SPEC® OMPG2012 Result

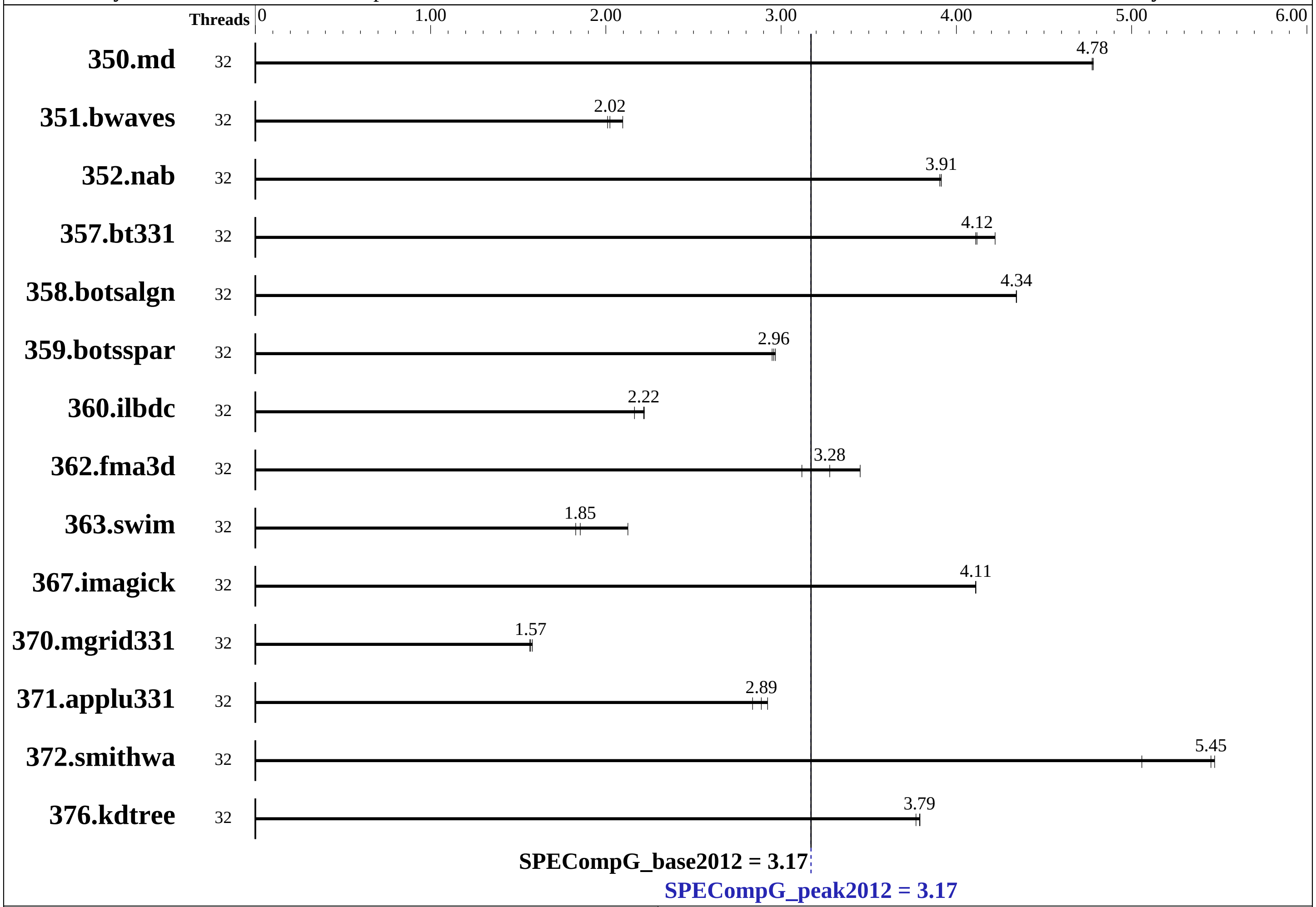
Supermicro
(Test Sponsor: The Portland Group)

A+ Server 2022G-URF

SPECompG_peak2012 = 3.17

SPECompG_base2012 = 3.17

OMP2012 license: 019		**Test date:**	Jan-2013
Test sponsor:	The Portland Group	**Hardware Availability:**	Sep-2012
Tested by:	The Portland Group	**Software Availability:**	Jan-2013



Hardware

CPU Name:	AMD Opteron 6386 SE
CPU Characteristics:	AMD Turbo CORE technology up to 3.50 GHz
CPU MHz:	2800
CPU MHz Maximum:	3500
FPU:	Integrated
CPU(s) enabled:	32 cores, 2 chips, 16 cores/chip
CPU(s) orderable:	1,2 chips
Primary Cache:	512 KB I on chip per chip, 64 KB I shared / 2 cores; 16 KB D on chip per core
Secondary Cache:	16 MB I+D on chip per chip, 2 MB shared / 2 cores
L3 Cache:	16 MB I+D on chip per chip, 8 MB shared / 8 cores
Other Cache:	None
Memory:	64 GB (8 x 8GB 2Rx4 PC3L-12800R-11, ECC)
Disk Subsystem:	10 x 144GB, RAID, 10000 RPM
Other Hardware:	None

