



# SPEC® CPU2017 Floating Point Speed Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

## Dell Inc.

PowerEdge MX840c (Intel Xeon Gold 6148 CPU, 2.40GHz)

SPECspeed2017\_fp\_base = 160

SPECspeed2017\_fp\_peak = 162

CPU2017 License: 55

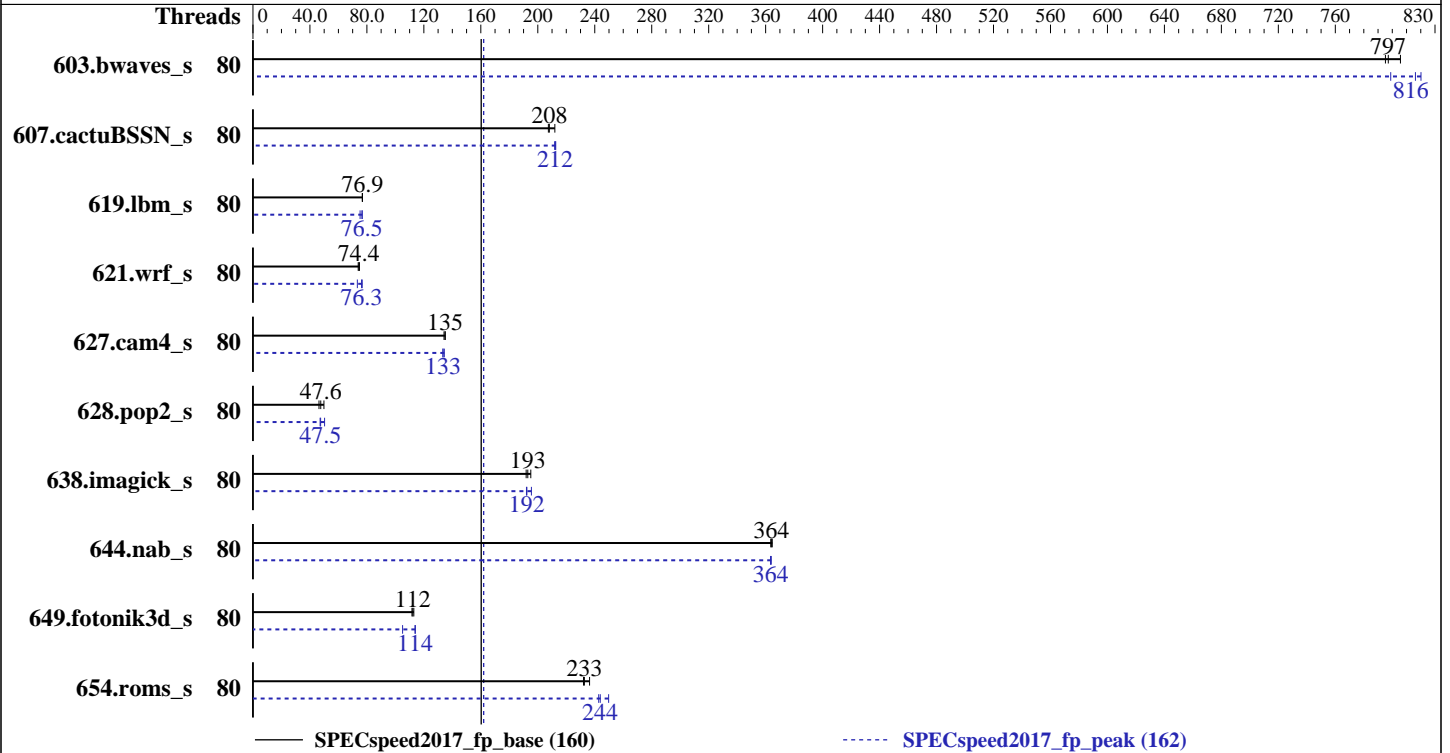
Test Sponsor: Dell Inc.

Tested by: Dell Inc.

