# SPEC® CPU2017 Integer Speed Result

## Dell Inc.

PowerEdge R740xd (Intel Xeon Bronze 3204, 1.90GHz)

<table>
<thead>
<tr>
<th>SPECspeed2017_int_base</th>
<th>SPECspeed2017_int_peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.67</td>
<td>4.76</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Threads</th>
<th>0</th>
<th>1.00</th>
<th>2.00</th>
<th>3.00</th>
<th>4.00</th>
<th>5.00</th>
<th>6.00</th>
<th>7.00</th>
<th>8.00</th>
<th>9.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>600.perlbench_s</td>
<td>12</td>
<td></td>
<td></td>
<td>3.16</td>
<td>3.72</td>
<td>4.85</td>
<td>4.94</td>
<td>6.54</td>
<td>6.53</td>
<td></td>
</tr>
<tr>
<td>602.gcc_s</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6.22</td>
<td>6.19</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>605.mcf_s</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.87</td>
<td>2.87</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>620.omnetpp_s</td>
<td>12</td>
<td></td>
<td></td>
<td>3.56</td>
<td>3.56</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>623.xalancbmk_s</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td>3.61</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>625.x264_s</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.95</td>
<td>5.95</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>631.deepsjeng_s</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2.33</td>
<td>2.33</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>641.leela_s</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6.87</td>
<td>6.86</td>
<td>8.08</td>
<td>8.19</td>
<td></td>
</tr>
<tr>
<td>648.exchange2_s</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>657.xz_s</td>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

## Hardware

- **CPU Name:** Intel Xeon Bronze 3204  
- **Max MHz:** 1900  
- **Nominal:** 1900  
- **Enabled:** 12 cores, 2 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:** 8.25 MB I+D on chip per chip  
- **Other:** None  
- **Memory:** 384 GB (24 x 16 GB 2Rx8 PC4-2933Y-R, running at 2133)  
- **Storage:** 1 x 960 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 2.2.10 released May-2019  
- **File System:** ext4  
- **System State:** Run level 5 (multi-user)  
- **Base Pointers:** 64-bit  
- **Peak Pointers:** 64-bit  
- **Other:** jemalloc memory allocator V5.0.1
SPEC CPU2017 Integer Speed Result

Dell Inc.
PowerEdge R740xd (Intel Xeon Bronze 3204, 1.90GHz)

SPECspeed2017_int_base = 4.67
SPECspeed2017_int_peak = 4.76

Results Table

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Threads</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benchmark</td>
<td>Base</td>
<td>Peak</td>
<td>Base</td>
<td>Peak</td>
<td>Base</td>
<td>Peak</td>
<td>Base</td>
</tr>
<tr>
<td>600.perlbench_s</td>
<td>12</td>
<td>558</td>
<td>3.18</td>
<td>562</td>
<td>3.16</td>
<td>565</td>
<td>3.14</td>
</tr>
<tr>
<td>602.gcc_s</td>
<td>12</td>
<td>817</td>
<td>4.87</td>
<td>822</td>
<td>4.84</td>
<td>822</td>
<td>4.85</td>
</tr>
<tr>
<td>605.mcf_s</td>
<td>12</td>
<td>722</td>
<td>6.54</td>
<td>722</td>
<td>6.54</td>
<td>720</td>
<td>6.56</td>
</tr>
<tr>
<td>620.omnetpp_s</td>
<td>12</td>
<td>459</td>
<td>3.56</td>
<td>458</td>
<td>3.56</td>
<td>458</td>
<td>3.56</td>
</tr>
<tr>
<td>623.xalancbmk_s</td>
<td>12</td>
<td>227</td>
<td>6.23</td>
<td>228</td>
<td>6.22</td>
<td>229</td>
<td>6.18</td>
</tr>
<tr>
<td>625.x264_s</td>
<td>12</td>
<td>297</td>
<td>5.95</td>
<td>297</td>
<td>5.94</td>
<td>297</td>
<td>5.95</td>
</tr>
<tr>
<td>631.deepsjeng_s</td>
<td>12</td>
<td>500</td>
<td>2.87</td>
<td>500</td>
<td>2.87</td>
<td>500</td>
<td>2.87</td>
</tr>
<tr>
<td>641.leela_s</td>
<td>12</td>
<td>733</td>
<td>2.33</td>
<td>733</td>
<td>2.33</td>
<td>733</td>
<td>2.33</td>
</tr>
<tr>
<td>648.exchange2_s</td>
<td>12</td>
<td>428</td>
<td>6.87</td>
<td>429</td>
<td>6.85</td>
<td>428</td>
<td>6.87</td>
</tr>
<tr>
<td>657.xz_s</td>
<td>12</td>
<td>764</td>
<td>8.09</td>
<td>766</td>
<td>8.07</td>
<td>765</td>
<td>8.08</td>
</tr>
</tbody>
</table>

