**SPEC CPU®2017 Integer Rate Result**

**Dell Inc.**
PowerEdge R740xd (Intel Xeon Bronze 3206R, 1.90 GHz)

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

**Test Date:** Oct-2019
**Hardware Availability:** Feb-2020
**Software Availability:** Oct-2019

**SPECrates**
- **SPECrates®2017_int_base = 53.4**
- **SPECrates®2017_int_peak = 54.4**

**Hardware**
- **CPU Name:** Intel Xeon Bronze 3206R
  - **Max MHz:** 1900
  - **Nominal:** 1900
  - **Enabled:** 16 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:** 11 MB I+D on chip per chip
  - **Memory:** 384 GB (24 x 16 GB 2Rx8 PC4-2933V-R, running at 2133)
  - **Storage:** 1 x 960 GB SATA SSD
  - **Other:** None

**Software**
- **OS:** Ubuntu 18.04.2 LTS
  - kernel 4.15.0-65-generic
- **Compiler:** C/C++: Version 19.0.4.227 of Intel C/C++ Compiler Build 20190416 for Linux;
  Fortran: Version 19.0.4.227 of Intel Fortran Compiler Build 20190416 for Linux
- **Parallel:** No
- **Firmware:** Version 2.4.5 released Sep-2019
- **File System:** ext4
- **System State:** Run level 5 (multi-user)
- **Base Pointers:** 64-bit
- **Peak Pointers:** 32/64-bit
- **Other:** jemalloc memory allocator V5.0.1
- **Power Management:** BIOS set to prefer performance at the cost of additional power usage.
Dell Inc.  
PowerEdge R740xd (Intel Xeon Bronze 3206R, 1.90 GHz)

SPEC CPU®2017 Integer Rate Result

Copyright 2017-2020 Standard Performance Evaluation Corporation

SPECrate®2017_int_base = 53.4
SPECrate®2017_int_peak = 54.4

Results Table

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Copies</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>500.perlbench_r</td>
<td>16</td>
<td>602</td>
<td>42.3</td>
<td>605</td>
<td>42.1</td>
<td>16</td>
<td>533</td>
<td>47.8</td>
<td>533</td>
<td>47.8</td>
<td></td>
</tr>
<tr>
<td>502.gcc_r</td>
<td>16</td>
<td>447</td>
<td>50.7</td>
<td>446</td>
<td>50.8</td>
<td>16</td>
<td>427</td>
<td>53.0</td>
<td>427</td>
<td>53.0</td>
<td></td>
</tr>
<tr>
<td>505.mcf_r</td>
<td>16</td>
<td>412</td>
<td>62.7</td>
<td>411</td>
<td>62.9</td>
<td>16</td>
<td>411</td>
<td>62.8</td>
<td>411</td>
<td>62.9</td>
<td></td>
</tr>
<tr>
<td>520.omnetpp_r</td>
<td>16</td>
<td>516</td>
<td>40.7</td>
<td>518</td>
<td>40.5</td>
<td>16</td>
<td>519</td>
<td>40.4</td>
<td>520</td>
<td>40.4</td>
<td></td>
</tr>
<tr>
<td>523.xalancbmk_r</td>
<td>16</td>
<td>260</td>
<td>65.1</td>
<td>259</td>
<td>65.2</td>
<td>16</td>
<td>269</td>
<td>62.7</td>
<td>270</td>
<td>62.7</td>
<td></td>
</tr>
<tr>
<td>525.x264_r</td>
<td>16</td>
<td>257</td>
<td>109</td>
<td>257</td>
<td>108</td>
<td>16</td>
<td>247</td>
<td>114</td>
<td>246</td>
<td>114</td>
<td></td>
</tr>
<tr>
<td>531.deepsjeng_r</td>
<td>16</td>
<td>429</td>
<td>42.7</td>
<td>429</td>
<td>42.7</td>
<td>16</td>
<td>429</td>
<td>42.7</td>
<td>429</td>
<td>42.7</td>
<td></td>
</tr>
<tr>
<td>541.leela_r</td>
<td>16</td>
<td>767</td>
<td>34.5</td>
<td>768</td>
<td>34.5</td>
<td>16</td>
<td>768</td>
<td>34.5</td>
<td>768</td>
<td>34.5</td>
<td></td>
</tr>
<tr>
<td>557.xz_r</td>
<td>16</td>
<td>559</td>
<td>30.9</td>
<td>559</td>
<td>30.9</td>
<td>16</td>
<td>559</td>
<td>30.9</td>
<td>559</td>
<td>30.9</td>
<td></td>
</tr>
</tbody>
</table>