Test Date: Mar-2018

Hardware Availability: Sep-2017

Software Availability: Sep-2017



### Hardware

CPU Name: Intel Xeon Gold 6148  
 Max MHz.: 3700  
 Nominal: 2400  
 Enabled: 80 cores, 4 chips  
 Orderable: 1,2 chips  
 Cache L1: 32 KB I + 32 KB D on chip per core  
 L2: 1 MB I+D on chip per core  
 L3: 27.5 MB I+D on chip per chip  
 Other: None  
 Memory: 768 GB (24 x 32 GB 2Rx8 PC4-2666V-R)  
 Storage: 960 GB SAS SSD  
 Other: None

### Software

OS: SUSE Linux Enterprise Server 12 SP3  
 4.4.114-94.11-default  
 Compiler: C/C++: Version 18.0.0.128 of Intel C/C++  
 Compiler for Linux;  
 Fortran: Version 18.0.0.128 of Intel Fortran  
 Compiler for Linux  
 Parallel: Yes  
 Firmware: Version 0.3.12 released Feb-2018  
 File System: xfs  
 System State: Run level 3 (multi-user)  
 Base Pointers: 64-bit  
 Peak Pointers: 64-bit  
 Other: None



# SPEC CPU2017 Floating Point Speed Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

## Dell Inc.

PowerEdge MX840c (Intel Xeon Gold 6148 CPU, 2.40GHz)

SPECspeed2017\_fp\_base = 160

SPECspeed2017\_fp\_peak = 162

CPU2017 License: 55  
Test Sponsor: Dell Inc.  
Tested by: Dell Inc.

Test Date: Mar-2018  
Hardware Availability: Sep-2017  
Software Availability: Sep-2017

## Results Table

Benchmark	Base							Peak						
	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
603.bwaves_s	80	<b>74.0</b>	<b>797</b>	74.2	795	73.2	806	80	73.8	799	71.9	820	<b>72.3</b>	<b>816</b>
607.cactuBSSN_s	80	78.6	212	<b>80.1</b>	<b>208</b>	80.4	207	80	<b>78.5</b>	<b>212</b>	78.7	212	78.4	213
619.lbm_s	80	68.2	76.8	<b>68.1</b>	<b>76.9</b>	68.1	76.9	80	<b>68.4</b>	<b>76.5</b>	68.3	76.7	69.6	75.2
621.wrf_s	80	177	74.8	<b>178</b>	<b>74.4</b>	179	73.9	80	<b>173</b>	<b>76.3</b>	180	73.3	172	76.7
627.cam4_s	80	66.1	134	65.6	135	<b>65.7</b>	<b>135</b>	80	<b>66.4</b>	<b>133</b>	66.5	133	66.0	134
628.pop2_s	80	238	49.8	256	46.4	<b>249</b>	<b>47.6</b>	80	236	50.3	<b>250</b>	<b>47.5</b>	252	47.2
638.imagick_s	80	<b>74.8</b>	<b>193</b>	73.9	195	75.2	192	80	75.1	192	73.8	196	<b>75.0</b>	<b>192</b>
644.nab_s	80	47.9	365	<b>48.0</b>	<b>364</b>	48.1	364	80	<b>48.1</b>	<b>364</b>	48.0	364	48.1	363
649.fotonik3d_s	80	<b>81.2</b>	<b>112</b>	80.7	113	81.7	112	80	<b>80.1</b>	<b>114</b>	86.8	105	79.9	114
654.roms_s	80	<b>67.7</b>	<b>233</b>	66.6	236	67.8	232	80	64.9	243	<b>64.6</b>	<b>244</b>	63.0	250

SPECspeed2017\_fp\_base = 160

SPECspeed2017\_fp\_peak = 162

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

## Operating System Notes

Stack size set to unlimited using "ulimit -s unlimited"

## General Notes

Environment variables set by runcpu before the start of the run:

KMP\_AFFINITY = "granularity=fine,compact"

LD\_LIBRARY\_PATH = "/root/cpu2017/lib/ia32:/root/cpu2017/lib/intel64:/root/cpu2017/je5.0.1-32:/root/cpu2017/je5.0.1-64"

OMP\_STACKSIZE = "192M"

Binaries compiled on a system with 1x Intel Core i7-4790 CPU + 32GB RAM memory using Redhat Enterprise Linux 7.4

Yes: The test sponsor attests, as of date of publication, that CVE-2017-5754 (Meltdown) is mitigated in the system as tested and documented.

