## Dell M630 Blade (KVM virtual machine)

### SPECCompG_peak2012 = Not Run

**SPECompG_base2012 = 6.77**

**Test Sponsor:** University of Delaware

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### 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
- **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 core
- **Other Cache:** None
- **Memory:** 128 GB (16 x 8 GB 2Rx8 PC4-2133P-R) | 118 GB (118/128 GB Allocated for KVM)
- **Disk Subsystem:** 400GB (SATA Mix Use MLC 6Gb/s 2.5in Hot-plug Drive, 13G (400-AEIX) 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 18.0.3.222 of Intel Parallel Studio XE for Linux Build 20180410
- **Auto Parallel:** No
- **File System:** CephFS
- **System State:** Run level 3 (multi-user)
- **Base Pointers:** 64-bit
- **Peak Pointers:** Not Applicable
- **Other Software:** KVM Version 2.10.0-21

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### Table

<table>
<thead>
<tr>
<th>Thread</th>
<th>SPECompG_base2012</th>
<th>Test Date</th>
<th>Hardware Availability</th>
<th>Software Availability</th>
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<td>Sep-2018</td>
<td>Jun-2018</td>
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Continued on next page
SPEC OMPG2012 Result

Dell M630 Blade (KVM virtual machine)

SPECompG_peak2012 = Not Run
SPECompG_base2012 = 6.77

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

<table>
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<tr>
<th>Benchmark</th>
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<th>Seconds</th>
<th>Ratio</th>
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</table>

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)
runtime on js-156-29.jetstream-cloud.org Mon Sep 17 18:45:03 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
SPEC OMPG2012 Result

Dell
(Test Sponsor: University of Delaware)

Dell M630 Blade (KVM virtual machine)

SPECompG_peak2012 = Not Run
SPECompG_base2012 = 6.77

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
- physical 15: cores 0
- physical 16: cores 0
- physical 17: cores 0
- physical 18: cores 0
- physical 19: cores 0
- physical 20: cores 0
- physical 21: cores 0
- physical 22: cores 0
- physical 23: cores 0
- physical 24: cores 0
- physical 25: cores 0
- physical 26: cores 0
- physical 27: cores 0
- physical 28: cores 0
- physical 29: cores 0
- physical 30: cores 0
- physical 31: cores 0
- physical 32: cores 0
- 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*

Continued on next page
**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:

- KMP_STACKSIZE=1G
- ulimit -s unlimited
- KMP_AFFINITY=compact

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)
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Tested by: University of Delaware

Test date: Sep-2018
Hardware Availability: Jun-2018
Software Availability: Jun-2018

Base Compiler Invocation

C benchmarks:
icc

C++ benchmarks:
icpc

Fortran benchmarks:
ifort

Base Portability Flags

350.md: -free
357.bt331: -mcmodel=medium
363.swim: -mcmodel=medium
367.imagick: -std=c99

Base Optimization Flags

C benchmarks:
-ansi-alias -qopenmp -ipo -O3 -no-prec-div -no-prec-sqrt
-fp-model fast=2 -xHost

C++ benchmarks:
-ansi-alias -qopenmp -ipo -O3 -no-prec-div -no-prec-sqrt
-fp-model fast=2 -xHost

Fortran benchmarks:
-qopenmp -ipo -O3 -no-prec-div -no-prec-sqrt -fp-model fast=2
-xHost

The flags file that was used to format this result can be browsed at
http://www.spec.org/omp2012/flags/Intel-ic17-linux64.html

You can also download the XML flags source by saving the following link:
http://www.spec.org/omp2012/flags/Intel-ic17-linux64.xml
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For other inquiries, please contact webmaster@spec.org.

Tested with SPEC OMP2012 v1.1.
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