Dell Inc. PowerEdge R740xd2 (Intel Xeon Gold 6140, 2.30GHz)

<table>
<thead>
<tr>
<th>SPECspeed2017_int_base</th>
<th>8.74</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECspeed2017_int_peak</td>
<td>9.00</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Software</th>
</tr>
</thead>
</table>
| **CPU Name:** Intel Xeon Gold 6140  
**Max MHz.:** 3700  
**Nominal:** 2300  
**Enabled:** 36 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:** 24.75 MB I+D on chip per chip  
**Other:** None  
**Memory:** 192 GB (12 x 16 GB 2Rx8 PC4-2666V-R)  
**Storage:** 1 x 250 GB M.2 SATA SSD  
**Other:** None | **OS:** SUSE Linux Enterprise Server 12 SP3  
**kernel 4.4.114-94.11-default**  
**Compiler:** C/C++: Version 18.0.2.20180210 of Intel C/C++ Compiler for Linux;  
Fortran: Version 18.0.2.20180210 of Intel Fortran Compiler for Linux  
**Parallel:** Yes  
**Firmware:** Version 1.0.3 released Oct-2018  
**File System:** xfs  
**System State:** Run level 3 (multi-user)  
**Base Pointers:** 64-bit  
**Peak Pointers:** 32/64-bit  
**Other:** jemalloc memory allocator v5.0.1 |

<table>
<thead>
<tr>
<th>Threads</th>
<th>SPECspeed2017_int_base (8.74)</th>
<th>SPECspeed2017_int_peak (9.00)</th>
</tr>
</thead>
<tbody>
<tr>
<td>600.perlbench_s 36</td>
<td>21.6</td>
<td>21.9</td>
</tr>
<tr>
<td>602.gcc_s 36</td>
<td>23.0</td>
<td>23.0</td>
</tr>
<tr>
<td>605.mcf_s 36</td>
<td>23.0</td>
<td>23.0</td>
</tr>
<tr>
<td>625.x264_s 36</td>
<td>23.0</td>
<td>23.0</td>
</tr>
<tr>
<td>631.deepsjeng_s 36</td>
<td>23.0</td>
<td>23.0</td>
</tr>
<tr>
<td>641.leela_s 36</td>
<td>23.0</td>
<td>23.0</td>
</tr>
<tr>
<td>648.exchange2_s 36</td>
<td>23.0</td>
<td>23.0</td>
</tr>
<tr>
<td>657.xz_s 36</td>
<td>23.0</td>
<td>23.0</td>
</tr>
</tbody>
</table>
Dell Inc.
PowerEdge R740xd2 (Intel Xeon Gold 6140, 2.30GHz)

SPEC CPU2017 Integer Speed Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

SPECspeed2017_int_base = 8.74
SPECspeed2017_int_peak = 9.00

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>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>600.perlbench_s</td>
<td>36</td>
<td>288</td>
<td>6.16</td>
<td>287</td>
<td>6.19</td>
<td>282</td>
<td>6.30</td>
<td>36</td>
<td>246</td>
<td>7.21</td>
<td>243</td>
</tr>
<tr>
<td>605.mcf_s</td>
<td>36</td>
<td>432</td>
<td>10.9</td>
<td>437</td>
<td>10.8</td>
<td>430</td>
<td>11.0</td>
<td>36</td>
<td>429</td>
<td>11.0</td>
<td>419</td>
</tr>
<tr>
<td>620.omnetpp_s</td>
<td>36</td>
<td>269</td>
<td>6.05</td>
<td>258</td>
<td>6.32</td>
<td>260</td>
<td>6.28</td>
<td>36</td>
<td>259</td>
<td>6.29</td>
<td>256</td>
</tr>
<tr>
<td>623.xalanchmk_s</td>
<td>36</td>
<td>148</td>
<td>9.56</td>
<td>150</td>
<td>9.45</td>
<td>150</td>
<td>9.48</td>
<td>36</td>
<td>139</td>
<td>10.2</td>
<td>141</td>
</tr>
<tr>
<td>625.x264_s</td>
<td>36</td>
<td>158</td>
<td>11.2</td>
<td>153</td>
<td>11.6</td>
<td>162</td>
<td>10.9</td>
<td>36</td>
<td>158</td>
<td>11.2</td>
<td>153</td>
</tr>
<tr>
<td>631.deepsjeng_s</td>
<td>36</td>
<td>282</td>
<td>5.09</td>
<td>281</td>
<td>5.10</td>
<td>282</td>
<td>5.09</td>
<td>36</td>
<td>282</td>
<td>5.09</td>
<td>281</td>
</tr>
<tr>
<td>641.leela_s</td>
<td>36</td>
<td>392</td>
<td>4.35</td>
<td>404</td>
<td>4.22</td>
<td>392</td>
<td>4.35</td>
<td>36</td>
<td>392</td>
<td>4.35</td>
<td>392</td>
</tr>
<tr>
<td>648.exchange2_s</td>
<td>36</td>
<td>221</td>
<td>13.3</td>
<td>221</td>
<td>13.3</td>
<td>225</td>
<td>13.1</td>
<td>36</td>
<td>221</td>
<td>13.3</td>
<td>221</td>
</tr>
<tr>
<td>657.xz_s</td>
<td>36</td>
<td>287</td>
<td>21.6</td>
<td>286</td>
<td>21.6</td>
<td>287</td>
<td>21.5</td>
<td>36</td>
<td>283</td>
<td>21.9</td>
<td>285</td>
</tr>
</tbody>
</table>

