Dell Inc.

PowerEdge C6420 (Intel Xeon Gold 6222V, 1.80GHz)

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

Threads

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Threads</th>
<th>SPECspeed2017_fp_base</th>
<th>SPECspeed2017_fp_peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>603.bwaves_s</td>
<td>80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>607.cactuBSSN_s</td>
<td>80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>619.lbm_s</td>
<td>80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>621.wrf_s</td>
<td>80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>627.cam4_s</td>
<td>80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>628.pop2_s</td>
<td>80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>638.imagick_s</td>
<td>80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>644.nab_s</td>
<td>80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>649.fotonik3d_s</td>
<td>80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>654.roms_s</td>
<td>80</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Hardware

CPU Name: Intel Xeon Gold 6222V
Max MHz.: 3600
Nominal: 1800
Enabled: 40 cores, 2 chips, 2 threads/core
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: 192 GB (12 x 16 GB 2Rx8 PC4-2933Y-R, running at 2400)
Storage: 1 x 480 GB SATA SSD
Other: None

Software

OS: Ubuntu 18.04.2 LTS
kernel 4.15.0-45-generic
Compiler: C/C++: Version 19.0.1.144 of Intel C/C++ Compiler Build 20181018 for Linux;
Fortran: Version 19.0.1.144 of Intel Fortran Compiler Build 20181018 for Linux
Parallel: Yes
Firmware: Version 2.1.6 released Mar-2019
File System: ext4
System State: Run level 5 (multi-user)
Base Pointers: 64-bit
Peak Pointers: 64-bit
Other: None
Dell Inc.  
PowerEdge C6420 (Intel Xeon Gold 6222V, 1.80GHz)  

Result Table

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Threads</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Base</th>
<th>Threads</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Peak</th>
<th>Threads</th>
<th>Seconds</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>603.bwaves_s</td>
<td>80</td>
<td>147</td>
<td>400</td>
<td>147/401</td>
<td>80</td>
<td>147</td>
<td>401</td>
<td>113/148/399</td>
<td>80</td>
<td>147</td>
<td>401</td>
</tr>
<tr>
<td>607.cactuBSSN_s</td>
<td>80</td>
<td>136</td>
<td>123</td>
<td>80.3</td>
<td>80</td>
<td>137</td>
<td>122</td>
<td>113/134/124</td>
<td>80</td>
<td>137</td>
<td>123</td>
</tr>
<tr>
<td>619.lbm_s</td>
<td>80</td>
<td>67.4</td>
<td>77.7</td>
<td>65.2</td>
<td>80</td>
<td>65.3</td>
<td>80.2</td>
<td>113/65.3/80.2</td>
<td>80</td>
<td>65.3</td>
<td>80.2</td>
</tr>
<tr>
<td>621.wrf_s</td>
<td>80</td>
<td>126</td>
<td>105</td>
<td>127/127/105</td>
<td>80</td>
<td>130</td>
<td>102</td>
<td>113/102/130</td>
<td>80</td>
<td>130</td>
<td>102</td>
</tr>
<tr>
<td>627.cam4_s</td>
<td>80</td>
<td>89.8</td>
<td>98.7</td>
<td>90.1</td>
<td>80</td>
<td>90.2</td>
<td>98.3</td>
<td>113/90.1/98.3</td>
<td>80</td>
<td>90.2</td>
<td>98.3</td>
</tr>
<tr>
<td>628.pop2_s</td>
<td>80</td>
<td>204</td>
<td>58.2</td>
<td>205/57.9/204</td>
<td>80</td>
<td>200</td>
<td>59.2</td>
<td>113/200/59.2</td>
<td>80</td>
<td>200</td>
<td>59.2</td>
</tr>
<tr>
<td>638.imagick_s</td>
<td>80</td>
<td>153</td>
<td>94.4</td>
<td>153/94.4</td>
<td>80</td>
<td>152</td>
<td>94.6</td>
<td>113/153/94.5</td>
<td>80</td>
<td>153</td>
<td>94.1</td>
</tr>
<tr>
<td>644.nab_s</td>
<td>80</td>
<td>87.7</td>
<td>199</td>
<td>87.9</td>
<td>80</td>
<td>88.0</td>
<td>198</td>
<td>113/87.9/199</td>
<td>80</td>
<td>88.0</td>
<td>199</td>
</tr>
<tr>
<td>649.fotonik3d_s</td>
<td>80</td>
<td>131</td>
<td>69.8</td>
<td>131/69.6/131</td>
<td>80</td>
<td>131</td>
<td>69.4</td>
<td>113/131/69.4</td>
<td>80</td>
<td>131</td>
<td>69.3</td>
</tr>
</tbody>
</table>

SPECspeed2017_fp_base = 113  
SPECspeed2017_fp_peak = 113

Submit Notes
The numactl mechanism was used to bind copies to processors. The config file option 'submit' was used to generate numactl commands to bind each copy to a specific processor. For details, please see the config file.

