**SPEC CPU®2017 Integer Speed Result**

Dell Inc.

PowerEdge R750 xa (Intel Xeon Platinum 8368, 2.40 GHz)

### SPECspeed®2017_int_base = 11.7

### SPECspeed®2017_int_peak = 11.9

<table>
<thead>
<tr>
<th>Test Sponsor</th>
<th>Dell Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Date</td>
<td>Apr-2021</td>
</tr>
<tr>
<td>Hardware Availability</td>
<td>May-2021</td>
</tr>
<tr>
<td>Software Availability</td>
<td>Feb-2021</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SPECspeed®2017_int_base</th>
<th>SPECspeed®2017_int_peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.7</td>
<td>11.9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Threads</th>
<th>0</th>
<th>1.0</th>
<th>3.0</th>
<th>5.0</th>
<th>7.0</th>
<th>9.0</th>
<th>11.0</th>
<th>13.0</th>
<th>15.0</th>
<th>17.0</th>
<th>19.0</th>
<th>21.0</th>
<th>23.0</th>
<th>25.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>perlbench_s</td>
<td>76</td>
<td>8.07</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>gcc_s</td>
<td>76</td>
<td>10.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>mcf_s</td>
<td>76</td>
<td>11.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>omnetpp_s</td>
<td>76</td>
<td>11.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xalancbmk_s</td>
<td>76</td>
<td>13.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>x264_s</td>
<td>76</td>
<td>16.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>xalancbmk_s</td>
<td>76</td>
<td>17.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>deepsjeng_s</td>
<td>76</td>
<td>5.78</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>leela_s</td>
<td>76</td>
<td>4.72</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>exchange2_s</td>
<td>76</td>
<td>18.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tz_s</td>
<td>76</td>
<td>24.1</td>
<td></td>
<td></td>
<td></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 Platinum 8368
- **Max MHz:** 3400
- **Nominal:** 2400
- **Enabled:** 76 cores, 2 chips
- **Orderable:** 1.2 chips
- **Cache L1:** 32 KB I + 48 KB D on chip per core
- **L2:** 1.25 MB I+D on chip per core
- **L3:** 57 MB I+D on chip per chip
- **Other:** None
- **Memory:** 512 GB (16 x 32 GB 2Rx8 PC4-3200AA-R)
- **Storage:** 225 GB on tmpfs
- **Other:** None

**Software**

- **OS:** Red Hat Enterprise Linux 8.3 (Ootpa)
- **Compiler:** C/C++: Version 2021.1 of Intel oneAPI DPC++/C++ Compiler Build 20201113 for Linux;
  Fortran: Version 2021.1 of Intel Fortran Compiler Classic Build 20201112 for Linux;
  C/C++: Version 2021.1 of Intel C/C++ Compiler Classic Build 20201112 for Linux
- **Parallel:** Yes
- **Firmware:** Version 1.1.2 released Apr-2021
- **File System:** tmpfs
- **System State:** Run level 5 (graphical multi-user)
- **Base Pointers:** 64-bit
- **Peak Pointers:** 64-bit
- **Other:** None
- **jemalloc memory allocator V5.0.1
- **Power Management:** BIOS and OS set to prefer performance at the cost of additional power usage.
SPEC CPU®2017 Integer Speed Result

Dell Inc.
PowerEdge R750 xa (Intel Xeon Platinum 8368, 2.40 GHz)