Yes: The test sponsor attests, as of date of publication, that CVE-2017-5753 (Spectre variant 1) is mitigated in the system as tested and documented.

Yes: The test sponsor attests, as of date of publication, that CVE-2017-5715 (Spectre variant 2) is mitigated in the system as tested and documented.

Transparent Huge Pages enabled by default

Prior to runcpu invocation

Filesystem page cache synced and cleared with:

```
sync; echo 3> /proc/sys/vm/drop_caches
```

## Platform Notes

BIOS settings:

Sub NUMA Cluster Disabled

Virtualization Technology Disabled

(Continued on next page)



# SPEC CPU2017 Floating Point Speed Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

## Dell Inc.

PowerEdge MX840c (Intel Xeon Gold 6148 CPU, 2.40GHz)

SPECspeed2017\_fp\_base = 160

SPECspeed2017\_fp\_peak = 162

CPU2017 License: 55

Test Sponsor: Dell Inc.

Tested by: Dell Inc.

Test Date: Mar-2018

Hardware Availability: Sep-2017

Software Availability: Sep-2017

## Platform Notes (Continued)

System Profile set to Custom  
 CPU Performance set to Maximum Performance  
 C States set to Autonomous  
 C1E Disabled  
 Uncore Frequency set to Dynamic  
 Energy Efficiency Policy set to Performance  
 Memory Patrol Scrub Disabled  
 Logical Processor Disabled  
 CPU Interconnect Bus Link Power Management Disabled  
 PCI ASPM L1 Link Power Management Disabled  
 Sysinfo program /root/cpu2017/bin/sysinfo  
 Rev: r5797 of 2017-06-14 96c45e4568ad54c135fd618bcc091c0f  
 running on linux-5y3r Wed Mar 7 14:21:34 2018

SUT (System Under Test) info as seen by some common utilities.

For more information on this section, see

<https://www.spec.org/cpu2017/Docs/config.html#sysinfo>

From /proc/cpuinfo

model name : Intel(R) Xeon(R) Gold 6148 CPU @ 2.40GHz

4 "physical id"s (chips)

80 "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 : 20

siblings : 20

physical 0: cores 0 1 2 3 4 8 9 10 11 12 16 17 18 19 20 24 25 26 27 28

physical 1: cores 0 1 2 3 4 8 9 10 11 12 16 17 18 19 20 24 25 26 27 28

physical 2: cores 0 1 2 3 4 8 9 10 11 12 16 17 18 19 20 24 25 26 27 28

physical 3: cores 0 1 2 3 4 8 9 10 11 12 16 17 18 19 20 24 25 26 27 28

From lscpu:

Architecture: x86\_64

CPU op-mode(s): 32-bit, 64-bit

Byte Order: Little Endian

CPU(s): 80

On-line CPU(s) list: 0-79

Thread(s) per core: 1

Core(s) per socket: 20

Socket(s): 4

NUMA node(s): 4

Vendor ID: GenuineIntel

CPU family: 6

Model: 85

Model name: Intel(R) Xeon(R) Gold 6148 CPU @ 2.40GHz

Stepping: 4

CPU MHz: 2394.361

(Continued on next page)



# SPEC CPU2017 Floating Point Speed Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

**Dell Inc.**

PowerEdge MX840c (Intel Xeon Gold 6148 CPU, 2.40GHz)