SPECspeed2017_int_base = 4.67
SPECspeed2017_int_peak = 4.76

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,scatter"
LD_LIBRARY_PATH = "/home/cpu2017/lib/ia32:/home/cpu2017/lib/intel64:/home/cpu2017/je5.0.1-32:/home/cpu2017/je5.0.1-64" OMP_STACKSIZE = "192M"

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
File system page cache synced and cleared with:
sync; echo 3> /proc/sys/vm/drop_caches
jemalloc, a general purpose malloc implementation
built with the RedHat Enterprise 7.5, and the system compiler gcc 4.8.5
Dell Inc. PowerEdge R740xd (Intel Xeon Bronze 3204, 1.90GHz)  

SPECspeed2017_int_base = 4.67  
SPECspeed2017_int_peak = 4.76  

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

Test Date: Jun-2019  
Hardware Availability: Jun-2019  
Software Availability: Feb-2019  

Platform Notes

BIOS settings:  
Virtualization Technology disabled  
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  
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 9bcde8f29999c33d61f64985e45859ea9  
running on intel-sut Thu Jun 20 16:53:56 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) Bronze 3204 CPU @ 1.90GHz  
  2 "physical id"s (chips)  
  12 "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 : 6  
siblings : 6  
physical 0: cores 0 1 2 3 4 5  
physical 1: cores 0 1 2 3 4 5

From lscpu:

Architecture: x86_64  
CPU op-mode(s): 32-bit, 64-bit  
Byte Order: Little Endian  
CPU(s): 12  
On-line CPU(s) list: 0-11  
Thread(s) per core: 1  
Core(s) per socket: 6  
Socket(s): 2  
NUMA node(s): 2  
Vendor ID: GenuineIntel  
CPU family: 6  
Model: 85  
Model name: Intel(R) Xeon(R) Bronze 3204 CPU @ 1.90GHz  
Stepping: 6  
CPU MHz: 1896.965  
BogoMIPS: 3800.00

(Continued on next page)
Dell Inc.
PowerEdge R740xd (Intel Xeon Bronze 3204, 1.90GHz)

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

SPECspeed2017_int_base = 4.67
SPECspeed2017_int_peak = 4.76

Test Date: Jun-2019
Hardware Availability: Jun-2019
Software Availability: Feb-2019

Platform Notes (Continued)

Virtualization: VT-x
L1d cache: 32K
L1i cache: 32K
L2 cache: 1024K
L3 cache: 8448K
NUMA node0 CPU(s): 0,2,4,6,8,10
NUMA node1 CPU(s): 1,3,5,7,9,11
Flags: fpu vme de pse sse sse2 ss ht tm pbe syscall nx pdpe1gb rdtscp lm constant_tsc 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 xtrp pdcm dca sse4_1 sse4_2 x2apic movbe popcnt aes f16c rdrand lahf_lm abm 3dnowprefetch cpuid_fault epb cat_l3 cdp_l3 invpcid_single intel_ppu ssbd mba ibp ibpb stibp ibrs Enhanced tpr_shadow vnmi flexpriority ept vpid fsgsbse tsc_adjust bni hle avx2 smep bmi2 3ms invpcid rdms rdt_a avx512f avx512dq rdseed adx smap clflushopt clwb intel_pt avx512cd avx512bw avx512vl xsaveopt xsaves xsave cqm_llc cqm_occu llc cqm_mbm_total cqm_mbm_local dtherm arat pml pts pku ospke avx512_vnni flush_lld arch_capabilities

/proce/cpuinfo cache data
  cache size : 8448 KB

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

  available: 2 nodes (0-1)
  node 0 cpus: 0 2 4 6 8 10
  node 0 size: 191896 MB
  node 0 free: 191498 MB
  node 1 cpus: 1 3 5 7 9 11
  node 1 size: 193534 MB
  node 1 free: 193089 MB
  node distances:
    node 0 1
    0: 10 21
    1: 21 10

From /proc/meminfo
  MemTotal: 394680860 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:

(Continued on next page)
Dell Inc.