SPECspeed®2017_int_base = 11.7
SPECspeed®2017_int_peak = 11.9

Results Table

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Base Threads</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Peak 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>600.perlbench_s</td>
<td>76</td>
<td>255</td>
<td>6.96</td>
<td>253</td>
<td>7.02</td>
<td>254</td>
<td>6.99</td>
<td>76</td>
<td>222</td>
<td>7.98</td>
<td>220</td>
<td>8.07</td>
<td>218</td>
<td>8.14</td>
</tr>
<tr>
<td>602gcc_s</td>
<td>76</td>
<td>373</td>
<td>10.7</td>
<td>369</td>
<td>10.8</td>
<td>373</td>
<td>10.7</td>
<td>76</td>
<td>360</td>
<td>11.1</td>
<td>359</td>
<td>11.1</td>
<td>359</td>
<td>11.1</td>
</tr>
<tr>
<td>605.mcf_s</td>
<td>76</td>
<td>242</td>
<td>19.5</td>
<td>239</td>
<td>19.7</td>
<td>242</td>
<td>19.5</td>
<td>76</td>
<td>242</td>
<td>19.5</td>
<td>239</td>
<td>19.7</td>
<td>242</td>
<td>19.5</td>
</tr>
<tr>
<td>620.omnetpp_s</td>
<td>76</td>
<td>138</td>
<td>11.8</td>
<td>134</td>
<td>12.2</td>
<td>138</td>
<td>11.8</td>
<td>76</td>
<td>138</td>
<td>11.8</td>
<td>134</td>
<td>12.2</td>
<td>138</td>
<td>11.8</td>
</tr>
<tr>
<td>625.x264_s</td>
<td>76</td>
<td>105</td>
<td>16.7</td>
<td>105</td>
<td>16.8</td>
<td>106</td>
<td>16.7</td>
<td>76</td>
<td>101</td>
<td>17.5</td>
<td>101</td>
<td>17.5</td>
<td>101</td>
<td>17.5</td>
</tr>
<tr>
<td>631.deepsjeng_s</td>
<td>76</td>
<td>250</td>
<td>5.74</td>
<td>248</td>
<td>5.78</td>
<td>248</td>
<td>5.78</td>
<td>76</td>
<td>250</td>
<td>5.74</td>
<td>248</td>
<td>5.78</td>
<td>248</td>
<td>5.78</td>
</tr>
<tr>
<td>641.leela_s</td>
<td>76</td>
<td>362</td>
<td>4.72</td>
<td>362</td>
<td>4.72</td>
<td>363</td>
<td>4.70</td>
<td>76</td>
<td>362</td>
<td>4.72</td>
<td>362</td>
<td>4.72</td>
<td>363</td>
<td>4.70</td>
</tr>
<tr>
<td>648.exchange2_s</td>
<td>76</td>
<td>157</td>
<td>18.8</td>
<td>156</td>
<td>18.8</td>
<td>157</td>
<td>18.8</td>
<td>76</td>
<td>157</td>
<td>18.8</td>
<td>156</td>
<td>18.8</td>
<td>157</td>
<td>18.8</td>
</tr>
<tr>
<td>657.xz_s</td>
<td>76</td>
<td>257</td>
<td>24.1</td>
<td>256</td>
<td>24.2</td>
<td>257</td>
<td>24.1</td>
<td>76</td>
<td>257</td>
<td>24.1</td>
<td>256</td>
<td>24.2</td>
<td>257</td>
<td>24.1</td>
</tr>
</tbody>
</table>

SPECspeed®2017_int_base = 11.7
SPECspeed®2017_int_peak = 11.9

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"

Environment Variables Notes
Environment variables set by runcpu before the start of the run:
KMP_AFFINITY = "granularity=fine,scatter"
LD_LIBRARY_PATH = "/mnt/ramdisk/cpu2017-1.1.5-ic2021.1/lib/intel64:/mnt/ramdisk/cpu2017-1.1.5-ic2021.1/je5.0.1-64"
MALLOC_CONF = "retain:true"
OMP_STACKSIZE = "192M"

General Notes
Binaries compiled on a system with 1x Intel Core i9-7980XE CPU + 64GB RAM memory using Redhat Enterprise Linux 8.0
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 7.5, and the system compiler gcc 4.8.5

NA: The test sponsor attests, as of date of publication, that CVE-2017-5754 (Meltdown) is mitigated in the system as tested and documented.

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

Dell Inc.
PowerEdge R750 xa (Intel Xeon Platinum 8368, 2.40 GHz)

SPECspeed®2017_int_base = 11.7
SPECspeed®2017_int_peak = 11.9

CPU2017 License: 55
Test Sponsor: Dell Inc.
Tested by: Dell Inc.
Hardware Availability: May-2021
Software Availability: Feb-2021

General Notes (Continued)

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.

Benchmark run from a 225 GB ramdisk created with the cmd: "mount -t tmpfs -o size=225G tmpfs /mnt/ramdisk"

Platform Notes

BIOS Settings:
Logical Processor : Disabled
Virtualization Technology : Disabled

System Profile : Custom
CPU Power Management : Maximum Performance
C1E : Disabled
C States : Autonomous
Memory Patrol Scrub : Disabled
Energy Efficiency Policy : Performance
CPU Interconnect Bus Link
Power Management : Disabled

Sysinfo program /mnt/ramdisk/cpu2017-1.1.5-ic2021.1/bin/sysinfo
Rev: r6538 of 2020-09-24 e8664e66d2d7080afeaa89d4b38e2f1c
running on localhost.localdomain Tue Apr 20 09:32:32 2021

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) Platinum 8368 CPU @ 2.40GHz
  2 "physical id"s (chips)
  76 "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 : 38
siblings : 38
physical 0: cores 0 1 2 3 4 5 6 7 8 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37
physical 1: cores 0 1 2 3 4 5 6 7 8 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37

