## Dell Inc.

**PowerEdge R740xd (Intel Xeon Gold 6226, 2.70GHz)**

<table>
<thead>
<tr>
<th><strong>CPU2017 License</strong></th>
<th>55</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Test Sponsor</strong></td>
<td>Dell Inc.</td>
</tr>
<tr>
<td><strong>Tested by</strong></td>
<td>Dell Inc.</td>
</tr>
<tr>
<td><strong>Test Date</strong></td>
<td>Jul-2019</td>
</tr>
<tr>
<td><strong>Hardware Availability</strong></td>
<td>Jun-2019</td>
</tr>
<tr>
<td><strong>Software Availability</strong></td>
<td>May-2019</td>
</tr>
</tbody>
</table>

### SPECspeed2017 int_results

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECspeed2017 int_base</td>
<td>9.30</td>
</tr>
<tr>
<td>SPECspeed2017 int_peak</td>
<td>9.44</td>
</tr>
</tbody>
</table>

### Threads

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Threads</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>600.perlbench_s</td>
<td>24</td>
<td>6.30</td>
</tr>
<tr>
<td>602.gcc_s</td>
<td>24</td>
<td>8.74</td>
</tr>
<tr>
<td>605.mcf_s</td>
<td>24</td>
<td>11.4</td>
</tr>
<tr>
<td>620.omnetpp_s</td>
<td>24</td>
<td>6.67</td>
</tr>
<tr>
<td>623.xalancbmk_s</td>
<td>24</td>
<td>11.8</td>
</tr>
<tr>
<td>625.x264_s</td>
<td>24</td>
<td>13.4</td>
</tr>
<tr>
<td>631.deepsjeng_s</td>
<td>24</td>
<td>5.23</td>
</tr>
<tr>
<td>641.leela_s</td>
<td>24</td>
<td>4.53</td>
</tr>
<tr>
<td>648.exchange2_s</td>
<td>24</td>
<td>15.8</td>
</tr>
<tr>
<td>657.xz_s</td>
<td>24</td>
<td>19.3</td>
</tr>
</tbody>
</table>

### SPECspeed2017 int_base (9.30)  SPECspeed2017 int_peak (9.44)

### Hardware

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CPU Name</strong></td>
<td>Intel Xeon Gold 6226</td>
</tr>
<tr>
<td><strong>Max MHz.</strong></td>
<td>3700</td>
</tr>
<tr>
<td><strong>Nominal</strong></td>
<td>2700</td>
</tr>
<tr>
<td><strong>Enabled</strong></td>
<td>24 cores, 2 chips</td>
</tr>
<tr>
<td><strong>Orderable</strong></td>
<td>1.2 chips</td>
</tr>
<tr>
<td><strong>Cache L1</strong></td>
<td>32 KB I + 32 KB D on chip per core</td>
</tr>
<tr>
<td><strong>Cache L2</strong></td>
<td>1 MB I+D on chip per core</td>
</tr>
<tr>
<td><strong>Cache L3</strong></td>
<td>19.25 MB I+D on chip per chip</td>
</tr>
<tr>
<td><strong>Memory</strong></td>
<td>384 GB (12 x 32 GB 2Rx4 PC4-2933Y-R)</td>
</tr>
<tr>
<td><strong>Storage</strong></td>
<td>1 x 960 GB SATA SSD</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>None</td>
</tr>
</tbody>
</table>

### Software

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OS</strong></td>
<td>Ubuntu 18.04.2 LTS</td>
</tr>
<tr>
<td><strong>Compiler</strong></td>
<td>C/C++: Version 19.0.4.227 of Intel C/C++</td>
</tr>
<tr>
<td><strong>Compiler Build</strong></td>
<td>20190416 for Linux</td>
</tr>
<tr>
<td><strong>Parallel</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Firmware</strong></td>
<td>Version 2.2.11 released Jun-2019</td>
</tr>
<tr>
<td><strong>System State</strong></td>
<td>Run level 5 (multi-user)</td>
</tr>
<tr>
<td><strong>Base Pointers</strong></td>
<td>64-bit</td>
</tr>
<tr>
<td><strong>Peak Pointers</strong></td>
<td>64-bit</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>jemalloc memory allocator V5.0.1</td>
</tr>
</tbody>
</table>
Dell Inc.