PowerEdge R740xd (Intel Xeon Bronze 3204, 1.90GHz)

SPECspeed2017_int_base = 4.67
SPECspeed2017_int_peak = 4.76

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

Platform Notes (Continued)

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 Jun 20 16:12

SPEC is set to: /home/cpu2017

Filesystem Type Size Used Avail Use% Mounted on
/dev/sda2 ext4 439G 21G 396G 5% /

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. 2.2.10 05/15/2019
Memory:
24x 00AD00B300AD HMA82GR7CJR8N-WM 16 GB 2 rank 2933, configured at 2133

(End of data from sysinfo program)

Compiler Version Notes

==============================================================================
CC  600.perlbench_s(base) 602.gcc_s(base) 605.mcf_s(base) 625.x264_s(base,
peak) 657.xz_s(base)
==============================================================================

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.

(Continued on next page)
## SPEC CPU2017 Integer Speed Result

**Dell Inc.**

PowerEdge R740xd (Intel Xeon Bronze 3204, 1.90GHz)  

<table>
<thead>
<tr>
<th>SPECspeed2017_int_base</th>
<th>SPECspeed2017_int_peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.67</td>
<td>4.76</td>
</tr>
</tbody>
</table>

**CPU2017 License:** 55  
**Test Sponsor:** Dell Inc.  
**Hardware Availability:** Jun-2019  
**Test Sponsor:** Dell Inc.  
**Software Availability:** Feb-2019

### Compiler Version Notes (Continued)

```
CC  600.peribench_s(peak) 602.gcc_s(peak) 605.mcf_s(peak) 657.xz_s(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.
```

```
CXXC 620.omnetpp_s(base) 623.xalancbmk_s(base, peak) 631.deepsjeng_s(base,  
peak) 641.leela_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.
```

```
CXXC 620.omnetpp_s(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  648.exchange2_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.
```

### Base Compiler Invocation

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

**C++ benchmarks:**  
`icpc -m64`

**Fortran benchmarks:**  
`ifort -m64`
## SPEC CPU2017 Integer Speed Result

**Dell Inc.**

PowerEdge R740xd (Intel Xeon Bronze 3204, 1.90GHz)

<table>
<thead>
<tr>
<th>SPECspeed2017_int_base</th>
<th>SPECspeed2017_int_peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.67</td>
<td>4.76</td>
</tr>
</tbody>
</table>

### CPU2017 License: 55

**Test Sponsor:** Dell Inc.  
**Tested by:** Dell Inc.

| Test Date: Jun-2019 | Hardware Availability: Jun-2019 | Software Availability: Feb-2019 |

### Base Portability Flags

600.perlbench_s: -DSPEC_LP64 -DSPEC_LINUX_X64  
602.gcc_s: -DSPEC_LP64  
605.mcf_s: -DSPEC_LP64  
620.omnetpp_s: -DSPEC_LP64  
623.xalancbmk_s: -DSPEC_LP64 -DSPEC_LINUX  
625.x264_s: -DSPEC_LP64  
631.deepsjeng_s: -DSPEC_LP64  
641.leela_s: -DSPEC_LP64  
648.exchange2_s: -DSPEC_LP64  
657.xz_s: -DSPEC_LP64

### Base Optimization Flags

**C benchmarks:**  
-Wl,-z,muldefs -xCORE-AVX512 -ipo -O3 -no-prec-div  
-qopt-mem-layout-trans=4 -qopenmp -DSPEC_OPENMP  
-L/usr/local/je5.0.1-64/lib -ljemalloc

**C++ benchmarks:**  
-Wl,-z,muldefs -xCORE-AVX512 -ipo -O3 -no-prec-div  
-qopt-mem-layout-trans=4  
-L/usr/local/IntelCompiler19/compilers_and_libraries_2019.1.144/linux/compiler/lib/intel64  
-lqkmalloc

**Fortran benchmarks:**  
-xCORE-AVX512 -ipo -O3 -no-prec-div -qopt-mem-layout-trans=4  
-nostandard-realloc-lhs

### Peak Compiler Invocation

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

**C++ benchmarks:**  
icpc -m64

**Fortran benchmarks:**  
ifort -m64
SPEC CPU2017 Integer Speed Result

Dell Inc.
PowerEdge R740xd (Intel Xeon Bronze 3204, 1.90GHz)

Copyright 2017-2019 Standard Performance Evaluation Corporation

SPECspeed2017_int_base = 4.67
SPECspeed2017_int_peak = 4.76

Dell Inc.