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

### Dell Inc.
PowerEdge R750 xa (Intel Xeon Platinum 8368, 2.40 GHz)

<table>
<thead>
<tr>
<th>SPECspeed®2017_int_base</th>
<th>SPECspeed®2017_int_peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.7</td>
<td>11.9</td>
</tr>
</tbody>
</table>

**CPU2017 License:** 55  
**Test Sponsor:** Dell Inc.  
**Tested by:** Dell Inc.  
**Test Date:** Apr-2021  
**Hardware Availability:** May-2021  
**Software Availability:** Feb-2021

---

### Platform Notes (Continued)

From `lscpu`:

- **Architecture:** x86_64
- **CPU op-mode(s):** 32-bit, 64-bit
- **Byte Order:** Little Endian
- **CPU(s):** 76
- **On-line CPU(s) list:** 0-75
- **Thread(s) per core:** 1
- **Core(s) per socket:** 38
- **Socket(s):** 2
- **NUMA node(s):** 2
- **Vendor ID:** GenuineIntel
- **CPU family:** 6
- **Model:** 106
- **Model name:** Intel(R) Xeon(R) Platinum 8368 CPU @ 2.40GHz
- **Stepping:** 6
- **CPU MHz:** 1026.161
- **BogoMIPS:** 4800.00
- **Virtualization:** VT-x
- **L1d cache:** 48K
- **L1i cache:** 32K
- **L2 cache:** 1280K
- **L3 cache:** 58368K
- **NUMA node0 CPU(s):** 0,2,4,6,8,10,12,14,16,18,20,22,24,26,28,30,32,34,36,38,40,42,44,46,48,50,52,54,56,58,60,62,64,66,68,70,72,74
- **NUMA node1 CPU(s):** 1,3,5,7,9,11,13,15,17,19,21,23,25,27,29,31,33,35,37,39,41,43,45,47,49,51,53,55,57,59,61,63,65,67,69,71,73,75
- **Flags:** fpu vme de pse tsc msr pae mce cmov pat pse36 clflush dts acpi mmx fxsr sse sse2 ss ht tm pbe syscall nx pdeldbg 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 tsc_deadline_timer aes xsave avx f16c rdrand lahf_lm abtm 3dnowprefetch cpuid_fault epb cat_l3 invpcid_single intel_pni ssbd mbx ibrs ibpb stibp ibrs_enhanced fsgsbase tsc_adjust bmi1 hle avx2 smep bmi2 erms invpcid cmq rdt_a avx512f avx512dq rdseed adx smap avx512ifma clflushopt clwb intel_pt avx512bv1 xsaveopt xsavevc xsaveprec xsaves cmp_legacy cmp_loadroot cmp_save rootrce smclntst tm2fb tso watchtx mpx prefetch_store pbeef mfffchain mmx+fp frsqrtpsv mbmi2 mtmsaf vaes f16c v_approx_fma f16c1 avx512vnni avx512bitalgs vfpow vfpunit mremc vfpunit_avx2

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

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

Dell Inc.  
PowerEdge R750 xa (Intel Xeon Platinum 8368, 2.40 GHz)  

<table>
<thead>
<tr>
<th>CPU2017 License: 55</th>
<th>Test Date: Apr-2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Sponsor: Dell Inc.</td>
<td>Hardware Availability: May-2021</td>
</tr>
<tr>
<td>Tested by: Dell Inc.</td>
<td>Software Availability: Feb-2021</td>
</tr>
</tbody>
</table>

**SPECspeed®2017_int_base = 11.7**  
**SPECspeed®2017_int_peak = 11.9**

---

**Platform Notes (Continued)**

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 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 74  
node 0 size: 241913 MB  
node 0 free: 241986 MB  
node 1 cpus: 1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51 53 55 57 59 61 63 65 67 69 71 73 75  
node 1 size: 245449 MB  
node 1 free: 256112 MB  
nodem distances:  
node 0 1  
0: 10 20  
1: 20 10  

From /proc/meminfo  
MemTotal: 527805896 kB  
HugePages_Total: 0  
Hugepagesize: 2048 kB  