PowerEdge R740xd (Intel Xeon Gold 6226, 2.70GHz)

SPECspeed2017_int_base = 9.30
SPECspeed2017_int_peak = 9.44

Results Table

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Threads</th>
<th>Base</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Seconds</td>
<td>Ratio</td>
<td>Seconds</td>
<td>Ratio</td>
<td>Seconds</td>
<td>Ratio</td>
<td>Seconds</td>
<td>Ratio</td>
<td>Seconds</td>
<td>Ratio</td>
</tr>
<tr>
<td>600.perlbench_s</td>
<td>24</td>
<td>282</td>
<td>6.30</td>
<td></td>
<td>283</td>
<td>6.27</td>
<td>281</td>
<td>6.31</td>
<td>24</td>
<td>244</td>
<td>7.29</td>
<td>244</td>
</tr>
<tr>
<td>602.gcc_s</td>
<td>24</td>
<td>443</td>
<td>8.98</td>
<td></td>
<td>455</td>
<td>8.74</td>
<td>458</td>
<td>8.69</td>
<td>24</td>
<td>447</td>
<td>8.91</td>
<td>436</td>
</tr>
<tr>
<td>605.mcf_s</td>
<td>24</td>
<td>415</td>
<td>11.4</td>
<td></td>
<td>412</td>
<td>11.5</td>
<td>412</td>
<td>11.5</td>
<td>24</td>
<td>414</td>
<td>11.4</td>
<td>411</td>
</tr>
<tr>
<td>620.omnetpp_s</td>
<td>24</td>
<td>244</td>
<td>6.67</td>
<td></td>
<td>246</td>
<td>6.64</td>
<td>243</td>
<td>6.70</td>
<td>24</td>
<td>243</td>
<td>6.71</td>
<td>244</td>
</tr>
<tr>
<td>623.xalanchmk_s</td>
<td>24</td>
<td>120</td>
<td>11.8</td>
<td></td>
<td>120</td>
<td>11.8</td>
<td>120</td>
<td>11.8</td>
<td>24</td>
<td>121</td>
<td>11.7</td>
<td>121</td>
</tr>
<tr>
<td>625.x264_s</td>
<td>24</td>
<td>131</td>
<td>13.4</td>
<td></td>
<td>131</td>
<td>13.4</td>
<td>131</td>
<td>13.4</td>
<td>24</td>
<td>132</td>
<td>13.4</td>
<td>131</td>
</tr>
<tr>
<td>631.deepsjeng_s</td>
<td>24</td>
<td>273</td>
<td>5.24</td>
<td></td>
<td>274</td>
<td>5.23</td>
<td>274</td>
<td>5.23</td>
<td>24</td>
<td>274</td>
<td>5.23</td>
<td>274</td>
</tr>
<tr>
<td>641.leela_s</td>
<td>24</td>
<td>377</td>
<td>4.53</td>
<td></td>
<td>376</td>
<td>4.53</td>
<td>377</td>
<td>4.53</td>
<td>24</td>
<td>377</td>
<td>4.53</td>
<td>377</td>
</tr>
<tr>
<td>648.exchange2_s</td>
<td>24</td>
<td>186</td>
<td>15.8</td>
<td></td>
<td>186</td>
<td>15.8</td>
<td>187</td>
<td>15.7</td>
<td>24</td>
<td>186</td>
<td>15.8</td>
<td>186</td>
</tr>
<tr>
<td>657.xz_s</td>
<td>24</td>
<td>320</td>
<td>19.3</td>
<td></td>
<td>325</td>
<td>19.0</td>
<td>319</td>
<td>19.4</td>
<td>24</td>
<td>321</td>
<td>19.3</td>
<td>322</td>
</tr>
</tbody>
</table>

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/intel64:/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
Files 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.    Dell Inc.    Dell Inc.
PowerEdge R740xd (Intel Xeon Gold 6226, 2.70GHz)    SPECspeed2017_int_base = 9.30
    SPECspeed2017_int_peak = 9.44

<table>
<thead>
<tr>
<th>CPU2017 License: 55</th>
<th>Test Date:    Jul-2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Sponsor: Dell Inc.</td>
<td>Hardware Availability: Jun-2019</td>
</tr>
<tr>
<td>Tested by: Dell Inc.</td>
<td>Software Availability: May-2019</td>
</tr>
</tbody>
</table>

