## SPEC® OMPG2012 Result

**Dell**

(Test Sponsor: University of Delaware)

**Dell M630 Blade (KVM virtual machine)**

<table>
<thead>
<tr>
<th>SPECCompG_peak2012 = Not Run</th>
<th>SPECCompG_base2012 = 6.09</th>
</tr>
</thead>
</table>

### OMP2012 license:056A
Test sponsor: University of Delaware
Tested by: University of Delaware

### Hardware

**CPU Name:** Dual Intel Xeon E5-2680 v3 (44 of 48 ht cores allocated to KVM)
**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
**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) 118 GB (118/128 GB Allocated to KVM)
**Disk Subsystem:** 400GB (SATA Mix Use MLC 6Gb/s 2.5in Hot-plug Drive,13G (400-4EIX) dual SSDs, RAID-1)

### 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:** CephFS
**System State:** Run level 5 (multi-user)
**Base Pointers:** 64-bit
**Peak Pointers:** Not Applicable
**Other Software:** KVM Version 2.10.0-21

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### Test Results

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Continued on next page
SPEC OMPG2012 Result

Dell M630 Blade (KVM virtual machine)

SPECompG_peak2012 = Not Run
SPECompG_base2012 = 6.09

OMP2012 license: 056A
Test sponsor: University of Delaware
Tested by: University of Delaware

Other Hardware: None
Base Threads Run: 44
Minimum Peak Threads: --
Maximum Peak Threads: --

Results Table

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

Platform Notes

Sysinfo program /home/tmh97/SPEC_OMP2012v1.1/Docs/sysinfo
Revision 563 of 2016-06-10 (097295389cf6073d8c3b03fa376740a5)
running on js-169-102.jetstream-cloud.org Mon Jul 2 13:06:11 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
  44 "physical id"s (chips)
  44 "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 : 1
  siblings : 1
  physical 0: cores 0
  physical 1: cores 0
  physical 2: cores 0

Continued on next page
## Dell M630 Blade (KVM virtual machine)

<table>
<thead>
<tr>
<th>Spec</th>
<th>SPECompG_peak2012 = Not Run</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECompG_base2012 =</td>
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**OMP2012 license:** 056A  
**Test date:** Sep-2018  
**Test sponsor:** University of Delaware  
**Hardware Availability:** Jun-2018  
**Tested by:** University of Delaware  
**Software Availability:** Jun-2018

### Platform Notes (Continued)

```
physical 3: cores 0  
physical 4: cores 0  
physical 5: cores 0  
physical 6: cores 0  
physical 7: cores 0  
physical 8: cores 0  
physical 9: cores 0  
physical 10: cores 0  
physical 11: cores 0  
physical 12: cores 0  
physical 13: cores 0  
physical 14: cores 0  
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physical 16: cores 0  
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physical 33: cores 0  
physical 34: cores 0  
physical 35: cores 0  
physical 36: cores 0  
physical 37: cores 0  
physical 38: cores 0  
physical 39: cores 0  
physical 40: cores 0  
physical 41: cores 0  
physical 42: cores 0  
physical 43: cores 0  
cache size : 16384 KB
```

From `/proc/meminfo`
```
MemTotal: 123602104 kB  
HugePages_Total: 0  
Hugepagesize: 2048 kB
```

```
/usr/bin/lsb_release -d
CentOS Linux release 7.5.1804 (Core)
```

From `/etc/*release* /etc/*version*`
Dell M630 Blade (KVM virtual machine)

**SPEC OMPG2012 Result**

**Dell**

(Test Sponsor: University of Delaware)

**SPECCompG_peak2012 = Not Run**

**SPECCompG_base2012 = 6.09**

**Platform Notes (Continued)**

```plaintext
centos-release: CentOS Linux release 7.5.1804 (Core)
centos-release-upstream: Derived from Red Hat Enterprise Linux 7.5 (Source)
```

```plaintext
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
```

```plaintext
uname -a:
  Linux js-169-102.jetstream-cloud.org 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 5 Jun 27 13:49
```

**SPEC is set to: /home/tmh97/SPEC_OMP2012v1.1**

**Filesystem**  **Type**  **Size**  **Used**  **Avail**  **Use%**  **Mounted on**
/dev/sda1      xfs    60G   39G   22G  64% /

**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**

Jetstream VM Configuration:
1 VM instance running OMP2012 on single node with 44 VCPUS and 118 GB memory
44 of the 48 available VCPUS are allocated to KVM

Environment Variables:
OMP_STACKSIZE=1G
ulimit -s unlimited

Yes: The test sponsor attests, as of date of publication, that CVE-2017-5754 (Meltdown)
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)
SPEC OMPG2012 Result

Dell
(Test Sponsor: University of Delaware)

Dell M630 Blade (KVM virtual machine)

SPECCompG_peak2012 = Not Run

SPECCompG_base2012 = 6.09

Base Compiler Invocation

C benchmarks:
  pgcc

C++ benchmarks:
  pgc++

Fortran benchmarks:
  pgf90

Base Portability Flags

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

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

Tested with SPEC OMP2012 v1.1.
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