SPECspeed2017\_fp\_base = 160

SPECspeed2017\_fp\_peak = 162

**CPU2017 License:** 55  
**Test Sponsor:** Dell Inc.  
**Tested by:** Dell Inc.

**Test Date:** Mar-2018  
**Hardware Availability:** Sep-2017  
**Software Availability:** Sep-2017

## Platform Notes (Continued)

```

BogoMIPS:                4788.72
Virtualization:          VT-x
L1d cache:               32K
L1i cache:               32K
L2 cache:                1024K
L3 cache:                28160K
NUMA node0 CPU(s):      0,4,8,12,16,20,24,28,32,36,40,44,48,52,56,60,64,68,72,76
NUMA node1 CPU(s):      1,5,9,13,17,21,25,29,33,37,41,45,49,53,57,61,65,69,73,77
NUMA node2 CPU(s):      2,6,10,14,18,22,26,30,34,38,42,46,50,54,58,62,66,70,74,78
NUMA node3 CPU(s):      3,7,11,15,19,23,27,31,35,39,43,47,51,55,59,63,67,71,75,79
Flags:                   fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov
pat pse36 clflush dts acpi mmx fxsr sse sse2 ss ht tm pbe syscall nx pdpe1gb rdtscp
lm constant_tsc art arch_perfmon pebs bts rep_good nopl xtopology nonstop_tsc
aperfperf eagerfpu pni pclmulqdq dtes64 monitor ds_cpl vmx smx est tm2 ssse3 sdbg
fma cx16 xtpr pdcm pcid dca sse4_1 sse4_2 x2apic movbe popcnt tsc_deadline_timer aes
xsave avx f16c rdrand lahf_lm abm 3dnowprefetch ida arat epb invpcid_single pln pts
dtherm intel_pt rsb_ctxsw spec_ctrl retpoline kaiser tpr_shadow vnmi flexpriority
ept vpid fsgsbase tsc_adjust bmi1 hle avx2 smep bmi2 erms invpcid rtm cqm mpx
avx512f avx512dq rdseed adx smap clflushopt clwb avx512cd avx512bw avx512vl xsaveopt
xsavec xgetbv1 cqm_llc cqm_occup_llc pku ospke

```

```

/proc/cpuinfo cache data
cache size : 28160 KB

```

From numactl --hardware WARNING: a numactl 'node' might or might not correspond to a physical chip.

```

available: 4 nodes (0-3)
node 0 cpus: 0 4 8 12 16 20 24 28 32 36 40 44 48 52 56 60 64 68 72 76
node 0 size: 192128 MB
node 0 free: 190727 MB
node 1 cpus: 1 5 9 13 17 21 25 29 33 37 41 45 49 53 57 61 65 69 73 77
node 1 size: 193525 MB
node 1 free: 190552 MB
node 2 cpus: 2 6 10 14 18 22 26 30 34 38 42 46 50 54 58 62 66 70 74 78
node 2 size: 193525 MB
node 2 free: 192173 MB
node 3 cpus: 3 7 11 15 19 23 27 31 35 39 43 47 51 55 59 63 67 71 75 79
node 3 size: 193523 MB
node 3 free: 190537 MB
node distances:
node  0  1  2  3
 0:  10  21  21  21
 1:  21  10  21  21
 2:  21  21  10  21
 3:  21  21  21  10

```

From /proc/meminfo

(Continued on next page)



# SPEC CPU2017 Floating Point Speed Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

**Dell Inc.**

PowerEdge MX840c (Intel Xeon Gold 6148 CPU, 2.40GHz)

SPECspeed2017\_fp\_base = 160

SPECspeed2017\_fp\_peak = 162

CPU2017 License: 55

Test Sponsor: Dell Inc.

Tested by: Dell Inc.

