Dell Inc.
PowerEdge R750 xa (Intel Xeon Platinum 8352S, 2.20 GHz)

<table>
<thead>
<tr>
<th>SPECspeed®2017_fp_base</th>
<th>SPECspeed®2017_fp_peak</th>
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</thead>
<tbody>
<tr>
<td>207</td>
<td>209</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>
<tbody>
<tr>
<td><strong>CPU Name:</strong></td>
<td><strong>OS:</strong> Red Hat Enterprise Linux 8.3 (Ootpa)</td>
</tr>
<tr>
<td>Max MHz:</td>
<td>Version 4.18.0-240.15.1.el8_3.x86_64</td>
</tr>
<tr>
<td>Nominal:</td>
<td>Compiler:</td>
</tr>
<tr>
<td>Enabled:</td>
<td>C/C++: Version 2021.1 of Intel oneAPI DPC++/C++</td>
</tr>
<tr>
<td>Orderable:</td>
<td>Compiler Build 20201113 for Linux;</td>
</tr>
<tr>
<td>Cache L1:</td>
<td>Fortran: Version 2021.1 of Intel Fortran Compiler</td>
</tr>
<tr>
<td>Cache L2:</td>
<td>Classic Build 20201112 for Linux;</td>
</tr>
<tr>
<td>Cache L3:</td>
<td></td>
</tr>
<tr>
<td>Other:</td>
<td>Parallel: Yes</td>
</tr>
<tr>
<td>Memory:</td>
<td>Firmware: Version 1.1.2 released Apr-2021</td>
</tr>
<tr>
<td>Storage:</td>
<td>File System: tmpfs</td>
</tr>
<tr>
<td>Other:</td>
<td>System State: Run level 5 (graphical multi-user)</td>
</tr>
<tr>
<td></td>
<td>Base Pointers: 64-bit</td>
</tr>
<tr>
<td></td>
<td>Peak Pointers: 64-bit</td>
</tr>
<tr>
<td></td>
<td>Other: None</td>
</tr>
<tr>
<td></td>
<td>Power Management: BIOS and OS set to prefer performance at the cost of additional power usage.</td>
</tr>
</tbody>
</table>

**Threads**

<table>
<thead>
<tr>
<th>SPECspeed®2017_fp_base (207)</th>
<th>SPECspeed®2017_fp_peak (209)</th>
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<tbody>
<tr>
<td>603.bwaves_s 64</td>
<td>64</td>
</tr>
<tr>
<td>607.cactuBSSN_s 64</td>
<td>64</td>
</tr>
<tr>
<td>619.ibm_s 64</td>
<td>64</td>
</tr>
<tr>
<td>621.wrf_s 64</td>
<td>64</td>
</tr>
<tr>
<td>627.cam4_s 64</td>
<td>64</td>
</tr>
<tr>
<td>628.pop2_s 64</td>
<td>64</td>
</tr>
<tr>
<td>638.imagick_s 64</td>
<td>64</td>
</tr>
<tr>
<td>644.nab_s 64</td>
<td>64</td>
</tr>
<tr>
<td>649.fotonik3d_s 64</td>
<td>64</td>
</tr>
<tr>
<td>654.roms_s 64</td>
<td>64</td>
</tr>
</tbody>
</table>

CPU Name: Intel Xeon Platinum 8352S
Max MHz: 3400
Nominal: 2200
Enabled: 64 cores, 2 chips
Orderable: 1.2 chips
Cache L1: 32 KB I + 48 KB D on chip per core
Cache L2: 1.25 MB I+D on chip per core
Cache L3: 48 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)
Version 4.18.0-240.15.1.el8_3.x86_64
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
Power Management: BIOS and OS set to prefer performance at the cost of additional power usage.
Dell Inc.

PowerEdge R750 xa (Intel Xeon Platinum 8352S, 2.20 GHz)

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

SPECspeed®2017_fp_base = 207
SPECspeed®2017_fp_peak = 209

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>
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<tbody>
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<tr>
<td>607.cactuBSSN_s</td>
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<td>67.6</td>
<td>247</td>
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<td>67.6</td>
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<td>199</td>
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<td>67.5</td>
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<td>627.cam4_s</td>
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<td>151</td>
<td>58.7</td>
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<td>58.6</td>
<td>151</td>
<td>58.7</td>
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<td>628.pop2_s</td>
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<td>137</td>
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<td>638.imagick_s</td>
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<td>75.3</td>
<td>191</td>
<td>75.3</td>
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<td>75.5</td>
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<td>75.3</td>
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<td>644.nab_s</td>
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<tr>
<td>649.fotonik3d_s</td>
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<td>113</td>
<td>80.7</td>
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<tr>
<td>654.roms_s</td>
<td>64</td>
<td>58.0</td>
<td>272</td>
<td>58.4</td>
<td>269</td>
<td>58.9</td>
<td>267</td>
<td>64</td>
<td>58.0</td>
<td>272</td>
<td>58.4</td>
</tr>
</tbody>
</table>

