SPEC® OMPG2012 Result

SGI

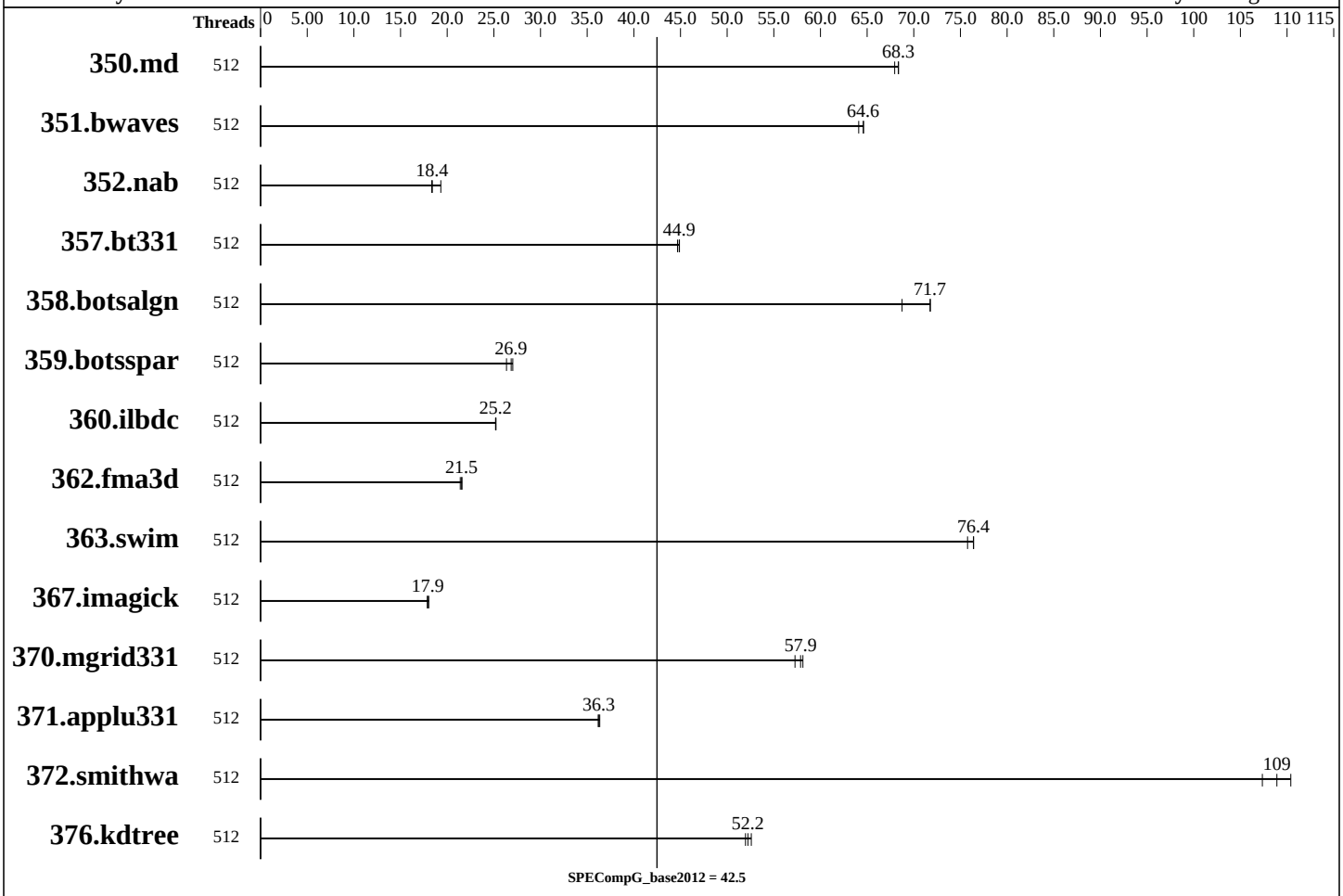
SGI UV1000 (Intel Xeon E7-8837, 2.66GHz)

SPECompG_peak2012 = Not Run

SPECompG_base2012 = 42.5

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:	512 cores, 64 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:	2 TB (512 x 4 GB 4Rx8 PC3-8500R-7, ECC)
Disk Subsystem:	10 x 1 TB SAS (Seagate Constellation ES, 7200RPM)
Other Hardware:	Routered quad-plane fat tree topology
Base Threads Run:	512
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

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Maximum Peak Threads: --

Results Table

Benchmark	Base							Peak						
	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
350.md	512	**67.7**	**68.3**	68.1	68.0	67.7	68.4							
351.bwaves	512	70.7	64.1	**70.1**	**64.6**	70.1	64.6							
352.nab	512	212	18.3	**211**	**18.4**	201	19.3							
357.bt331	512	**106**	**44.9**	106	44.9	106	44.7							
358.botsalgn	512	60.6	71.8	**60.6**	**71.7**	63.3	68.7							
359.botsspar	512	194	27.0	**195**	**26.9**	199	26.4							
360.ilbdc	512	**141**	**25.2**	141	25.2	141	25.2							
362.fma3d	512	178	21.4	**176**	**21.5**	176	21.6							
363.swim	512	**59.3**	**76.4**	59.8	75.8	59.3	76.4							
367.imagick	512	390	18.0	**392**	**17.9**	393	17.9							
370.mgrid331	512	76.1	58.1	77.2	57.3	**76.4**	**57.9**							
371.applu331	512	167	36.3	**167**	**36.3**	167	36.2							
372.smithwa	512	49.9	107	48.5	110	**49.2**	**109**							
376.kdtree	512	85.6	52.6	**86.2**	**52.2**	86.6	52.0							

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.
```

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 -mcmodel=medium
-shared-intel

C++ benchmarks:
-O3 -xSSE4.2 -ipo1 -openmp -ansi-alias -mcmodel=medium
-shared-intel

Fortran benchmarks:
-O3 -xSSE4.2 -ipo1 -openmp -mcmodel=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

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

Tested with SPEC OMP2012 v21.
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