Test Date: Mar-2018

Hardware Availability: Sep-2017

Software Availability: Sep-2017

## Platform Notes (Continued)

MemTotal: 791248800 kB  
HugePages\_Total: 0  
Hugepagesize: 2048 kB

```
/usr/bin/lsb_release -d
SUSE Linux Enterprise Server 12 SP3
```

```
From /etc/*release* /etc/*version*
```

```
SuSE-release:
```

```
SUSE Linux Enterprise Server 12 (x86_64)
```

```
VERSION = 12
```

```
PATCHLEVEL = 3
```

```
# This file is deprecated and will be removed in a future service pack or release.
```

```
# Please check /etc/os-release for details about this release.
```

```
os-release:
```

```
NAME="SLES"
```

```
VERSION="12-SP3"
```

```
VERSION_ID="12.3"
```

```
PRETTY_NAME="SUSE Linux Enterprise Server 12 SP3"
```

```
ID="sles"
```

```
ANSI_COLOR="0;32"
```

```
CPE_NAME="cpe:/o:suse:sles:12:sp3"
```

```
uname -a:
```

```
Linux linux-5y3r 4.4.114-94.11-default #1 SMP Thu Feb 1 19:28:26 UTC 2018 (4309ff9)
x86_64 x86_64 x86_64 GNU/Linux
```

```
run-level 3 Mar 7 09:10
```

```
SPEC is set to: /root/cpu2017
```

```
Filesystem      Type  Size  Used Avail Use% Mounted on
/dev/sda3        xfs   882G  22G  861G   3% /
```

Additional information from dmidecode follows. 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.

```
BIOS Dell Inc. 0.3.12 02/06/2018
```

```
Memory:
```

```
12x 00AD00B300AD HMA84GR7AFR4N-VK 32 GB 2 rank 2666
```

```
12x 00AD063200AD HMA84GR7AFR4N-VK 32 GB 2 rank 2666
```

```
24x Not Specified Not Specified
```

```
(End of data from sysinfo program)
```



# SPEC CPU2017 Floating Point Speed Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

**Dell Inc.**

PowerEdge MX840c (Intel Xeon Gold 6148 CPU, 2.40GHz)

SPECspeed2017\_fp\_base = 160

SPECspeed2017\_fp\_peak = 162

CPU2017 License: 55

Test Sponsor: Dell Inc.

Tested by: Dell Inc.

Test Date: Mar-2018

Hardware Availability: Sep-2017

Software Availability: Sep-2017

## Compiler Version Notes

=====  
CC 619.lbm\_s(base) 638.imagick\_s(base, peak) 644.nab\_s(base, peak)  
-----

icc (ICC) 18.0.0 20170811  
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.  
-----

=====  
CC 619.lbm\_s(peak)  
-----

icc (ICC) 18.0.0 20170811  
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.  
-----

=====  
FC 607.cactuBSSN\_s(base)  
-----

icpc (ICC) 18.0.0 20170811  
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.  
icc (ICC) 18.0.0 20170811  
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.  
ifort (IFORT) 18.0.0 20170811  
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.  
-----

=====  
FC 607.cactuBSSN\_s(peak)  
-----

icpc (ICC) 18.0.0 20170811  
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.  
icc (ICC) 18.0.0 20170811  
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.  
ifort (IFORT) 18.0.0 20170811  
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.  
-----

=====  
FC 603.bwaves\_s(base) 649.fotonik3d\_s(base) 654.roms\_s(base)  
-----

ifort (IFORT) 18.0.0 20170811  
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.  
-----

=====  
FC 603.bwaves\_s(peak) 649.fotonik3d\_s(peak) 654.roms\_s(peak)  
-----

ifort (IFORT) 18.0.0 20170811  
-----

(Continued on next page)



# SPEC CPU2017 Floating Point Speed Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

**Dell Inc.**

PowerEdge MX840c (Intel Xeon Gold 6148 CPU, 2.40GHz)

SPECspeed2017\_fp\_base = 160

SPECspeed2017\_fp\_peak = 162

CPU2017 License: 55

Test Sponsor: Dell Inc.

Tested by: Dell Inc.

Test Date: Mar-2018

Hardware Availability: Sep-2017

Software Availability: Sep-2017

## Compiler Version Notes (Continued)

Copyright (C) 1985-2017 Intel Corporation. All rights reserved.

```
=====  
CC 621.wrf_s(base) 627.cam4_s(base, peak) 628.pop2_s(base)  
-----
```

```
ifort (IFORT) 18.0.0 20170811
```

```
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.
```

```
icc (ICC) 18.0.0 20170811
```

```
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.  
-----
```

```
=====  
CC 621.wrf_s(peak) 628.pop2_s(peak)  
-----
```

```
ifort (IFORT) 18.0.0 20170811
```

```
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.
```

```
icc (ICC) 18.0.0 20170811
```

```
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.  
-----
```