**Platform Notes**

BIOS settings:
ADDDC setting disabled
Virtualization Technology disabled
DCU Streamer Prefetcher 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
Logical Processor 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 9bcde8f2999c33d61f64985e45859ea9
running on intel-sut Fri Jul 19 11:27:36 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 6226 CPU @ 2.70GHz
  2 "physical id"s (chips)
24 "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 : 12
siblings : 12
physical 0: cores 0 1 2 3 4 5 6 8 10 11 12 14
physical 1: cores 1 2 3 4 5 6 8 9 10 11 12 13
```

From lscpu:

```
Architecture:         x86_64
CPU op-mode(s):       32-bit, 64-bit
Byte Order:           Little Endian
CPU(s):               24
On-line CPU(s) list:  0-23
Thread(s) per core:   1
Core(s) per socket:   12
Socket(s):            2
NUMA node(s):         2
Vendor ID:            GenuineIntel
CPU family:           6
Model:                85
Model name:           Intel(R) Xeon(R) Gold 6226 CPU @ 2.70GHz
```

(Continued on next page)
SPEC CPU2017 Integer Speed Result

Dell Inc.

PowerEdge R740xd (Intel Xeon Gold 6226, 2.70GHz)

SPECspeed2017_int_base = 9.30
SPECspeed2017_int_peak = 9.44

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

Test Date: Jul-2019
Hardware Availability: Jun-2019
Software Availability: May-2019

Platform Notes (Continued)

Stepping: 7
CPU MHz: 3516.108
BogoMIPS: 5400.00
Virtualization: VT-x
L1d cache: 32K
L1i cache: 32K
L2 cache: 1024K
L3 cache: 19712K
NUMA node0 CPU(s): 0,2,4,6,8,10,12,14,16,18,20,22
NUMA node1 CPU(s): 1,3,5,7,9,11,13,15,17,19,21,23
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 cpuid
aperfmperc pni pclmulqdq dtes64 monitor ds_cpl vmx smx est tm2 ssse3 sdbg fma cx16
xtrpr pdcm pcid dca sse4_1 sse4_2 x2apic movbe popcnt aes avx f16c rdrand
lahf_lm_abm 3dnowprefetch cpuid_fault epb cat_l3 cdp_l3 invpcid_single intel_patin
ssbd mba ibrs ibpb ibrs_enhanced tpr_shadow vnumi flexpriority ept vpid
fsgsbase tsc_adjust bmi1 hle avx2 smep bmi2 erms invpcid rtm cqm mpx rd tỀ_ a avx512f
avx512dq rdseed adx smap clflushopt clwb intel_pt avx512cd avx512bw avx512vl
xsaveopt xsavec xgetbv1 xsaves cqm_llc cqm_occup_llc cqm_mbmb_total cqm_mbmb_local
dtherm ida arat pin pts pku ospke avx512_vnni flush_lld arch_capabilities

/proc/cpuinfo cache data
  cache size: 19712 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 12 14 16 18 20 22
  node 0 size: 191916 MB
  node 0 free: 191473 MB
  node 1 cpus: 1 3 5 7 9 11 13 15 17 19 21 23
  node 1 size: 193512 MB
  node 1 free: 193096 MB
  node distances:
    node 0 1
    0: 10 21
    1: 21 10

From /proc/meminfo
  MemTotal: 394678648 kB
  HugePages_Total: 0
  Hugepagesize: 2048 kB

/usr/bin/lsb_release -d
  Ubuntu 18.04.2 LTS

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

**Dell Inc.**

**PowerEdge R740xd (Intel Xeon Gold 6226, 2.70GHz)**

<table>
<thead>
<tr>
<th>SPECspeed2017_int_base</th>
<th>SPECspeed2017_int_peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.30</td>
<td>9.44</td>
</tr>
</tbody>
</table>

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

---

### Platform Notes (Continued)

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

```plaintext
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 Jul 19 11:13**

**SPEC is set to:** /home/cpu2017  
**Filesystem Type Size Used Avail Use% Mounted on**

<table>
<thead>
<tr>
<th>Filesystem</th>
<th>Type</th>
<th>Size</th>
<th>Used</th>
<th>Avail</th>
<th>Use%</th>
<th>Mounted on</th>
</tr>
</thead>
<tbody>
<tr>
<td>/dev/sda2</td>
<td>ext4</td>
<td>439G</td>
<td>26G</td>
<td>391G</td>
<td>7%</td>
<td>/</td>
</tr>
</tbody>
</table>