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:
LD_LIBRARY_PATH = "/home/cpu2017/lib/ia32:/home/cpu2017/lib/intel64"

Binaries compiled on a system with 1x Intel Core i9-7900X CPU + 32GB RAM memory using Redhat Enterprise Linux 7.5
NA: 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
runcpus command invoked through numactl i.e.:
numactl --interleave=all runcpu <etc>
SPEC CPU2017 Floating Point Speed Result

Dell Inc.  
PowerEdge C6420 (Intel Xeon Gold 6222V, 1.80GHz)  

SPECspeed2017_fp_base = 113  
SPECspeed2017_fp_peak = 113

BIOS settings:  
ADDDC setting disabled  
Sub NUMA Cluster enabled  
Virtualization Technology disabled  
DCU Streamer Prefetcher enabled  
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 enabled  
CPU Interconnect Bus Link Power Management disabled  
PCI ASPM L1 Link Power Management disabled  
Sysinfo program /home/cpu2017/bin/sysinfo  
Rev: r5974 of 2018-05-19 9bcde8f2999c33d61f64985e45859ea9  
runtime on intel-sut Thu Apr 11 23:35:02 2019

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 6222V CPU @ 1.80GHz  
  2 "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 : 40  
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

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: 2  
Core(s) per socket: 20  
Socket(s): 2  
NUMA node(s): 4  
Vendor ID: GenuineIntel  
CPU family: 6  
Model: 85

(Continued on next page)
**SPEC CPU2017 Floating Point Speed Result**

**Dell Inc.**

PowerEdge C6420 (Intel Xeon Gold 6222V, 1.80GHz)

---

**SPECspeed2017_fp_base = 113**

**SPECspeed2017_fp_peak = 113**

---

**CPU2017 License:** 55  
**Test Sponsor:** Dell Inc.  
**Tested by:** Dell Inc.  
**Test Date:** Mar-2019  
**Hardware Availability:** Apr-2019  
**Software Availability:** Feb-2019

---

**Platform Notes (Continued)**

- Model name: Intel(R) Xeon(R) Gold 6222V CPU @ 1.80GHz  
- Stepping: 7  
- CPU MHz: 3071.555  
- BogoMIPS: 3600.00  
- 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 acpica 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 cpuid aperfmperf 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 aes xsave avx f16c rdrand lahf_lm abm 3dnowprefetch 
  cpuid_fault epb cat_l3 cdp_l3 invpcid_single ssbd mba ibrs ibpb 
  stibp ibrs_enhanced tpr_shadow vmmx flexpriority ept vpid fsgsbbase 
  tsc_adjust bmi1 hle avx2 smep bmi2  
- /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: 46783 MB  
- node 0 free: 43417 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: 48380 MB  
- node 1 free: 45859 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: 48359 MB  
- node 2 free: 46320 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: 48378 MB  
- node 3 free: 46719 MB  
- node distances:  
  0: 10 21 11 21  
  1: 21 10 21 11

(Continued on next page)
Dell Inc. PowerEdge C6420 (Intel Xeon Gold 6222V, 1.80GHz)

SPECspeed2017_fp_base = 113
SPECspeed2017_fp_peak = 113

CPU2017 License: 55
Test Sponsor: Dell Inc.
Tested by: Dell Inc.
Test Date: Mar-2019
Hardware Availability: Apr-2019
Software Availability: Feb-2019

Platform Notes (Continued)

2: 11 21 10 21
3: 21 11 21 10

From /proc/meminfo
MemTotal: 196507576 kB
HugePages_Total: 0
Hugepagesize: 2048 kB