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

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"

Environment Variables Notes

Environment variables set by runcpu before the start of the run:
LD_LIBRARY_PATH = 
"/home/cpu2017/lib/intel64:/home/cpu2017/lib/ia32:/home/cpu2017/je5.0.1-32"

General Notes

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.

(Continued on next page)
SPEC CPU®2017 Integer Rate Result

Dell Inc.
PowerEdge R740xd (Intel Xeon Bronze 3206R, 1.90 GHz)

<table>
<thead>
<tr>
<th>SPECrate®2017 int_base</th>
<th>SPECrate®2017 int_peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>53.4</td>
<td>54.4</td>
</tr>
</tbody>
</table>

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

General Notes (Continued)

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
runcpu command invoked through numactl i.e.:
numactl --interleave=all runcpu <etc>
jemalloc, a general purpose malloc implementation
built with the RedHat Enterprise 7.5, and the system compiler gcc 4.8.5

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 enabled
PCI ASPM L1 Link Power Management enabled

Sysinfo program /home/cpu2017/bin/sysinfo
Rev: r6365 of 2019-08-21 295195f888a3d7ed1e6e46a485a0011
running on intel-sut Tue Oct 22 11:31:15 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 3206R CPU @ 1.90GHz
  2 "physical id"s (chips)
  16 "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 : 8
siblings : 8
physical 0: cores 0 1 2 3 4 5 6 7
physical 1: cores 0 1 2 3 4 5 6 7

From lscpu:
Architecture: x86_64
CPU op-mode(s): 32-bit, 64-bit

(Continued on next page)
Dell Inc.

PowerEdge R740xd (Intel Xeon Bronze 3206R, 1.90 GHz)

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

SPECrate®2017_int_base = 53.4
SPECrate®2017_int_peak = 54.4

Test Date: Oct-2019
Hardware Availability: Feb-2020
Software Availability: Oct-2019

Platform Notes (Continued)

Byte Order: Little Endian
CPU(s): 16
On-line CPU(s) list: 0-15
Thread(s) per core: 1
Core(s) per socket: 8
Socket(s): 2
NUMA node(s): 2
Vendor ID: GenuineIntel
CPU family: 6
Model: 85
Model name: Intel(R) Xeon(R) Bronze 3206R CPU @ 1.90GHz
Stepping: 7
CPU MHz: 1860.616
BogoMIPS: 3800.00
Virtualization: VT-x
L1d cache: 32K
L1i cache: 32K
L2 cache: 1024K
L3 cache: 11264K
NUMA node0 CPU(s): 0,2,4,6,8,10,12,14
NUMA node1 CPU(s): 1,3,5,7,9,11,13,15

Flags:
fpu vme de pse tsc msr pae mca 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 arch_perfmon pebs bts rep_good nopl xtopology nonstop_tsc cpuid
aperfmpref perfct pni pclmulqdq dtes64 monitor ds_cpl vmx smx est tm2 ssse3 sdbg fma cx16
xtrd pdcm pcid dca sse4_1 sse4_2 x2apic movbe popcnt tsc_deadline_timer aes xsave
avx f16c rdrand lahf_lm abm 3dnowprefetch cpuid_fault epb cat_l3 cdp_l3
inpveci_single intel_pipn ssbd mba ibbs ibb pibp ibrs_enhanced tpr_shadow vnow
mni fpext priority ept vpid fsgsbase tsc_adjust bni hle avx2 smp bmi2 erms invpcid rtm
cqm mpx rdt_a avx512f avx512dq rdseed adx smap clflushopt clwb intel_pt avx512cd
avx512bw avx512vl xsaveopt xsavec xgetbv1 xsaves cqm_llc cqm_occcll cqm_mmb_total
cqm_mmb_local dthrm arat pln pku ospke avx512_vnni md_clear flush_lld
arch_capabilities