SPECspeed®2017_fp_base = 207
SPECspeed®2017_fp_peak = 209

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,compact"
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

NA: The test sponsor attests, as of date of publication, that CVE-2017-5754 (Meltdown) is mitigated in the system as tested and documented.
Dell Inc.
PowerEdge R750 xa (Intel Xeon Platinum 8352S, 2.20 GHz)

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 Wed Apr 28 13:33:38 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 8352S CPU @ 2.20GHz
  - 2 "physical id"s (chips)
  - 64 "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 : 32
  - siblings : 32
  - physical 0: cores 0 1 2 3 4 5 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
  - physical 1: cores 0 1 2 3 4 5 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

From lscpu:
- Architecture: x86_64

(Continued on next page)
Dell Inc.
PowerEdge R750 xa (Intel Xeon Platinum 8352S, 2.20 GHz)  

SPECspeed®2017_fp_base = 207  
SPECspeed®2017_fp_peak = 209

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)

CPU op-mode(s): 32-bit, 64-bit
Byte Order: Little Endian
CPU(s): 64
On-line CPU(s) list: 0-63
Thread(s) per core: 1
Core(s) per socket: 32
Socket(s): 2
NUMA node(s): 2
Vendor ID: GenuineIntel
CPU family: 6
Model: 106
Model name: Intel(R) Xeon(R) Platinum 8352S CPU @ 2.20GHz
Stepping: 6
CPU MHz: 2834.358
BogoMIPS: 4400.00
Virtualization: VT-x
L1d cache: 48K
L1i cache: 32K
L2 cache: 1280K
L3 cache: 49152K
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
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
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 arch_perfmon pebs bts rep_good nopl xtopology nonstop_tsc cpuid
aerperfmpref pni pclmulqdq dtes64 monitor ds_cpl vmx smx est tm2 ssse3 sdbg fma cx16
xtrm pdcm pcid dca sse4_1 sse4_2 x2apic movbe popcnt tsc_deadline_timer aes xsave
avx f16c rdrand lahf_lm abm 3nowprefetch cpuid_fault epb cat_l3 invpcid_single
intel_pni ssbd mba ibrs ibpb stibp ibrs_enhanced fsgsbase tsc_adjust bmi1 hle avx2
smep bmi2 erms invpcid cqm rdt_a avx512f avx512dq rdseed adx smap avx512ifma
ciflushopt clwb intel_pt avx512cd sha ni avx512bw avx512vl xsaves vmbx xgetbv1
xsaves cqm_llc cqm_occsp llc cqm_mbb_total cqm_mbb_local split_lock_detect
wbinvd dtmval ida pm tms avx512vbmi umip pkp ospe avx512_vmbi2 gfn vaes vpcmvlqdq
avx512_vnni avx512_vbitalg tme avx512_vpopcntdq la55 rdpid md_clear pconfig flush_l1d
arch_capabilities

/proc/cpuinfo cache data

cache size : 49152 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 36 38 40 42 44 46 48 50

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

Dell Inc.

PowerEdge R750 xa (Intel Xeon Platinum 8352S, 2.20 GHz)

SPECspeed®2017_fp_base = 207
SPECspeed®2017_fp_peak = 209

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)

52 54 56 58 60 62
node 0 size: 243671 MB
node 0 free: 238007 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
node 1 size: 245706 MB
node 1 free: 253810 MB
node distances:
node 0 1
0: 10 20
1: 20 10

From /proc/meminfo
MemTotal:       527808492 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.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 Bypass disabled via prctl and seccomp

(Continued on next page)
Dell Inc.  
PowerEdge R750 xa (Intel Xeon Platinum 8352S, 2.20 GHz)  

**SPEC CPU®2017 Floating Point Speed Result**  

---

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

---

**Platform Notes (Continued)**

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

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

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

---

**run-level 5 Apr 28 09:35**

SPEC is set to: /mnt/ramdisk/cpu2017-1.1.5-ic2021.1

Filesystem     Type   Size  Used Avail Use% Mounted on  
tmpfs          tmpfs  225G   13G  213G   6% /mnt/ramdisk

From /sys/devices/virtual/dmi/id  
Vendor:         Dell Inc.  
Product:        PowerEdge R750 xa  
Product Family: PowerEdge  
Serial:         1234567

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.

