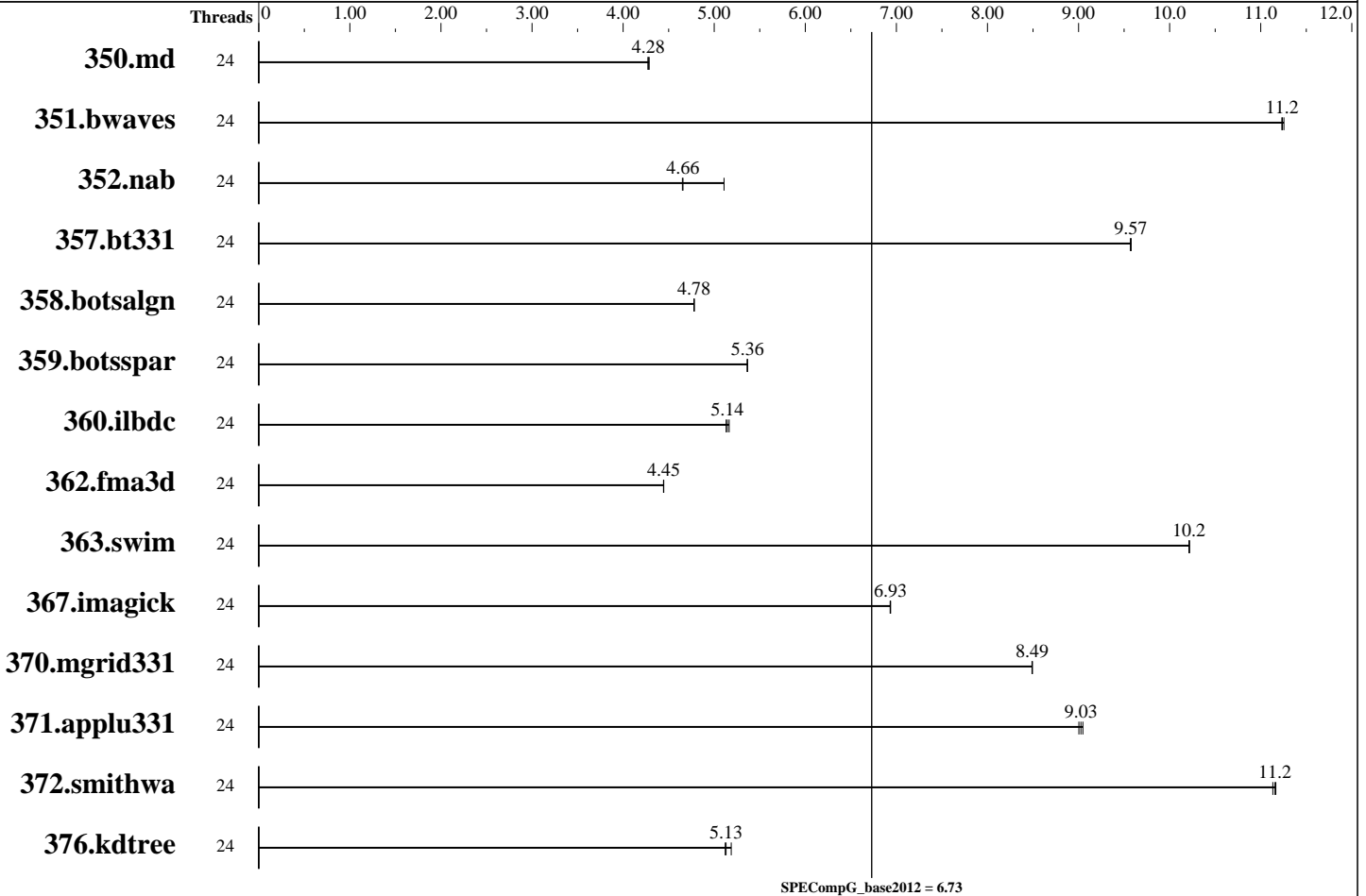
Test sponsor: SGI

Tested by: SGI

Test date: Mar-2013

Hardware Availability: Jun-2012

Software Availability: Jan-2013



### Hardware

CPU Name: Intel Xeon E5-4617  
 CPU Characteristics: Intel Turbo Boost Technology up to 3.40 GHz  
 CPU MHz: 2900  
 CPU MHz Maximum: 3400  
 FPU: Integrated  
 CPU(s) enabled: 24 cores, 4 chips, 6 cores/chip  
 CPU(s) orderable: 2-4 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: 15 MB I+D on chip per chip  
 Other Cache: None  
 Memory: 512 GB (32 x 16 GB 2Rx4 PC3-12800R-11, ECC)  
 Disk Subsystem: 3.6 TB RAID 0  
 6 x 600 GB SATA (Intel SSD 320, 2.5in SATA 3Gb/s, MLC)  
 Other Hardware: None

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### Software

Operating System: SUSE Linux Enterprise Server 11 (x86\_64) SP2  
 Kernel 3.0.42-0.7-default #1 SMP  
 Compiler: C/C++/Fortran: Version 13.1.0.146 of Intel  
 Composer XE 2013, Build 20130121  
 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 1.5, Build  
 707r85.sles11sp2-1302142007  
 SGI Foundation Software 2.7,  
 Build 707r85.sles11sp2-1302142007



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Base Threads Run: 24

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	24	<b>1082</b>	<b>4.28</b>	1080	4.29	1084	4.27							
351.bwaves	24	403	11.3	403	11.2	<b>403</b>	<b>11.2</b>							
352.nab	24	<b>835</b>	<b>4.66</b>	762	5.11	836	4.65							
357.bt331	24	<b>495</b>	<b>9.57</b>	495	9.58	495	9.57							
358.botsalgn	24	<b>910</b>	<b>4.78</b>	910	4.78	910	4.78							
359.botsspar	24	979	5.36	<b>979</b>	<b>5.36</b>	979	5.36							
360.ilbdc	24	689	5.16	694	5.13	<b>692</b>	<b>5.14</b>							
362.fma3d	24	855	4.44	855	4.45	<b>855</b>	<b>4.45</b>							
363.swim	24	443	10.2	444	10.2	<b>444</b>	<b>10.2</b>							
367.imagick	24	1014	6.93	<b>1014</b>	<b>6.93</b>	1013	6.94							
370.mgrid331	24	520	8.49	<b>520</b>	<b>8.49</b>	521	8.49							
371.applu331	24	670	9.05	673	9.00	<b>671</b>	<b>9.03</b>							
372.smithwa	24	480	11.2	481	11.1	<b>480</b>	<b>11.2</b>							
376.kdtree	24	<b>877</b>	<b>5.13</b>	879	5.12	868	5.19							

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.  
 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.

## Operating System Notes

```
export KMP_AFFINITY=disabled
export KMP_STACKSIZE=200M
export KMP_LIBRARY=turnaround
export KMP_BLOCKTIME=infinite
export OMP_DYNAMIC=FALSE
limit -s unlimited
```



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## General Notes

## 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 -xAVX -ipol -openmp -ansi-alias -mcmmodel=medium -shared-intel

C++ benchmarks:

-O3 -xAVX -ipol -openmp -mcmmodel=medium -shared-intel

Fortran benchmarks:

-O3 -xAVX -ipol -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-ic13.20130403.html>

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

<http://www.spec.org/omp2012/flags/SGI-OMP2012-ic13.20130403.xml>



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For questions about this result, please contact the tester.  
For other inquiries, please contact [webmaster@spec.org](mailto:webmaster@spec.org).

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