/proc/cpuinfo cache data
cache size : 11264 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
node 0 size: 191917 MB
node 0 free: 191392 MB
node 1 cpus: 1 3 5 7 9 11 13 15
node 1 size: 193512 MB
node 1 free: 193043 MB
node distances:
### Platform Notes (Continued)

<table>
<thead>
<tr>
<th>node</th>
<th>0</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>0:</td>
<td>10</td>
<td>21</td>
</tr>
<tr>
<td>1:</td>
<td>21</td>
<td>10</td>
</tr>
</tbody>
</table>

From /proc/meminfo

- MemTotal: 394680180 kB
- HugePages_Total: 0
- Hugepagesize: 2048 kB

From /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 4.15.0-65-generic #74-Ubuntu SMP Tue Sep 17 17:06:04 UTC 2019 x86_64
x86_64 x86_64 GNU/Linux

Kernel self-reported vulnerability status:

- CVE-2018-3620 (L1 Terminal Fault): Not affected
- Microarchitectural Data Sampling: Not affected
- CVE-2017-5754 (Meltdown): Not affected
- CVE-2018-3639 (Speculative Store Bypass): Mitigation: Speculative Store Bypass disabled via prctl and seccomp
- CVE-2017-5753 (Spectre variant 1): Mitigation: usercopy/swapgs barriers and __user pointer sanitization
- CVE-2017-5715 (Spectre variant 2): Mitigation: Enhanced IBRS, IBPB: conditional, RSB filling

run-level 5 Oct 22 11:29

SPEC is set to: /home/cpu2017

<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>36G</td>
<td>381G</td>
<td>9%</td>
<td>/</td>
</tr>
</tbody>
</table>

From /sys/devices/virtual/dmi/id

(Continued on next page)
## Dell Inc.
**PowerEdge R740xd (Intel Xeon Bronze 3206R, 1.90 GHz)**

**SPECrate®2017_int_base = 53.4**

**SPECrate®2017_int_peak = 54.4**

<table>
<thead>
<tr>
<th>SPEC2017 License: 55</th>
<th>Test Date: Oct-2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Sponsor: Dell Inc.</td>
<td>Hardware Availability: Feb-2020</td>
</tr>
<tr>
<td>Tested by: Dell Inc.</td>
<td>Software Availability: Oct-2019</td>
</tr>
</tbody>
</table>

### Platform Notes (Continued)

- **BIOS:** Dell Inc. 2.4.5 09/22/2019
- **Vendor:** Dell Inc.
- **Product:** PowerEdge R740xd
- **Product Family:** PowerEdge
- **Serial:** F5BMC52

Additional information from dmidcode follows. **WARNING:** Use caution when you interpret this section. The 'dmidcode' 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.

#### Memory:
- 12x 002C069D002C 18ASF2G72PDZ-2G9E1 16 GB 2 rank 2933, configured at 2133
- 7x 00AD00B300AD HMA82GR7CJR8N-WM 16 GB 2 rank 2933, configured at 2133
- 5x 00AD063200AD HMA82GR7CJR8N-WM 16 GB 2 rank 2933, configured at 2133

(End of data from sysinfo program)

### Compiler Version Notes

---

<table>
<thead>
<tr>
<th>C</th>
<th>502.gcc_r(peak)</th>
</tr>
</thead>
</table>

Intel(R) C Intel(R) 64 Compiler for applications running on IA-32, Version 19.0.4.227 Build 20190416

Copyright (C) 1985-2019 Intel Corporation. All rights reserved.

---

<table>
<thead>
<tr>
<th>C</th>
<th>500.perlbench_r(base, peak) 502.gcc_r(base) 505.mcf_r(base, peak) 525.x264_r(base, peak) 557.xz_r(base, peak)</th>
</tr>
</thead>
</table>

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.

---

<table>
<thead>
<tr>
<th>C</th>
<th>502.gcc_r(peak)</th>
</tr>
</thead>
</table>

Intel(R) C Intel(R) 64 Compiler for applications running on IA-32, Version 19.0.4.227 Build 20190416

Copyright (C) 1985-2019 Intel Corporation. All rights reserved.