SPECspeed2017_int_base = 8.74
SPECspeed2017_int_peak = 9.00

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 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
jemalloc, a general purpose malloc implementation
built with the RedHat Enterprise 7.4, and the system compiler gcc 4.8.5
SPEC CPU2017 Integer Speed Result

Dell Inc.
PowerEdge R740xd2 (Intel Xeon Gold 6140, 2.30GHz)

<table>
<thead>
<tr>
<th>SPECspeed2017_int_peak</th>
<th>SPECspeed2017_int_base</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.00</td>
<td>8.74</td>
</tr>
</tbody>
</table>

CPU2017 License: 55
Test Sponsor: Dell Inc.
Tested by: Dell Inc.
Test Date: Nov-2018
Hardware Availability: Dec-2018
Software Availability: Feb-2018

Platform Notes

BIOS settings:
Sub NUMA Cluster disabled
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
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 linux-m8ku Sun Nov 11 12:06:58 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 6140 CPU @ 2.30GHz
  2 "physical id"s (chips)
  36 "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: 18
  siblings: 18
  physical 0: cores 0 1 2 3 4 8 9 10 11 16 17 18 19 20 24 25 26 27
  physical 1: cores 0 1 2 3 4 8 9 10 11 16 17 18 19 20 24 25 26 27

From lscpu:
  Architecture: x86_64
  CPU op-mode(s): 32-bit, 64-bit
  Byte Order: Little Endian
  CPU(s): 36
  On-line CPU(s) list: 0-35
  Thread(s) per core: 1
  Core(s) per socket: 18
  Socket(s): 2
  NUMA node(s): 2
  Vendor ID: GenuineIntel
  CPU family: 6
  Model: 85
  Model name: Intel(R) Xeon(R) Gold 6140 CPU @ 2.30GHz
  Stepping: 4

(Continued on next page)
SPEC CPU2017 Integer Speed Result

Dell Inc.
PowerEdge R740xd2 (Intel Xeon Gold 6140, 2.30GHz)

SPECspeed2017_int_base = 8.74
SPECspeed2017_int_peak = 9.00

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

Test Date: Nov-2018
Hardware Availability: Dec-2018
Software Availability: Feb-2018

Platform Notes (Continued)

CPU MHz: 2294.619
BogoMIPS: 4589.23
Virtualization: VT-x
L1d cache: 32K
L1i cache: 32K
L2 cache: 1024K
L3 cache: 25344K
NUMA node0 CPU(s): 0,2,4,6,8,10,12,14,16,18,20,22,24,26,28,30,32,34
NUMA node1 CPU(s): 1,3,5,7,9,11,13,15,17,19,21,23,25,27,29,31,33,35
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
aperfmpref eagerfpu pni pclmulqdq dtes64 monitor ds_cpl vmx smx est tm2 ssse3 sdbg
fma cx16 xtrp pdcm pclid dca sse4_1 sse4_2 x2apic movbe popcnt tsc_deadline_timer aes
xsave avx f16c rdrand lahf_lm abm 3dnowprefetch ida arat epb invpidd_single pln pts
dtherm intel_pt rsb_ctsxsw spec_ctrl retpoline kaiser tpr_shadow vmx flexpriority
ept vpid fsgsbase tsc_adjust bmi1 hle avx2 smep bmi2 erms invpcid rtm cqm mp
avx512f avx512dq rdseed adx smap clflushopt clwb avx512cd avx512bw avx512vl xsaveopt
xsaves xsavec xgetbv1 cqm_llc cqm_occup_llc pku ospke

/proc/cpuinfo cache data
  cache size : 25344 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 24 26 28 30 32 34
  node 0 size: 95284 MB
  node 0 free: 94864 MB
  node 1 cpus: 1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35
  node 1 size: 96748 MB
  node 1 free: 96368 MB
  node distances:
    node 0 1
    0: 10 21
    1: 21 10