/sbin/tuned-adm active  
Current active profile: throughput-performance  

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

| os-release: NAME="Red Hat Enterprise Linux" VERSION="8.3 (Ootpa)" ID="rhel" ID_LIKE="fedora" VERSION_ID="8.3" PLATFORM_ID="platform:el8" PRETTY_NAME="Red Hat Enterprise Linux 8.3 (Ootpa)" ANSI_COLOR="0;31" redhat-release: Red Hat Enterprise Linux release 8.3 (Ootpa) system-release: Red Hat Enterprise Linux release 8.3 (Ootpa) system-release-cpe: cpe:/o:redhat:enterprise_linux:8.3:ga |

uname -a:  
Linux localhost.localdomain 4.18.0-240.15.1.el8_3.x86_64 #1 SMP Wed Feb 3 03:12:15 EST 2021 x86_64 x86_64 x86_64 GNU/Linux  

Kernel self-reported vulnerability status:  

| CVE-2018-12207 (iTLB Multihit): Not affected |
| 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 |

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

### Dell Inc. PowerEdge R750 xa (Intel Xeon Platinum 8368, 2.40 GHz)

<table>
<thead>
<tr>
<th>CPU2017 License</th>
<th>Test Date</th>
<th>Hardware Availability</th>
<th>Software Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>55</td>
<td>Apr-2021</td>
<td>May-2021</td>
<td>Feb-2021</td>
</tr>
</tbody>
</table>

### SPECspeed®2017_int_base = 11.7

### SPECspeed®2017_int_peak = 11.9

#### Platform Notes (Continued)

- **CVE-2017-5753 (Spectre variant 1):**
  - Bypass disabled via prctl and seccomp
  - Mitigation: usercopy/swapgs barriers and __user pointer sanitization

- **CVE-2017-5715 (Spectre variant 2):**
  - Mitigation: Enhanced IBRS, IBPB: conditional, RSB filling

- **CVE-2020-0543 (Special Register Buffer Data Sampling):**
  - Not affected

- **CVE-2019-11135 (TSX Asynchronous Abort):**
  - Not affected

#### Compiler Version Notes

```
C       | 600.perlbench_s(peak)
```

Intel(R) C Intel(R) 64 Compiler Classic for applications running on Intel(R) 64, Version 2021.1 Build 20201112_000000

Copyright (C) 1985-2020 Intel Corporation. All rights reserved.

(Continued on next page)
Dell Inc.
PowerEdge R750 xa (Intel Xeon Platinum 8368, 2.40 GHz)

<table>
<thead>
<tr>
<th>CPU2017 License:</th>
<th>55</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>Spec CPU®2017 Integer Speed Result</td>
<td></td>
</tr>
</tbody>
</table>

**SPECspeed®2017_int_base = 11.7**

**SPECspeed®2017_int_peak = 11.9**

<table>
<thead>
<tr>
<th>Test Date:</th>
<th>Apr-2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware Availability:</td>
<td>May-2021</td>
</tr>
<tr>
<td>Software Availability:</td>
<td>Feb-2021</td>
</tr>
</tbody>
</table>

---

**Compiler Version Notes (Continued)**

```plaintext
<table>
<thead>
<tr>
<th>C</th>
<th>600.perlbench_s(base) 602.gcc_s(base, peak) 605.mcf_s(base, peak)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>625.x264_s(base, peak) 657.xz_s(base, peak)</td>
</tr>
</tbody>
</table>
```

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2021.1 Build 20201113
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.

```plaintext
<table>
<thead>
<tr>
<th>C</th>
<th>600.perlbench_s(peak)</th>
</tr>
</thead>
</table>
```

Intel(R) C Intel(R) 64 Compiler Classic for applications running on Intel(R) 64, Version 2021.1 Build 20201112_000000
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.

```plaintext
<table>
<thead>
<tr>
<th>C</th>
<th>600.perlbench_s(base) 602.gcc_s(base, peak) 605.mcf_s(base, peak)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>625.x264_s(base, peak) 657.xz_s(base, peak)</td>
</tr>
</tbody>
</table>
```

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2021.1 Build 20201113
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.

```plaintext
<table>
<thead>
<tr>
<th>C++</th>
<th>620.omnetpp_s(base, peak) 623.xalancbmk_s(base, peak)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>631.deepsjeng_s(base, peak) 641.leela_s(base, peak)</td>
</tr>
</tbody>
</table>
```

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2021.1 Build 20201113
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.

```plaintext
<table>
<thead>
<tr>
<th>Fortran</th>
<th>648.exchange2_s(base, peak)</th>
</tr>
</thead>
</table>
```

Intel(R) Fortran Intel(R) 64 Compiler Classic for applications running on Intel(R) 64, Version 2021.1 Build 20201112_000000
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.
## SPEC CPU®2017 Integer Speed Result