## Base Compiler Invocation

C benchmarks:

icc

Fortran benchmarks:

ifort

Benchmarks using both Fortran and C:

ifort icc

Benchmarks using Fortran, C, and C++:

icpc icc ifort

## Base Portability Flags

603.bwaves\_s: -DSPEC\_LP64

607.cactuBSSN\_s: -DSPEC\_LP64

619.lbm\_s: -DSPEC\_LP64

621.wrf\_s: -DSPEC\_LP64 -DSPEC\_CASE\_FLAG -convert big\_endian

627.cam4\_s: -DSPEC\_LP64 -DSPEC\_CASE\_FLAG

628.pop2\_s: -DSPEC\_LP64 -DSPEC\_CASE\_FLAG -convert big\_endian

-assume byterecl

(Continued on next page)



# SPEC CPU2017 Floating Point Speed Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

**Dell Inc.**

PowerEdge MX840c (Intel Xeon Gold 6148 CPU, 2.40GHz)

SPECspeed2017\_fp\_base = 160

SPECspeed2017\_fp\_peak = 162

**CPU2017 License:** 55

**Test Sponsor:** Dell Inc.

**Tested by:** Dell Inc.

**Test Date:** Mar-2018

**Hardware Availability:** Sep-2017

**Software Availability:** Sep-2017

## Base Portability Flags (Continued)

638.imagick\_s: -DSPEC\_LP64  
644.nab\_s: -DSPEC\_LP64  
649.fotonik3d\_s: -DSPEC\_LP64  
654.roms\_s: -DSPEC\_LP64

## Base Optimization Flags

C benchmarks:

-xCORE-AVX512 -ipo -O3 -no-prec-div -qopt-prefetch  
-ffinite-math-only -qopt-mem-layout-trans=3 -qopenmp -DSPEC\_OPENMP

Fortran benchmarks:

-DSPEC\_OPENMP -xCORE-AVX512 -ipo -O3 -no-prec-div -qopt-prefetch  
-ffinite-math-only -qopt-mem-layout-trans=3 -qopenmp  
-nonstandard-realloc-lhs -align array32byte

Benchmarks using both Fortran and C:

-xCORE-AVX512 -ipo -O3 -no-prec-div -qopt-prefetch  
-ffinite-math-only -qopt-mem-layout-trans=3 -qopenmp -DSPEC\_OPENMP  
-nonstandard-realloc-lhs -align array32byte

Benchmarks using Fortran, C, and C++:

-xCORE-AVX512 -ipo -O3 -no-prec-div -qopt-prefetch  
-ffinite-math-only -qopt-mem-layout-trans=3 -qopenmp -DSPEC\_OPENMP  
-nonstandard-realloc-lhs -align array32byte

## Base Other Flags

C benchmarks:

-m64 -std=c11

Fortran benchmarks:

-m64

Benchmarks using both Fortran and C:

-m64 -std=c11

Benchmarks using Fortran, C, and C++:

-m64 -std=c11





# SPEC CPU2017 Floating Point Speed Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

**Dell Inc.**

PowerEdge MX840c (Intel Xeon Gold 6148 CPU, 2.40GHz)

SPECspeed2017\_fp\_base = 160

SPECspeed2017\_fp\_peak = 162

CPU2017 License: 55

Test Sponsor: Dell Inc.

Tested by: Dell Inc.

Test Date: Mar-2018

Hardware Availability: Sep-2017

Software Availability: Sep-2017

## Peak Compiler Invocation

C benchmarks:

icc

Fortran benchmarks:

ifort

Benchmarks using both Fortran and C:

ifort icc

Benchmarks using Fortran, C, and C++:

icpc icc ifort

## Peak Portability Flags

Same as Base Portability Flags

## Peak Optimization Flags

C benchmarks:

```
619.lbm_s: -prof-gen(pass 1) -prof-use(pass 2) -O2 -xCORE-AVX512
-qopt-prefetch -ipo -O3 -ffinite-math-only -no-prec-div
-qopt-mem-layout-trans=3 -DSPEC_SUPPRESS_OPENMP -qopenmp
-DSPEC_OPENMP
```

```
638.imagick_s: -xCORE-AVX512 -ipo -O3 -no-prec-div -qopt-prefetch
-ffinite-math-only -qopt-mem-layout-trans=3 -qopenmp
-DSPEC_OPENMP
```