/usr/bin/lsb_release -d
Ubuntu 18.04.2 LTS

From /etc/*release* /etc/*version*
debian_version: buster/sid
os-release:
   NAME=Ubuntu
   VERSION="18.04.2 LTS (Bionic Beaver)"
   ID=ubuntu
   ID_LIKE=debian
   PRETTY_NAME="Ubuntu 18.04.2 LTS"
   VERSION_ID="18.04"
   HOME_URL="https://www.ubuntu.com/"
   SUPPORT_URL="https://help.ubuntu.com/"

uname -a:
   Linux intel-sut 4.15.0-45-generic #48-Ubuntu SMP Tue Jan 29 16:28:13 UTC 2019 x86_64
   x86_64 x86_64 GNU/Linux

Kernel self-reported vulnerability status:
CVE-2017-5754 (Meltdown): Not affected
CVE-2017-5753 (Spectre variant 1): Mitigation: __user pointer sanitization
CVE-2017-5715 (Spectre variant 2): Mitigation: Enhanced IBRS, IBPB

run-level 5 Apr 9 22:12

SPEC is set to: /home/cpu2017
Filesystem Type Size Used Avail Use% Mounted on
/dev/sda2 ext4 439G 25G 392G 6% /

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. 2.1.6 03/04/2019

Memory:
   11x 002C069D002C 18ASF2G72PD2-2G9E1 16 GB 2 rank 2933, configured at 2400
   1x 00AD00B300AD HMA82GR7CJR8N-WM 16 GB 2 rank 2933, configured at 2400

(Continued on next page)
SPEC CPU2017 Floating Point Speed Result

Dell Inc.

PowerEdge C6420 (Intel Xeon Gold 6222V, 1.80GHz)

SPECspeed2017_fp_base = 113
SPECspeed2017_fp_peak = 113

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

Test Date: Mar-2019
Hardware Availability: Apr-2019
Software Availability: Feb-2019

Platform Notes (Continued)

4x Not Specified Not Specified

(End of data from sysinfo program)

Compiler Version Notes

==============================================================================
CC  619.lbm_s(base, peak) 638.imagick_s(base, peak) 644.nab_s(base, peak)
-----------------------------------------------------------------------------
Intel(R) C Intel(R) 64 Compiler for applications running on Intel(R) 64,
Version 19.0.1.144 Build 20181018
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.

-----------------------------------------------------------------------------
FC  607.cactuBSSN_s(base, peak)
-----------------------------------------------------------------------------
Intel(R) C++ Intel(R) 64 Compiler for applications running on Intel(R) 64,
Version 19.0.1.144 Build 20181018
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
Intel(R) C Intel(R) 64 Compiler for applications running on Intel(R) 64,
Version 19.0.1.144 Build 20181018
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
Intel(R) Fortran Intel(R) 64 Compiler for applications running on Intel(R)
64, Version 19.0.1.144 Build 20181018
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
-----------------------------------------------------------------------------
FC  603.bwaves_s(base) 649.fotonik3d_s(base) 654.roms_s(base, peak)
-----------------------------------------------------------------------------
Intel(R) Fortran Intel(R) 64 Compiler for applications running on Intel(R)
64, Version 19.0.1.144 Build 20181018
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
-----------------------------------------------------------------------------
FC  603.bwaves_s(peak) 649.fotonik3d_s(peak)
-----------------------------------------------------------------------------
Intel(R) Fortran Intel(R) 64 Compiler for applications running on Intel(R)
64, Version 19.0.1.144 Build 20181018
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
-----------------------------------------------------------------------------
CC  621.wrf_s(base) 627.cam4_s(base, peak) 628.pop2_s(base)

(Continued on next page)
## Compiler Version Notes (Continued)

Intel(R) Fortran Intel(R) 64 Compiler for applications running on Intel(R) 64, Version 19.0.1.144 Build 20181018
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.

Intel(R) C Intel(R) 64 Compiler for applications running on Intel(R) 64, Version 19.0.1.144 Build 20181018
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.

