



SPEC® OMPG2012 Result

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HP

(Test Sponsor: Indiana University)

HP Proliant DL580 G7 Server Series, Intel Xeon L7555, 1.87 GHz

SPECompG_peak2012 = Not Run

SPECompG_base2012 = 4.72

OMP2012 license:3440A

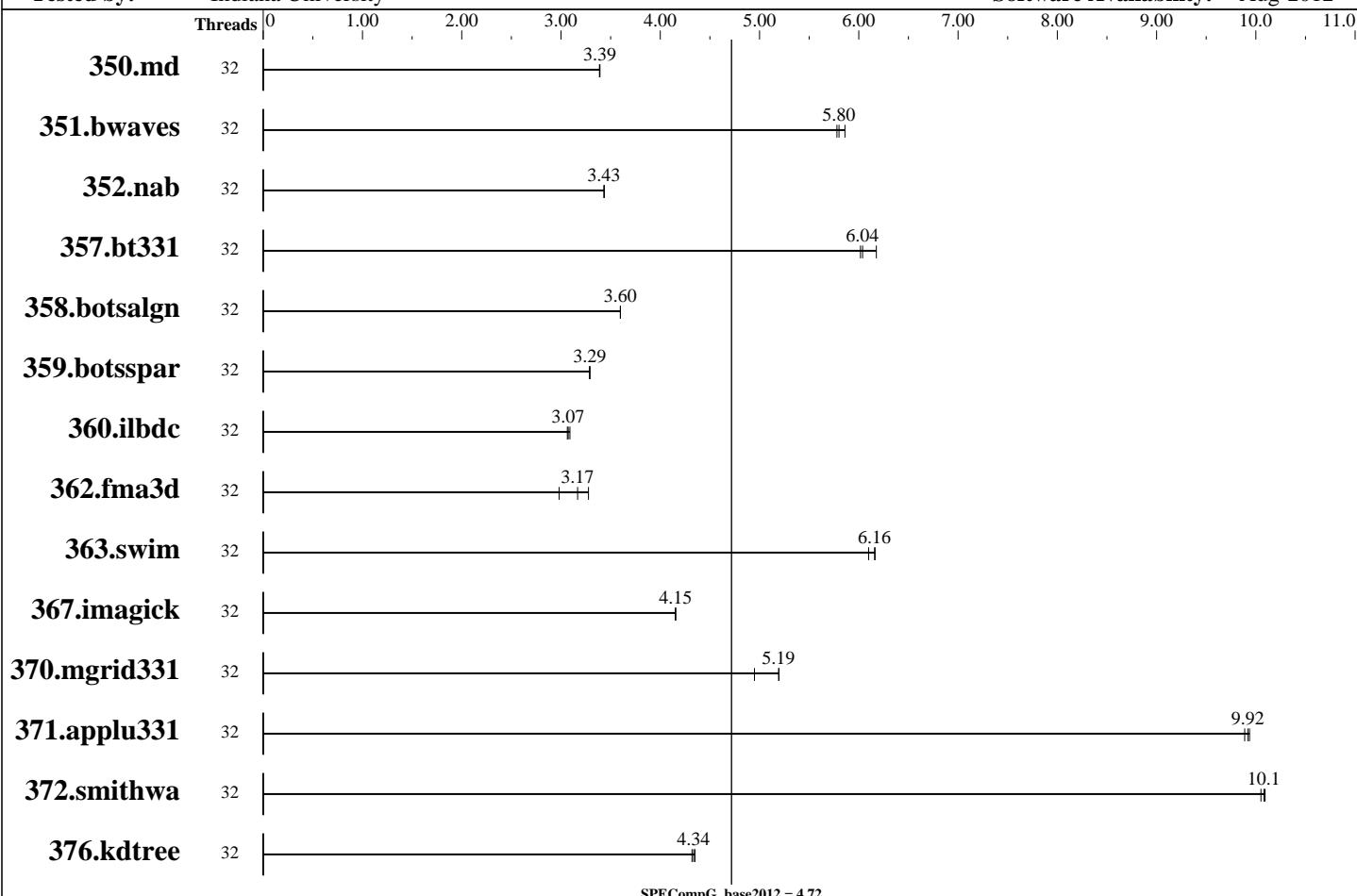
Test sponsor: Indiana University

Tested by: Indiana University

Test date: Oct-2012

Hardware Availability: Jun-2010

Software Availability: Aug-2012



Hardware

CPU Name: Intel Xeon L7555
 CPU Characteristics: Intel Turbo Boost Technology up to 2.533GHz, Hyper-Threading off
 CPU MHz: 1866
 CPU MHz Maximum: 2533
 FPU: Integrated
 CPU(s) enabled: 32 cores, 4 chips, 8 cores/chip
 CPU(s) orderable: 1-4 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: 24 MB I+D on chip per chip, 24 MB shared / 8 cores
 Other Cache: None
 Memory: 512 GB (64 x 8 GB 2Rx4 PC3-10600R-9, ECC)
 Disk Subsystem: Two 500 GB 7200 RPM 2.5" SAS hard drives, in RAID 1 mirror
 Other Hardware: None