PowerEdge R740xd (Intel Xeon Bronze 3204, 1.90GHz) SPECspeed2017_int_base = 4.67 SPECspeed2017_int_peak = 4.76

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

Peak Portability Flags
Same as Base Portability Flags

Peak Optimization Flags

C benchmarks:

600.perlbench_s: -Wl,-z,muldefs -prof-gen(pass 1) -prof-use(pass 2) -O2 -xCORE-AVX512 -qopt-mem-layout-trans=4 -ipo -O3 -no-prec-div -DSPEC_SUPPRESS_OPENMP -qopenmp
-DSPEC_OPENMP -fno-strict-overflow
-/usr/local/je5.0.1-64/lib -ljemalloc

602.gcc_s: -Wl,-z,muldefs -prof-gen(pass 1) -prof-use(pass 2) -O2 -xCORE-AVX512 -qopt-mem-layout-trans=4 -ipo -O3 -no-prec-div -DSPEC_SUPPRESS_OPENMP
-/usr/local/je5.0.1-64/lib -ljemalloc

605.mcf_s: -Wl,-z,muldefs -prof-gen(pass 1) -prof-use(pass 2) -ipo -xCORE-AVX512 -O3 -no-prec-div -qopt-mem-layout-trans=4
-DSPEC_SUPPRESS_OPENMP -qopenmp -DSPEC_OPENMP
-/usr/local/je5.0.1-64/lib -ljemalloc

625.x264_s: -Wl,-z,muldefs -xCORE-AVX512 -ipo -O3 -no-prec-div
-qopt-mem-layout-trans=4 -qopenmp -DSPEC_OPENMP
-/usr/local/je5.0.1-64/lib -ljemalloc

657.xz_s: -Wl,-z,muldefs -prof-gen(pass 1) -prof-use(pass 2) -O2 -xCORE-AVX512 -qopt-mem-layout-trans=4 -ipo -O3 -no-prec-div -DSPEC_SUPPRESS_OPENMP -qopenmp
-DSPEC_OPENMP -L/usr/local/je5.0.1-64/lib -ljemalloc

C++ benchmarks:

620.omnetpp_s: -Wl,-z,muldefs -prof-gen(pass 1) -prof-use(pass 2) -ipo -xCORE-AVX512 -O3 -no-prec-div -qopt-mem-layout-trans=4
-DSPEC_SUPPRESS_OPENMP
-/usr/local/IntelCompiler19/compilers_and_libraries_2019.1.144/linux/compiler/lib/intel64
-lqkmalloc

623.xalancbmk_s: -Wl,-z,muldefs -xCORE-AVX512 -ipo -O3 -no-prec-div
-qopt-mem-layout-trans=4
-/usr/local/IntelCompiler19/compilers_and_libraries_2019.1.144/linux/compiler/lib/intel64
-lqkmalloc

(Continued on next page)
## SPEC CPU2017 Integer Speed Result

**Dell Inc.**

PowerEdge R740xd (Intel Xeon Bronze 3204, 1.90GHz)  

<table>
<thead>
<tr>
<th>SPECspeed2017_int_base</th>
<th>4.67</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECspeed2017_int_peak</td>
<td>4.76</td>
</tr>
</tbody>
</table>

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

---

**Peak Optimization Flags (Continued)**

- 631.deepsjeng_s: Same as 623.xalancbmk_s
- 641.leela_s: Same as 623.xalancbmk_s

Fortran benchmarks:
- `-xCORE-AVX512`  
- `-ipo`  
- `-O3`  
- `-no-prec-div`  
- `-qopt-mem-layout-trans=4`  
- `-nostandard-realloc-lhs`

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


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 2019-06-20 12:53:55-0400.  
Originally published on 2019-07-09.