---

Base Compiler Invocation

**C benchmarks:**
```bash
icc -m64 -std=c11
```

**Fortran benchmarks:**
```bash
ifort -m64
```

**Benchmarks using both Fortran and C:**
```bash
ifort -m64 icc -m64 -std=c11
```

**Benchmarks using Fortran, C, and C++:**
```bash
icpc -m64 icc -m64 -std=c11 ifort -m64
```

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

**Dell Inc.**

PowerEdge C6420 (Intel Xeon Gold 6222V, 1.80GHz)

<table>
<thead>
<tr>
<th>SPECspeed2017_fp_base = 113</th>
<th>SPECspeed2017_fp_peak = 113</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dell Inc.</td>
<td>Test Date: Mar-2019</td>
</tr>
<tr>
<td>Dell Inc.</td>
<td>Hardware Availability: Apr-2019</td>
</tr>
<tr>
<td>Dell Inc.</td>
<td>Software Availability: Feb-2019</td>
</tr>
</tbody>
</table>

**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=4 -qopenmp -DSPEC_OPENMP

**Fortran benchmarks:**

-DSPEC_OPENMP -xCORE-AVX512 -ipo -O3 -no-prec-div -qopt-prefetch
-ffinite-math-only -qopt-mem-layout-trans=4 -qopenmp
-nostandard-realloc-lhs

**Benchmarks using both Fortran and C:**

-xCORE-AVX512 -ipo -O3 -no-prec-div -qopt-prefetch
-ffinite-math-only -qopt-mem-layout-trans=4 -qopenmp -DSPEC_OPENMP
-nostandard-realloc-lhs

**Benchmarks using Fortran, C, and C++:**

-xCORE-AVX512 -ipo -O3 -no-prec-div -qopt-prefetch
-ffinite-math-only -qopt-mem-layout-trans=4 -qopenmp -DSPEC_OPENMP
-nostandard-realloc-lhs

**Peak Compiler Invocation**

**C benchmarks:**

icc -m64 -std=c11

**Fortran benchmarks:**

ifort -m64

**Benchmarks using both Fortran and C:**

ifort -m64 icc -m64 -std=c11

**Benchmarks using Fortran, C, and C++:**

icpc -m64 icc -m64 -std=c11 ifort -m64
SPEC CPU2017 Floating Point Speed Result

Dell Inc.
PowerEdge C6420 (Intel Xeon Gold 6222V, 1.80GHz)

<table>
<thead>
<tr>
<th>SPECspeed2017_fp_base</th>
<th>113</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECspeed2017_fp_peak</td>
<td>113</td>
</tr>
</tbody>
</table>

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

Test Date: Mar-2019
Hardware Availability: Apr-2019
Software Availability: Feb-2019

Peak Portability Flags
Same as Base Portability Flags

Peak Optimization Flags

C benchmarks:
-xCORE-AVX512 -ipo -O3 -no-prec-div -qopt-prefetch
-ffinite-math-only -qopt-mem-layout-trans=4 -qopenmp -DSPEC_OPENMP

Fortran benchmarks:
603.bwaves_s: -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=4
 -qopenmp -nostandard-realloc-lhs

649.fotonik3d_s: Same as 603.bwaves_s

654.roms_s: -DSPEC_OPENMP -xCORE-AVX512 -ipo -O3 -no-prec-div
 -qopt-prefetch -ffinite-math-only -qopt-mem-layout-trans=4
 -qopenmp -nostandard-realloc-lhs

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=4 -DSPEC_SUPPRESS_OPENMP -qopenmp
 -DSPEC_OPENMP -nostandard-realloc-lhs

627.cam4_s: -xCORE-AVX512 -ipo -O3 -no-prec-div -qopt-prefetch
 -ffinite-math-only -qopt-mem-layout-trans=4 -qopenmp
 -DSPEC_OPENMP -nostandard-realloc-lhs

628.pop2_s: Same as 621.wrf_s

Benchmarks using Fortran, C, and C++:
-xCORE-AVX512 -ipo -O3 -no-prec-div -qopt-prefetch
-ffinite-math-only -qopt-mem-layout-trans=4 -qopenmp -DSPEC_OPENMP
-nostandard-realloc-lhs

The flags files that were used to format this result can be browsed at
# SPEC CPU2017 Floating Point Speed Result

## Dell Inc.

PowerEdge C6420 (Intel Xeon Gold 6222V, 1.80GHz)

<table>
<thead>
<tr>
<th>SPECspeed2017_fp_base</th>
<th>SPECspeed2017_fp_peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>113</td>
<td>113</td>
</tr>
</tbody>
</table>

**CPU2017 License:** 55  
**Test Sponsor:** Dell Inc.  
**Tested by:** Dell Inc.  
**Test Date:** Mar-2019  
**Hardware Availability:** Apr-2019  
**Software Availability:** Feb-2019

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


---

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.

Tested with SPEC CPU2017 v1.0.5 on 2019-04-11 19:35:02-0400.  
Originally published on 2019-05-29.