644.nab\_s: Same as 638.imagick\_s

Fortran benchmarks:

```
-prof-gen(pass 1) -prof-use(pass 2) -DSPEC_SUPPRESS_OPENMP
-DSPEC_OPENMP -O2 -xCORE-AVX512 -qopt-prefetch -ipo -O3
-ffinite-math-only -no-prec-div -qopt-mem-layout-trans=3 -qopenmp
-nostandard-realloc-lhs -align array32byte
```

Benchmarks using both Fortran and C:

```
621.wrf_s: -prof-gen(pass 1) -prof-use(pass 2) -O2 -xCORE-AVX512
-qopt-prefetch -ipo -O3 -ffinite-math-only -no-prec-div
-qopt-mem-layout-trans=3 -DSPEC_SUPPRESS_OPENMP -qopenmp
```

(Continued on next page)



# SPEC CPU2017 Floating Point Speed Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

**Dell Inc.**

PowerEdge MX840c (Intel Xeon Gold 6148 CPU, 2.40GHz)

SPECspeed2017\_fp\_base = 160

SPECspeed2017\_fp\_peak = 162

**CPU2017 License:** 55

**Test Sponsor:** Dell Inc.

**Tested by:** Dell Inc.

**Test Date:** Mar-2018

**Hardware Availability:** Sep-2017

**Software Availability:** Sep-2017

## Peak Optimization Flags (Continued)

621.wrf\_s (continued):

```
-DSPEC_OPENMP -nostandard-realloc-lhs -align array32byte
```

627.cam4\_s: -xCORE-AVX512 -ipo -O3 -no-prec-div -qopt-prefetch

```
-ffinite-math-only -qopt-mem-layout-trans=3 -qopenmp
```

```
-DSPEC_OPENMP -nostandard-realloc-lhs -align array32byte
```

628.pop2\_s: Same as 621.wrf\_s

Benchmarks using Fortran, C, and C++:

```
-prof-gen(pass 1) -prof-use(pass 2) -O2 -xCORE-AVX512 -qopt-prefetch
```

```
-ipo -O3 -ffinite-math-only -no-prec-div -qopt-mem-layout-trans=3
```

```
-DSPEC_SUPPRESS_OPENMP -qopenmp -DSPEC_OPENMP -nostandard-realloc-lhs
```

```
-align array32byte
```

## Peak Other Flags

C benchmarks:

```
-m64 -std=c11
```

Fortran benchmarks:

```
-m64
```

Benchmarks using both Fortran and C:

```
-m64 -std=c11
```

Benchmarks using Fortran, C, and C++:

```
-m64 -std=c11
```

The flags files that were used to format this result can be browsed at

<http://www.spec.org/cpu2017/flags/Intel-ic18.0-official-linux64.2017-10-19.html>

<http://www.spec.org/cpu2017/flags/Dell-Platform-Flags-PowerEdge14G-revC.html>

You can also download the XML flags sources by saving the following links:

<http://www.spec.org/cpu2017/flags/Intel-ic18.0-official-linux64.2017-10-19.xml>

<http://www.spec.org/cpu2017/flags/Dell-Platform-Flags-PowerEdge14G-revC.xml>

SPEC is a registered trademark of the Standard Performance Evaluation Corporation. All other brand and product names appearing in this result are trademarks or registered trademarks of their respective holders.

For questions about this result, please contact the tester. For other inquiries, please contact [info@spec.org](mailto:info@spec.org).

Tested with SPEC CPU2017 v1.0.2 on 2018-03-07 01:21:34-0500.

Report generated on 2018-10-31 18:13:33 by CPU2017 PDF formatter v6067.

Originally published on 2018-09-04.