---

<table>
<thead>
<tr>
<th>C</th>
<th>500.perlbench_r(base, peak) 502.gcc_r(base) 505.mcf_r(base, peak)</th>
</tr>
</thead>
</table>

(Continued on next page)
Dell Inc.

PowerEdge R740xd (Intel Xeon Bronze 3206R, 1.90 GHz)

Compiler Version Notes (Continued)

<table>
<thead>
<tr>
<th>525.x264_r(base, peak) 557.xz_r(base, peak)</th>
</tr>
</thead>
</table>
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.

<table>
<thead>
<tr>
<th>523.xalancbmk_r(peak)</th>
</tr>
</thead>
</table>
Intel(R) C++ Intel(R) 64 Compiler for applications running on IA-32, Version 19.0.4.227 Build 20190416
Copyright (C) 1985-2019 Intel Corporation. All rights reserved.

| 520.omnetpp_r(base, peak) 523.xalancbmk_r(base) |
| 531.deepsjeng_r(base, peak) 541.leela_r(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.

<table>
<thead>
<tr>
<th>523.xalancbmk_r(peak)</th>
</tr>
</thead>
</table>
Intel(R) C++ Intel(R) 64 Compiler for applications running on IA-32, Version 19.0.4.227 Build 20190416
Copyright (C) 1985-2019 Intel Corporation. All rights reserved.

| 520.omnetpp_r(base, peak) 523.xalancbmk_r(base) |
| 531.deepsjeng_r(base, peak) 541.leela_r(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.

Fortran | 548.exchange2_r(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.

(Continued on next page)

CPU2017 License: 55
Test Sponsor: Dell Inc.
Tested by: Dell Inc.
Test Date: Oct-2019
Hardware Availability: Feb-2020
Software Availability: Oct-2019
## Dell Inc.

PowerEdge R740xd (Intel Xeon Bronze 3206R, 1.90 GHz)

<table>
<thead>
<tr>
<th>SPECrate®2017_int_base = 53.4</th>
<th>SPECrate®2017_int_peak = 54.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU2017 License: 55</td>
<td>Test Date: Oct-2019</td>
</tr>
<tr>
<td>Test Sponsor: Dell Inc.</td>
<td>Hardware Availability: Feb-2020</td>
</tr>
<tr>
<td>Tested by: Dell Inc.</td>
<td>Software Availability: Oct-2019</td>
</tr>
</tbody>
</table>

### Compiler Version Notes (Continued)

#### Base Compiler Invocation

C benchmarks:

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

C++ benchmarks:

```bash
icpc -m64
```

Fortran benchmarks:

```bash
ifort -m64
```

### Base Portability Flags

500.perlbench_r: -DSPEC_LP64 -DSPEC_LINUX_X64
502.gcc_r: -DSPEC_LP64
505.mcf_r: -DSPEC_LP64
520.omnetpp_r: -DSPEC_LP64
523.xalancbmk_r: -DSPEC_LP64 -DSPEC_LINUX
525.x264_r: -DSPEC_LP64
531.deepsjeng_r: -DSPEC_LP64
541.leela_r: -DSPEC_LP64
548.exchange2_r: -DSPEC_LP64
557.xz_r: -DSPEC_LP64

### Base Optimization Flags

C benchmarks:

```bash
-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
```

C++ benchmarks:

```bash
-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
```

(Continued on next page)
SPEC CPU®2017 Integer Rate Result

Dell Inc.
PowerEdge R740xd (Intel Xeon Bronze 3206R, 1.90 GHz)

SPECrate®2017_int_base = 53.4
SPECrate®2017_int_peak = 54.4

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

Test Date: Oct-2019
Hardware Availability: Feb-2020
Software Availability: Oct-2019

Base Optimization Flags (Continued)

Fortran benchmarks:
-Wl,-z,muldefs -xCORE-AVX512 -ipo -O3 -no-prec-div
-qopt-mem-layout-trans=4 -nostandard-realloc-lhs -align array32byte
-L/usr/local/IntelCompiler19/compilers_and_libraries_2019.4.227/linux/compiler/lib/intel64
-1qkmalloc