From /proc/meminfo
  MemTotal: 196641940 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:

(Continued on next page)
SPEC CPU2017 Integer Speed Result

Dell Inc.
PowerEdge R740xd2 (Intel Xeon Gold 6140, 2.30GHz)

SPECspeed2017_int_base = 8.74
SPECspeed2017_int_peak = 9.00

CPU2017 License: 55
Test Sponsor: Dell Inc.
Test Date: Nov-2018
Tested by: Dell Inc.
Hardware Availability: Dec-2018
Software Availability: Feb-2018

Platform Notes (Continued)

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-m8ku 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

Kernel self-reported vulnerability status:
CVE-2017-5754 (Meltdown): Mitigation: PTI
CVE-2017-5753 (Spectre variant 1): Mitigation: Barriers
CVE-2017-5715 (Spectre variant 2): Mitigation: IBRS+IBPB

run-level 3 Nov 11 12:03 last=5

SPEC is set to: /home/cpu2017

Filesystem Type Size Used Avail Use% Mounted on
/dev/sdz4 xfs 182G 4.0G 178G 3% /home

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. 1.0.3 10/25/2018
Memory:
12x 002C04B3002C 18ASF2G72PD2-2G6E1 16 GB 2 rank 2666
4x 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)
657.xz_s(base)

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

**Dell Inc.**  
**PowerEdge R740xd2 (Intel Xeon Gold 6140, 2.30GHz)**  

<table>
<thead>
<tr>
<th>SPECspeed2017_int_base</th>
<th>SPECspeed2017_int_peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.74</td>
<td>9.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CPU2017 License</th>
<th>Test Date</th>
<th>Hardware Availability</th>
<th>Test Sponsor</th>
<th>Software Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>55</td>
<td>Nov-2018</td>
<td>Dec-2018</td>
<td>Dell Inc.</td>
<td>Feb-2018</td>
</tr>
</tbody>
</table>

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

## Compiler Version Notes (Continued)

```plaintext
---

icc (ICC) 18.0.2 20180210  
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
---

CC 600.perlbench_s(peak) 602.gcc_s(peak) 605.mcf_s(peak) 625.x264_s(peak) 657.xz_s(peak)  
icc (ICC) 18.0.2 20180210  
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
---

CXXC 620.omnetpp_s(base) 623.xalancbmk_s(base) 631.deepsjeng_s(base) 641.leela_s(base)  
icpc (ICC) 18.0.2 20180210  
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
---

CXXC 620.omnetpp_s(peak) 623.xalancbmk_s(peak) 631.deepsjeng_s(peak) 641.leela_s(peak)  
icpc (ICC) 18.0.2 20180210  
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
---

FC 648.exchange2_s(base)  
ifort (IFORT) 18.0.2 20180210  
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
---

FC 648.exchange2_s(peak)  
ifort (IFORT) 18.0.2 20180210  
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
---
```
### SPEC CPU2017 Integer Speed Result

**Dell Inc.**

PowerEdge R740xd2 (Intel Xeon Gold 6140, 2.30GHz)

<table>
<thead>
<tr>
<th>CPU2017 License: 55</th>
<th>Test Date: Nov-2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Sponsor: Dell Inc.</td>
<td>Hardware Availability: Dec-2018</td>
</tr>
<tr>
<td>Tested by: Dell Inc.</td>
<td>Software Availability: Feb-2018</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SPECspeed2017_int_base</th>
<th>SPECspeed2017_int_peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.74</td>
<td>9.00</td>
</tr>
</tbody>
</table>

**Base Compiler Invocation**

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

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

- **Fortran benchmarks**:
  - ifort -m64

**Base Portability Flags**

- **C benchmarks**:
  - 600.perlbmk_s: -DSPEC_LP64 -DSPEC_LINUX_X64
  - 602.gcc_s: -DSPEC_LP64
  - 605.mcf_s: -DSPEC_LP64
  - 620.omnetpp_s: -DSPEC_LP64
  - 623.xalanchbk_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**:
  - -W1,-z,muldefs -xCORE-AVX512 -ipo -O3 -no-prec-div
  - -qopt-mem-layout-trans=3 -qopenmp -DSPEC_OPENMP
  - -L/usr/local/je5.0.1-64/lib -ljemalloc

- **C++ benchmarks**:
  - -W1,-z,muldefs -xCORE-AVX512 -ipo -O3 -no-prec-div
  - -qopt-mem-layout-trans=3 -L/usr/local/je5.0.1-64/lib -ljemalloc

- **Fortran benchmarks**:
  - -W1,-z,muldefs -xCORE-AVX512 -ipo -O3 -no-prec-div
  - -qopt-mem-layout-trans=3 -nostandard-realloc-lhs
  - -L/usr/local/je5.0.1-64/lib -ljemalloc
SPEC CPU2017 Integer Speed Result

Dell Inc.

