



# SPEC® OMPG2012 Result

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**Dell**

(Test Sponsor: University of Delaware)

**SPECompG\_peak2012 = Not Run**

**Dell M630 Blade (Intel Xeon E5-2680 v3)**

**SPECompG\_base2012 = 7.03**

**OMP2012 license:**056A

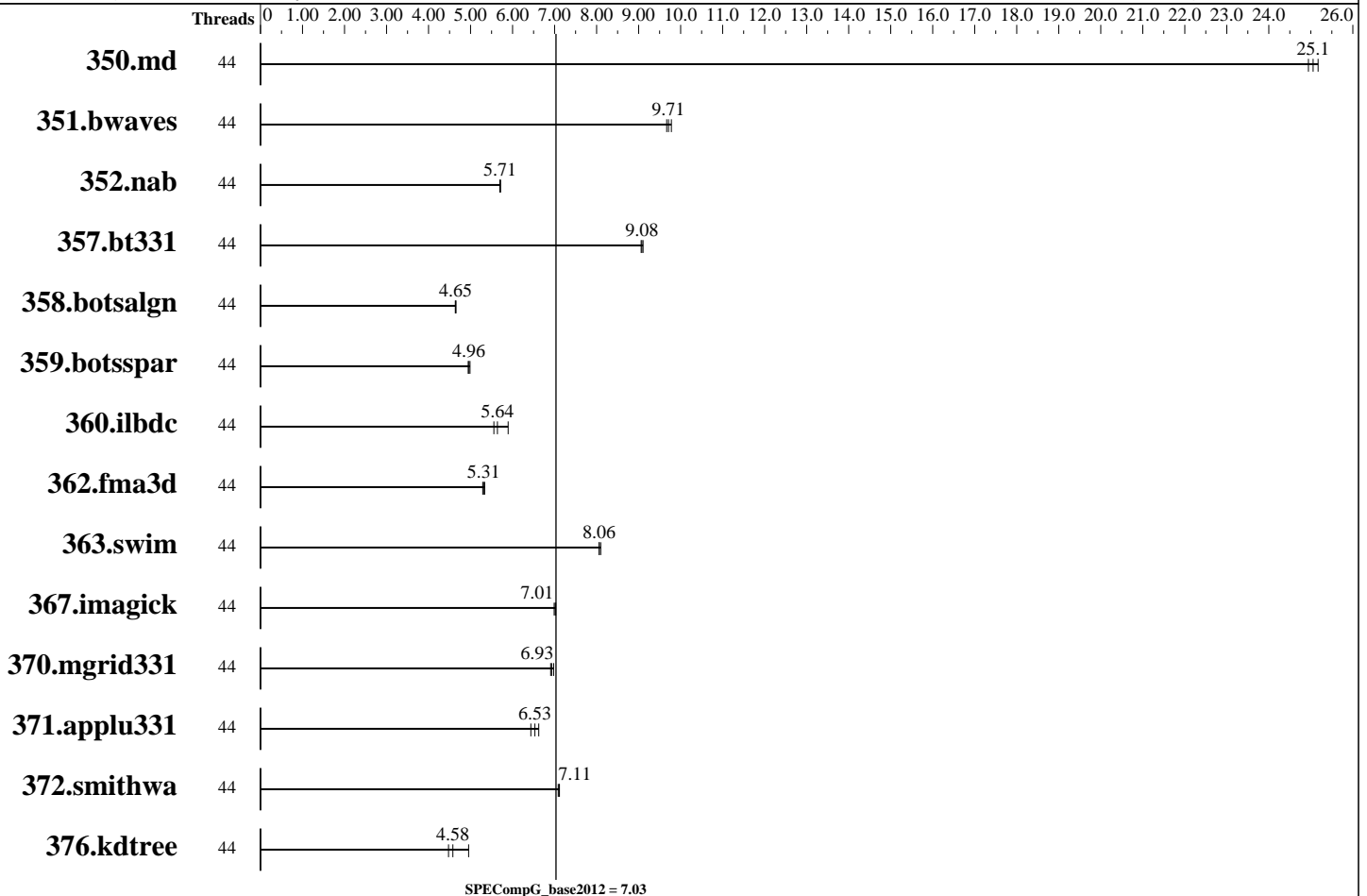
**Test sponsor:** University of Delaware

**Tested by:** University of Delaware

**Test date:** Sep-2018

**Hardware Availability:** Jun-2018

**Software Availability:** Jun-2018



## Hardware

CPU Name: Dual Intel Xeon E5-2680 v3  
 CPU Characteristics: Intel Turbo Boost Technology off, Hyper-Threading on  
 CPU MHz: 2500  
 CPU MHz Maximum: 3300  
 FPU: Integrated  
 CPU(s) enabled: 24 cores, 2 chips, 12 cores/chip, 2 threads/core  
 CPU(s) orderable: 1-2 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: 30 MB I+D on chip per chip  
 Other Cache: None  
 Memory: 128 GB (16 x 8 GB 2Rx4 PC4-2133P-R)  
 Disk Subsystem: 400GB (SATA Mix Use MLC 6Gbps 2.5in Hot-plug Drive, 13G (400-AEIX) dual SSDs, RAID-1)  
 Other Hardware: None

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## Software

Operating System: CentOS Linux release 7.5.1804 (Core) 3.10.0-862.3.3.el7.x86\_64  
 Compiler: C/C++/Fortran: Version 18.4 of PGI Community Edition  
 Auto Parallel: No  
 File System: XFS  
 System State: Run level 3 (multi-user)  
 Base Pointers: 64-bit  
 Peak Pointers: Not Applicable  
 Other Software: None



