



SPEC® OMPG2012 Result

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Supermicro

(Test Sponsor: The Portland Group)

A+ Server 2022G-URF

SPECompG_peak2012 = 3.17

SPECompG_base2012 = 3.17

OMP2012 license:019

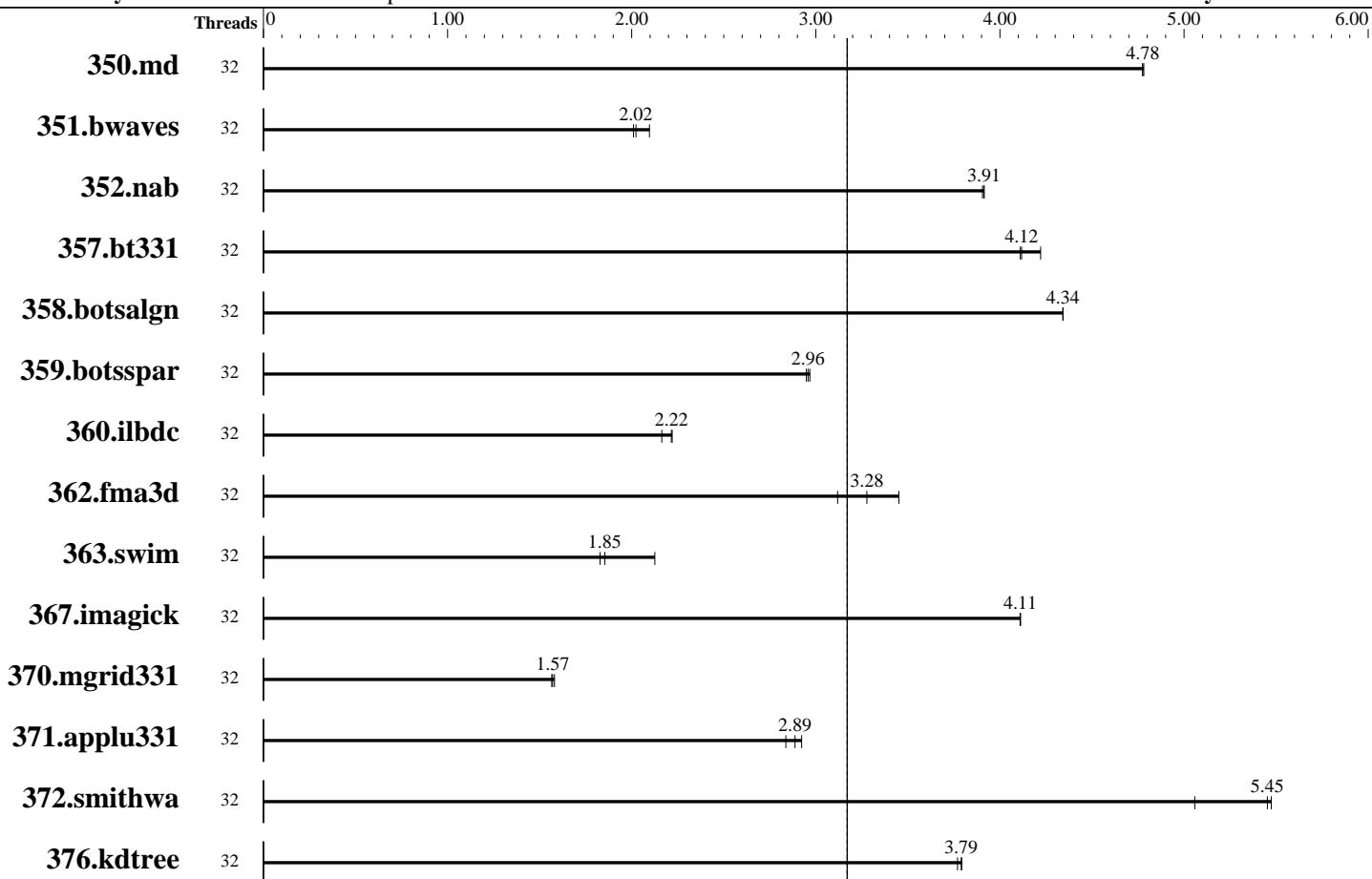
Test sponsor: The Portland Group

Tested by: The Portland Group

Test date: Jan-2013

Hardware Availability: Sep-2012

Software Availability: Jan-2013



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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

Software

Operating System: Red Hat Enterprise Linux Server release 6.2 (Santiago)
 Compiler: 2.6.32-220.el6.x86_64
 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

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Base Threads Run: 32

Minimum Peak Threads: 32

Maximum Peak Threads: 32

Results Table

Benchmark	Base							Peak						
	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	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 ## $ 8f8c0fe9e19c658963ale67685e50647
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 -ipol -openmp -ansi-alias -mcmodel=medium -shared-intel

C++ benchmarks:

-O3 -ipol -openmp -ansi-alias -mcmodel=medium -shared-intel

Fortran benchmarks:

-O3 -ipol -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>

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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 13:36:26 2014 by SPEC OMP2012 PS/PDF formatter v541.

Originally published on 20 February 2013.