**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. 2.2.11 06/13/2019**  
**Memory:**

- 12x 00AD00B300AD HMA84GR7CJR4N-WM 32 GB 2 rank 2933  
- 12x Not Specified Not Specified

(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,

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

**Dell Inc.**

PowerEdge R740xd (Intel Xeon Gold 6226, 2.70GHz)

<table>
<thead>
<tr>
<th>SPECspeed2017_int_base</th>
<th>9.30</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECspeed2017_int_peak</td>
<td>9.44</td>
</tr>
</tbody>
</table>

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

### Compiler Version Notes (Continued)

Version 19.0.4.227 Build 20190416  
Copyright (C) 1985-2019 Intel Corporation. All rights reserved.

-------------------------------

```
CC   600.perlbench_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 19.0.4.227 Build 20190416  
Copyright (C) 1985-2019 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 19.0.4.227 Build 20190416  
Copyright (C) 1985-2019 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 19.0.4.227 Build 20190416  
Copyright (C) 1985-2019 Intel Corporation. All rights reserved.
```

### Base Compiler Invocation

**C benchmarks:**

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

**C++ benchmarks:**

```
icpc -m64
```
Dell Inc. PowerEdge R740xd (Intel Xeon Gold 6226, 2.70GHz)

**SPECspeed2017_int_base = 9.30**

**SPECspeed2017_int_peak = 9.44**

<table>
<thead>
<tr>
<th>CPU2017 License: 55</th>
<th>Test Date: Jul-2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Sponsor: Dell Inc.</td>
<td>Hardware Availability: Jun-2019</td>
</tr>
<tr>
<td>Tested by: Dell Inc.</td>
<td>Software Availability: May-2019</td>
</tr>
</tbody>
</table>

### Base Compiler Invocation (Continued)

Fortran benchmarks:
`ifort -m64`

### 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_2019.4.227/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`
**SPEC CPU2017 Integer Speed Result**

**Dell Inc.**

**PowerEdge R740xd (Intel Xeon Gold 6226, 2.70GHz)**

<table>
<thead>
<tr>
<th>SPECspeed2017_int_base</th>
<th>Dell Inc.</th>
<th>SPECspeed2017_int_peak</th>
<th>Dell Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.30</td>
<td>Dell Inc.</td>
<td>9.44</td>
<td>Dell Inc.</td>
</tr>
</tbody>
</table>

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

**Peak Compiler Invocation (Continued)**

Fortran benchmarks:

ifort -m64

**Peak Portability Flags**

Same as Base Portability Flags

**Peak Optimization Flags**

**C benchmarks:**

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

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

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

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

**C++ benchmarks:**

620.omnetpp_s: -Wl,-z,muldefs -prof-gen(pass l) -prof-use(pass 2) -ipo -xCORE-AVX512 -O3 -no-prec-div -qopt-mem-layout-trans=4

(Continued on next page)
Dell Inc.

PowerEdge R740xd (Intel Xeon Gold 6226, 2.70GHz)

<table>
<thead>
<tr>
<th>SPECspeed2017_int_base</th>
<th>SPECspeed2017_int_peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.30</td>
<td>9.44</td>
</tr>
</tbody>
</table>

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

Test Date: Jul-2019
Hardware Availability: Jun-2019
Software Availability: May-2019

Peak Optimization Flags (Continued)

620.omnetpp_s (continued):
-DSPEC_SUPPRESS_OPENMP
-L/usr/local/IntelCompiler19/compilers_and_libraries_2019.4.227/linux/compiler/lib/intel64
-lqkmalloc

623.xalancbmk_s: -Wl,-z,muldefs -xCORE-AVX512 -ipo -O3 -no-prec-div
-qopt-mem-layout-trans=4
-L/usr/local/IntelCompiler19/compilers_and_libraries_2019.4.227/linux/compiler/lib/intel64
-lqkmalloc

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 2019-07-19 07:27:36-0400.
Report generated on 2019-08-06 17:57:47 by CPU2017 PDF formatter v6067.
Originally published on 2019-08-06.