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Software

Operating System:	Red Hat Enterprise Linux Server release 6.2 (Santiago) 2.6.32-220.el6.x86_64
Compiler:	C/C++/Fortran: Version 13.0 of Intel Composer XE 2013 Build 20120731
Auto Parallel:	No
File System:	nfs
System State:	Run level 3 (multi-user)
Base Pointers:	64-bit
Peak Pointers:	64-bit
Other Software:	None

Base Threads Run: 32
Minimum Peak Threads: 32
Maximum Peak Threads: 32

Results Table

Benchmark	Base Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Peak Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
350.md	32	970	4.77	968	4.78	**970**	**4.78**	32	970	4.77	968	4.78	**970**	**4.78**
351.bwaves	32	2254	2.01	**2239**	**2.02**	2161	2.10	32	2254	2.01	**2239**	**2.02**	2161	2.10
352.nab	32	996	3.91	994	3.91	**994**	**3.91**	32	996	3.91	994	3.91	**994**	**3.91**
357.bt331	32	1123	4.22	1153	4.11	**1151**	**4.12**	32	1123	4.22	1153	4.11	**1151**	**4.12**
358.botsalgn	32	1002	4.34	1002	4.34	**1002**	**4.34**	32	1002	4.34	1002	4.34	**1002**	**4.34**
359.botsspar	32	1780	2.95	1769	2.97	**1775**	**2.96**	32	1780	2.95	1769	2.97	**1775**	**2.96**
360.ilbdc	32	**1607**	**2.22**	1645	2.16	1604	2.22	32	**1607**	**2.22**	1645	2.16	1604	2.22
362.fma3d	32	1101	3.45	1219	3.12	**1159**	**3.28**	32	1101	3.45	1219	3.12	**1159**	**3.28**
363.swim	32	2131	2.13	2478	1.83	**2443**	**1.85**	32	2131	2.13	2478	1.83	**2443**	**1.85**
367.imagick	32	1711	4.11	**1710**	**4.11**	1710	4.11	32	1711	4.11	**1710**	**4.11**	1710	4.11
370.mgrid331	32	2823	1.57	2796	1.58	**2814**	**1.57**	32	2823	1.57	2796	1.58	**2814**	**1.57**
371.applu331	32	2073	2.92	2136	2.84	**2099**	**2.89**	32	2073	2.92	2136	2.84	**2099**	**2.89**
372.smithwa	32	1060	5.06	979	5.47	**983**	**5.45**	32	1060	5.06	979	5.47	**983**	**5.45**
376.kdtree	32	1194	3.77	**1187**	**3.79**	1187	3.79	32	1194	3.77	**1187**	**3.79**	1187	3.79

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

Platform Notes

```
Sysinfo program /scratch/cparrott/OMP2012_v1.0/Docs/sysinfo
$Rev: 395 $ $Date:: 2012-07-25 #$ 8f8c0fe9e19c658963a1e67685e50647
running on piledriver Sun Jan 27 11:38:55 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 : AMD Opteron(tm) Processor 6386 SE
      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 : 2048 KB
```

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Platform Notes (Continued)

```
From /proc/meminfo
   MemTotal:       66087492 kB
   HugePages_Total:       0
   Hugepagesize:       2048 kB

/usr/bin/lsb_release -d
   Red Hat Enterprise Linux Server release 6.2 (Santiago)

From /etc/*release* /etc/*version*
   redhat-release: Red Hat Enterprise Linux Server release 6.2 (Santiago)
   system-release: Red Hat Enterprise Linux Server release 6.2 (Santiago)
   system-release-cpe: cpe:/o:redhat:enterprise_linux:6server:ga:server

uname -a:
   Linux piledriver 2.6.32-220.el6.x86_64 #1 SMP Wed Nov 9 08:03:13 EST 2011
   x86_64 x86_64 x86_64 GNU/Linux

run-level 3 Nov 9 14:31

SPEC is set to: /scratch/cparrott/OMP2012_v1.0
   Filesystem     Type     Size  Used Avail Use% Mounted on
   filer01.pgi.net:/vol/vol1/scratch
                  nfs      727G  126G  601G  18% /proj/scratch

Additional information from dmidecode:

(End of data from sysinfo program)
```

General Notes

```
Software Environment:
    ulimit -s unlimited
```

Base Compiler Invocation

C benchmarks:
  icc

C++ benchmarks:
  icpc

Fortran benchmarks:
  ifort

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Base Portability Flags

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

Base Optimization Flags

C benchmarks:
`-O3 -ipo1 -openmp -ansi-alias -mcmodel=medium -shared-intel`

C++ benchmarks:
`-O3 -ipo1 -openmp -ansi-alias -mcmodel=medium -shared-intel`

Fortran benchmarks:
`-O3 -ipo1 -openmp -ansi-alias -mcmodel=medium -shared-intel`

Peak Optimization Flags

C benchmarks:

352.nab: `basepeak = yes`

358.botsalgn: `basepeak = yes`

359.botsspar: `basepeak = yes`

367.imagick: `basepeak = yes`

372.smithwa: `basepeak = yes`

C++ benchmarks:

376.kdtree: `basepeak = yes`

Fortran benchmarks:

350.md: `basepeak = yes`

351.bwaves: `basepeak = yes`

357.bt331: `basepeak = yes`

360.ilbdc: `basepeak = yes`

362.fma3d: `basepeak = yes`

363.swim: `basepeak = yes`

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Peak Optimization Flags (Continued)

370.mgrid331: basepeak = yes

371.applu331: basepeak = yes

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 v1.0.
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