Software

Operating System: RHEL6.3 (x86_64) 2.6.32-279.5.2.el6
 Compiler: Kernel 2.6.32-279.5.2.el6
 2.6.32-279.9.1.el6.x86_64
 C/C++/Fortran: Version 13.0.0.079 of Intel Composer XE 2013 for Linux Build 20120731
 Auto Parallel: No
 File System: NFSv3 (IBM N5500 NAS) over Gb ethernet
 System State: Multi-user, run level 3
 Base Pointers: 64-bit
 Peak Pointers: Not Applicable
 Other Software: None

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Base Threads Run: 32

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	Seconds	Ratio
350.md	32	1365	3.39	1367	3.39	<u>1365</u>	<u>3.39</u>									
351.bwaves	32	781	5.80	784	5.78	773	5.86									
352.nab	32	1132	3.44	<u>1133</u>	<u>3.43</u>	1133	3.43									
357.bt331	32	767	6.18	788	6.02	<u>785</u>	<u>6.04</u>									
358.botsalgn	32	1209	3.60	<u>1209</u>	<u>3.60</u>	1209	3.60									
359.botsspar	32	1597	3.29	1595	3.29	<u>1596</u>	<u>3.29</u>									
360.ilbdc	32	1152	3.09	1162	3.06	<u>1159</u>	<u>3.07</u>									
362.fma3d	32	1275	2.98	<u>1200</u>	<u>3.17</u>	1160	3.28									
363.swim	32	743	6.10	<u>736</u>	<u>6.16</u>	735	6.16									
367.imagick	32	1692	4.15	1693	4.15	1692	4.15									
370.mgrid331	32	851	5.20	893	4.95	<u>851</u>	<u>5.19</u>									
371.applu331	32	611	9.92	610	9.94	613	9.89									
372.smithwa	32	533	10.1	531	10.1	<u>532</u>	<u>10.1</u>									
376.kdtree	32	1038	4.34	1042	4.32	1035	4.35									

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

Platform Notes

```
Sysinfo program /N/soft/mason/omp2012-021/Docs/sysinfo
$Rev: 395 $ $Date::: 2012-07-25 #\$ 8f8c0fe9e19c658963a1e67685e50647
running on c13 Wed Oct 3 13:30:14 2012
```

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 : Intel(R) Xeon(R) CPU L7555 @ 1.87GHz
        4 "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 : 8
        physical 0: cores 0 1 2 3 8 9 10 11
        physical 1: cores 0 1 2 3 8 9 10 11
        physical 2: cores 0 1 2 3 8 9 10 11
        physical 3: cores 0 1 2 3 8 9 10 11
```

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Platform Notes (Continued)

cache size : 24576 kB

```
From /proc/meminfo
MemTotal:      529427940 kB
HugePages_Total:      0
Hugepagesize:     2048 kB
```

```
From /etc/*release* /etc/*version*
redhat-release: Red Hat Enterprise Linux Server release 6.3 (Santiago)
system-release: Red Hat Enterprise Linux Server release 6.3 (Santiago)
system-release-cpe: cpe:/o:redhat:enterprise_linux:6server:ga:server
```

```
uname -a:
Linux c13 2.6.32-279.9.1.el6.x86_64 #1 SMP Fri Aug 31 09:04:24 EDT 2012
x86_64 x86_64 x86_64 GNU/Linux
```

run-level 3 Oct 2 14:02

```
SPEC is set to: /N/soft/mason/omp2012-021
Filesystem      Type  Size  Used Avail Use% Mounted on
bl-nas2:/vol/soft
                nfs    1.2T  791G  410G  66%  /N/soft
```

Cannot run dmidecode; consider saying 'chmod +s /usr/sbin/dmidecode'

(End of data from sysinfo program)

General Notes

Environment:

```
KMP_AFFINITY=disabled
KMP_SCHEDULE=static,balanced
KMP_BLOCKTIME=infinite
KMP_LIBRARY=throughput
KMP_STACKSIZE=31m
OMP_NESTED=FALSE
OMP_DYNAMIC=FALSE
OMP_NUM_THREADS=32
```

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 -xSSE4.2 -ansi-alias -no-prec-div -openmp -shared-intel
-mcmodel=medium -ipo

C++ benchmarks:

-O3 -xSSE4.2 -ansi-alias -no-prec-div -openmp -shared-intel
-mcmodel=medium -ipo

Fortran benchmarks:

-O3 -xSSE4.2 -no-prec-div -openmp -shared-intel -mcmodel=medium
-ipo

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

<http://www.spec.org/omp2012/flags/Intel-ic13.0-linux64.html>

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

<http://www.spec.org/omp2012/flags/Intel-ic13.0-linux64.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 v21.

Report generated on Tue Jul 22 13:35:34 2014 by SPEC OMP2012 PS/PDF formatter v541.

Originally published on 16 October 2012.