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Base Threads Run: 44

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	44	<b>185</b>	<b>25.1</b>	186	24.9	184	25.2							
351.bwaves	44	463	9.78	469	9.67	<b>466</b>	<b>9.71</b>							
352.nab	44	681	5.71	<b>682</b>	<b>5.71</b>	683	5.70							
357.bt331	44	<b>522</b>	<b>9.08</b>	523	9.06	521	9.11							
358.botsalgn	44	<b>936</b>	<b>4.65</b>	938	4.64	935	4.65							
359.botsspar	44	1053	4.99	<b>1058</b>	<b>4.96</b>	1062	4.94							
360.ilbdc	44	<b>631</b>	<b>5.64</b>	641	5.56	604	5.89							
362.fma3d	44	712	5.34	<b>715</b>	<b>5.31</b>	718	5.29							
363.swim	44	559	8.10	562	8.06	<b>562</b>	<b>8.06</b>							
367.imagick	44	1006	6.99	<b>1002</b>	<b>7.01</b>	1001	7.03							
370.mgrid331	44	640	6.91	<b>638</b>	<b>6.93</b>	633	6.98							
371.applu331	44	942	6.43	915	6.62	<b>928</b>	<b>6.53</b>							
372.smithwa	44	753	7.12	756	7.09	<b>754</b>	<b>7.11</b>							
376.kdtree	44	<b>983</b>	<b>4.58</b>	1005	4.48	908	4.95							

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

## Platform Notes

Sysinfo program /home/huberth/SPEC\_OMP2012v1.1/Docs/sysinfo  
Revision 563 of 2016-06-10 (097295389cf6073d8c3b03fa376740a5)  
running on r01c2b04 Mon Jul 2 13:05:55 2018

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 E5-2680 v3 @ 2.50GHz
 2 "physical id"s (chips)
 48 "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 : 12
siblings : 24
physical 0: cores 0 1 2 3 4 5 8 9 10 11 12 13
physical 1: cores 0 1 2 3 4 5 8 9 10 11 12 13
cache size : 30720 KB
```

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## Platform Notes (Continued)

From /proc/meminfo

MemTotal: 131612404 kB

HugePages\_Total: 0

Hugepagesize: 2048 kB

/usr/bin/lsb\_release -d

CentOS Linux release 7.5.1804 (Core)

From /etc/\*release\* /etc/\*version\*

centos-release: CentOS Linux release 7.5.1804 (Core)

centos-release-upstream: Derived from Red Hat Enterprise Linux 7.5 (Source)

os-release:

NAME="CentOS Linux"

VERSION="7 (Core)"

ID="centos"

ID\_LIKE="rhel fedora"

VERSION\_ID="7"

PRETTY\_NAME="CentOS Linux 7 (Core)"

ANSI\_COLOR="0;31"

CPE\_NAME="cpe:/o:centos:centos:7"

redhat-release: CentOS Linux release 7.5.1804 (Core)

system-release: CentOS Linux release 7.5.1804 (Core)

system-release-cpe: cpe:/o:centos:centos:7

uname -a:

Linux r01c2b04 3.10.0-862.3.3.el7.x86\_64 #1 SMP Fri Jun 15 04:15:27 UTC 2018  
x86\_64 x86\_64 x86\_64 GNU/Linux

run-level 3 Jul 2 11:49

SPEC is set to: /home/huberth/SPEC\_OMP2012v1.1

Filesystem	Type	Size	Used	Avail	Use%	Mounted on
/dev/mapper/centos_r01c2b04-root	xf	926G	43G	884G	5%	/

Additional information from dmidecode:

Warning: Use caution when you interpret this section. The 'dmidecode' program reads system data which is "intended to allow hardware to be accurately determined", but the intent may not be met, as there are frequent changes to hardware, firmware, and the "DMTF SMBIOS" standard.

(End of data from sysinfo program)

## General Notes

Environment Variables:

OMP\_STACKSIZE=1G

ulimit -s unlimited

Yes: The test sponsor attests, as of date of publication, that CVE-2017-5754 (Meltdown)

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## General Notes (Continued)

Yes: The test sponsor attests, as of date of publication, that CVE-2017-5753 (Spectre variant 1)  
Yes: The test sponsor attests, as of date of publication, that CVE-2017-5715 (Spectre variant 2)

## Base Compiler Invocation

C benchmarks:  
pgcc

C++ benchmarks:  
pgc++

Fortran benchmarks:  
pgf90

## Base Portability Flags

350.md: -Mfree  
357.bt331: -mcmode=medium  
363.swim: -mcmode=medium

## Base Optimization Flags

C benchmarks:  
-fast -Mfprelaxed -mp -Mipa=fast -Mipa=inline

C++ benchmarks:  
-fast -Mfprelaxed -mp -Mipa=fast -Mipa=inline

Fortran benchmarks:  
-fast -Mfprelaxed -mp -Mipa=fast -Mipa=inline

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

[http://www.spec.org/omp2012/flags/pgi17\\_linux\\_flags.html](http://www.spec.org/omp2012/flags/pgi17_linux_flags.html)

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

[http://www.spec.org/omp2012/flags/pgi17\\_linux\\_flags.xml](http://www.spec.org/omp2012/flags/pgi17_linux_flags.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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