PowerEdge R740xd2 (Intel Xeon Gold 6140, 2.30GHz)

SPECspeed2017_int_base = 8.74
SPECspeed2017_int_peak = 9.00

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

Test Date: Nov-2018
Hardware Availability: Dec-2018
Software Availability: Feb-2018

Peak Compiler Invocation

C benchmarks:
icc -m64 -std=c11

C++ benchmarks (except as noted below):
icpc -m64

623.xalancbmk_s: icpc -m32 -L/home/prasadj/specdev/IC18u2_Internal/lin_18_0_20180210/compiler/lib/ia32_lin

Fortran benchmarks:
ifort -m64

Peak 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: -D_FILE_OFFSET_BITS=64 -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

Peak Optimization Flags

C benchmarks:
600.perlbench_s: -Wl,-z,muldefs -prof-gen(pass 1) -prof-use(pass 2) -O2
-xCORE-AVX512 -qopt-prefetch -ipo -O3
-qopt-mem-layout-trans=3 -no-prec-div
-DSPEC_SUPPRESS_OPENMP -qopenmp -DSPEC_OPENMP
-fno-strict-overflow -L/usr/local/je5.0.1-64/lib
-lljemalloc

602.gcc_s: -Wl,-z,muldefs -prof-gen(pass 1) -prof-use(pass 2) -O2
-xCORE-AVX512 -qopt-prefetch -ipo -O3
-qopt-mem-layout-trans=3 -no-prec-div
-DSPEC_SUPPRESS_OPENMP -qopenmp -DSPEC_OPENMP
-L/usr/local/je5.0.1-64/lib -lljemalloc

(Continued on next page)
### Dell Inc.

PowerEdge R740xd2 (Intel Xeon Gold 6140, 2.30GHz)

<table>
<thead>
<tr>
<th>SPECspeed2017_int_base</th>
<th>SPECspeed2017_int_peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.74</td>
<td>9.00</td>
</tr>
</tbody>
</table>

#### CPU2017 License: 55

<table>
<thead>
<tr>
<th>Test Date:</th>
<th>Nov-2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Sponsor:</td>
<td>Dell Inc.</td>
</tr>
<tr>
<td>Tested by:</td>
<td>Dell Inc.</td>
</tr>
<tr>
<td>Hardware Availability:</td>
<td>Dec-2018</td>
</tr>
<tr>
<td>Software Availability:</td>
<td>Feb-2018</td>
</tr>
</tbody>
</table>

#### Peak Optimization Flags (Continued)

605.mcf_s: `-Wl,-z,muldefs -prof-gen(pass 1) -prof-use(pass 2) -ipo`  
-xCORE-AVX512 -O3 -no-prec-div -qopt-prefetch  
-qopt-mem-layout-trans=3 -DSPEC_SUPPRESS_OPENMP -qopenmp  
-DSPEC_OPENMP -L/usr/local/je5.0.1-64/lib -ljemalloc

625.x264_s: `basepeak = yes`

657.xz_s: `Same as 602.gcc_s`

#### C++ benchmarks:

620.omnetpp_s: `-Wl,-z,muldefs -prof-gen(pass 1) -prof-use(pass 2) -ipo`  
-xCORE-AVX512 -O3 -no-prec-div -qopt-prefetch  
-qopt-mem-layout-trans=3 -DSPEC_SUPPRESS_OPENMP -qopenmp  
-DSPEC_OPENMP -L/usr/local/je5.0.1-64/lib -ljemalloc

623.xalancbmk_s: `-Wl,-z,muldefs -prof-gen(pass 1) -prof-use(pass 2) -ipo`  
-xCORE-AVX512 -O3 -no-prec-div -qopt-prefetch  
-qopt-mem-layout-trans=3 -DSPEC_SUPPRESS_OPENMP -qopenmp  
-DSPEC_OPENMP -L/usr/local/je5.0.1-32/lib -ljemalloc

631.deepsjeng_s: `basepeak = yes`

641.leela_s: `Same as 620.omnetpp_s`

#### Fortran benchmarks:

648.exchange2_s: `basepeak = yes`

---

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 2018-11-11 13:06:57-0500.  
Report generated on 2018-12-26 13:02:30 by CPU2017 PDF formatter v6067.  
Originally published on 2018-12-25.