Peak Compiler Invocation

C benchmarks (except as noted below):
icc -m64 -std=c11

C++ benchmarks (except as noted below):
icpc -m64
523.xalancbmk_r: icpc -m32 -L/usr/local/IntelCompiler19/compilers_and_libraries_2019.4.227/linux/compiler/lib/ia32_lin

Fortran benchmarks:
ifort -m64

Peak Portability Flags

500.perlbench_r: -DSPEC_LP64 -DSPEC_LINUX_X64
502.gcc_r: -D_FILE_OFFSET_BITS=64
505.mcf_r: -DSPEC_LP64
520.omnetpp_r: -DSPEC_LP64
523.xalancbmk_r: -D_FILE_OFFSET_BITS=64 -DSPEC_LINUX
525.x264_r: -DSPEC_LP64
531.deepsjeng_r: -DSPEC_LP64
541.leela_r: -DSPEC_LP64
548.exchange2_r: -DSPEC_LP64
557.xz_r: -DSPEC_LP64

Peak Optimization Flags

C benchmarks:
500.perlbench_r: -Wl,-z,muldefs -prof-gen(pass 1) -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 Bronze 3206R, 1.90 GHz)

Peak Optimization Flags (Continued)

500.perlbench_r (continued):
  -fno-strict-overflow
  -L/usr/local/IntelCompiler19/compilers_and_libraries_2019.4.227/linux/compiler/lib/intel64
  -lqkmalloc

502.gcc_r: -Wl,-z,muldefs -prof-gen(pass 1) -prof-use(pass 2) -ipo
  -xCORE-AVX512 -O3 -no-prec-div -qopt-mem-layout-trans=4
  -L/usr/local/je5.0.1-32/lib -ljemalloc

505.mcf_r: -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

525.x264_r: -Wl,-z,muldefs -xCORE-AVX512 -ipo -O3 -no-prec-div
  -qopt-mem-layout-trans=4 -fno-alias
  -L/usr/local/IntelCompiler19/compilers_and_libraries_2019.4.227/linux/compiler/lib/intel64
  -lqkmalloc

557.xz_r: Same as 505.mcf_r

C++ benchmarks:

520.omnetpp_r: -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

523.xalancbmk_r: -Wl,-z,muldefs -prof-gen(pass 1) -prof-use(pass 2) -ipo
  -xCORE-AVX512 -O3 -no-prec-div -qopt-mem-layout-trans=4
  -L/usr/local/je5.0.1-32/lib -ljemalloc

531.deepsjeng_r: Same as 520.omnetpp_r

541.leela_r: Same as 520.omnetpp_r

Fortran benchmarks:

-Wl,-z,muldefs -xCORE-AVX512 -ipo -O3 -no-prec-div
  -qopt-mem-layout-trans=4 -nostandard-realloc-lhs -align array32byte
  -L/usr/local/IntelCompiler19/compilers_and_libraries_2019.4.227/linux/compiler/lib/intel64
  -lqkmalloc

The flags files that were used to format this result can be browsed at
<table>
<thead>
<tr>
<th>Spec CPU®2017 Integer Rate Result</th>
<th>Dell Inc.</th>
<th>SPECrate®2017_int_base = 53.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>PowerEdge R740xd (Intel Xeon Bronze 3206R, 1.90 GHz)</td>
<td>Dell Inc.</td>
<td>SPECrate®2017_int_peak = 54.4</td>
</tr>
<tr>
<td>CPU2017 License: 55</td>
<td>Test Sponsor: Dell Inc.</td>
<td>Hardware Availability: Feb-2020</td>
</tr>
<tr>
<td>Test Sponsor: Dell Inc.</td>
<td>Tested by: Dell Inc.</td>
<td>Software Availability: Oct-2019</td>
</tr>
<tr>
<td>Test Date: Oct-2019</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hardware Availability: Feb-2020</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Software Availability: Oct-2019</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

SPEC CPU and SPECrate are registered trademarks 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 CPU®2017 v1.1.0 on 2019-10-22 07:31:14-0400.
Report generated on 2020-03-02 11:50:00 by CPU2017 PDF formatter v6255.
Originally published on 2020-02-29.