**Dell Inc.**  
PowerEdge R750 xa (Intel Xeon Platinum 8368, 2.40 GHz)  

<table>
<thead>
<tr>
<th>SPECspeed®2017_int_base</th>
<th>SPECspeed®2017_int_peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.7</td>
<td>11.9</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Test Date:</th>
<th>Apr-2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware Availability:</td>
<td>May-2021</td>
</tr>
<tr>
<td>Software Availability:</td>
<td>Feb-2021</td>
</tr>
</tbody>
</table>

### Base Compiler Invocation

C benchmarks:  
- icx

C++ benchmarks:  
- icpx

Fortran benchmarks:  
- ifort

### Base Portability Flags

- Perlbench: -DSPEC_LP64 -DSPEC_LINUX_X64  
- gcc: -DSPEC_LP64  
- mcf: -DSPEC_LP64  
- omnetpp: -DSPEC_LP64  
- xalancbmk: -DSPEC_LP64 -DSPEC_LINUX  
- x264: -DSPEC_LP64  
- deepsjeng: -DSPEC_LP64  
- leela: -DSPEC_LP64  
- exchange2: -DSPEC_LP64  
- xz: -DSPEC_LP64

### Base Optimization Flags

#### C benchmarks:
- -DSPEC_OPENMP -std=c11 -m64 -fopenmp -Wl,-z,muldefs -xCORE-AVX512  
- -O3 -ffast-math -flto -mfpmath=sse -funroll-loops  
- -qopt-mem-layout-trans=4 -mbranches-within-32B-boundaries  
- -L/usr/local/jemalloc64-5.0.1/lib -ljemalloc

#### C++ benchmarks:  
- -DSPEC_OPENMP -m64 -Wl,-z,muldefs -xCORE-AVX512 -O3 -ffast-math  
- -flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4  
- -mbranches-within-32B-boundaries  
- -L/opt/intel/oneapi/compiler/2021.1.1/linux/compiler/lib/intel64_lin/ -lqkmalloc

#### Fortran benchmarks:  
- -m64 -xCORE-AVX512 -O3 -ipo -no-prec-div -qopt-mem-layout-trans=4  
- -nostandard-realloc-lhs -align array32byte -auto  
- -mbranches-within-32B-boundaries
SPEC CPU®2017 Integer Speed Result

Dell Inc.
PowerEdge R750 xa (Intel Xeon Platinum 8368, 2.40 GHz)

SPECspeed®2017_int_base = 11.7
SPECspeed®2017_int_peak = 11.9

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

Test Date: Apr-2021
HardwareAvailability: May-2021
SoftwareAvailability: Feb-2021

Peak Compiler Invocation

C benchmarks (except as noted below):
icx
600.perlbench_s: icc

C++ benchmarks:
icpx

Fortran benchmarks:
ifort

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)
-xCORE-AVX512 -ipo -O3 -no-prec-div
-qopt-mem-layout-trans=4 -fno-strict-overflow
-mbranches-within-32B-boundaries
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc

602.gcc_s: -m64 -std=c11 -Wl,-z,muldefs -fprofile-generate(pass 1)
-fprofile-use=default.profdata(pass 2) -xCORE-AVX512 -flto
-Ofast(pass 1) -O3 -ffast-math -qopt-mem-layout-trans=4
-mbranches-within-32B-boundaries
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc

605.mcf_s: basepeak = yes

625.x264_s: -DSPEC_OPENMP -fiopenmp -std=c11 -m64 -Wl,-z,muldefs
-xCORE-AVX512 -flto -O3 -ffast-math
-qopt-mem-layout-trans=4 -fno-alias
-mbranches-within-32B-boundaries
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc

657.xz_s: basepeak = yes

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

### Dell Inc.

PowerEdge R750 xa (Intel Xeon Platinum 8368, 2.40 GHz)

<table>
<thead>
<tr>
<th>SPECspeed®2017_int_base</th>
<th>SPECspeed®2017_int_peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>11.7</td>
<td>11.9</td>
</tr>
</tbody>
</table>

**CPU2017 License:** 55  
**Test Sponsor:** Dell Inc.  
**Test Date:** Apr-2021  
**Hardware Availability:** May-2021  
**Tested by:** Dell Inc.  
**Software Availability:** Feb-2021

### Peak Optimization Flags (Continued)

**C++ benchmarks:**

- 620.omnetpp_s: basepeak = yes
- 623.xalancbmk_s: basepeak = yes
- 631.deepsjeng_s: basepeak = yes
- 641.leela_s: basepeak = yes

**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 CPU and SPECspeed 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 v1.1.5 on 2021-04-19 21:32:32-0400.  
Originally published on 2021-05-18.