Memory:  
16x 002C069D002C 18ASF4G72PDZ-3G2E1 32 GB 2 rank 3200  
16x Not Specified Not Specified

BIOS:  
BIOS Vendor: Dell Inc.  
BIOS Version: 1.1.2  
BIOS Date: 04/09/2021  
BIOS Revision: 1.1

---

**Compiler Version Notes**

==============================================================================
| C               | 619.lbm_s(base, peak) 638.imagick_s(base, peak) 644.nab_s(base) |
==============================================================================

Intel(R) C Intel(R) 64 Compiler Classic for applications running on Intel(R) 64, Version 2021.1 Build 20201112_000000  
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(Continued on next page)
### Dell Inc.

**PowerEdge R750 xa (Intel Xeon Platinum 8352S, 2.20 GHz)**

---

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

---

**SPECspeed®2017_fp_base = 207**  
**SPECspeed®2017_fp_peak = 209**

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**Compiler Version Notes (Continued)**

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<table>
<thead>
<tr>
<th>Language</th>
<th>COMP</th>
<th>Benchmark(s)</th>
</tr>
</thead>
</table>
| C        | 644.nab_s(peak) | 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. |
| C        | 619.lbm_s(base, peak) 638.imagick_s(base, peak) 644.nab_s(base) | 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. |
| C        | 644.nab_s(peak) | 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. |
| C++, C, Fortran | 607.cactuBSSN_s(base, 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.  
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.  
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. |
| Fortran  | 603.bwaves_s(base, peak) 649.fotonik3d_s(base, peak) 654.roms_s(base, peak) | 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. |

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(Continued on next page)
### Compiler Version Notes (Continued)

| Fortran, C          | 621.wrf_s(base, peak) 627.cam4_s(base, peak) 628.pop2_s(base, peak) |

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.

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.

### Base Compiler Invocation

C benchmarks:

icc  

Fortran benchmarks:

ifort  

Benchmarks using both Fortran and C:

ifort icc  

Benchmarks using Fortran, C, and C++:

icpc icc ifort

### Base Portability Flags

<table>
<thead>
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<th>Flag</th>
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<tr>
<td>603.bwaves_s: -DSPEC_LP64</td>
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<td>607.cactuBSSN_s: -DSPEC_LP64</td>
</tr>
<tr>
<td>619.lbm_s: -DSPEC_LP64</td>
</tr>
<tr>
<td>621.wrf_s: -DSPEC_LP64 -DSPEC_CASE_FLAG -convert big_endian</td>
</tr>
<tr>
<td>627.cam4_s: -DSPEC_LP64 -DSPEC_CASE_FLAG</td>
</tr>
<tr>
<td>628.pop2_s: -DSPEC_LP64 -DSPEC_CASE_FLAG -convert big_endian -assume byterecl</td>
</tr>
<tr>
<td>638.imagick_s: -DSPEC_LP64</td>
</tr>
<tr>
<td>644.nab_s: -DSPEC_LP64</td>
</tr>
<tr>
<td>649.fotonik3d_s: -DSPEC_LP64</td>
</tr>
<tr>
<td>654.roms_s: -DSPEC_LP64</td>
</tr>
</tbody>
</table>
Base Optimization Flags

C benchmarks:
-m64 -std=c11 -xCORE-AVX512 -ipo -O3 -no-prec-div -qopt-prefetch
-ffinite-math-only -qopt-mem-layout-trans=4 -qopenmp -DSPEC_OPENMP
-mbranches-within-32B-boundaries

Fortran benchmarks:
-m64 -Wl,-z,muldefs -DSPEC_OPENMP -xCORE-AVX512 -ipo -O3
-no-prec-div -qopt-prefetch -ffinite-math-only
-qopt-mem-layout-trans=4 -qopenmp -nostandard-realloc-lhs
-mbranches-within-32B-boundaries -L/usr/local/jemalloc64-5.0.1/lib
-ljemalloc

Benchmarks using both Fortran and C:
-m64 -std=c11 -Wl,-z,muldefs -xCORE-AVX512 -ipo -O3 -no-prec-div
-qopt-prefetch -ffinite-math-only -qopt-mem-layout-trans=4 -qopenmp
-DSPEC_OPENMP -mbranches-within-32B-boundaries -nostandard-realloc-lhs
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc

Benchmarks using Fortran, C, and C++:
-m64 -std=c11 -Wl,-z,muldefs -xCORE-AVX512 -ipo -O3 -no-prec-div
-qopt-prefetch -ffinite-math-only -qopt-mem-layout-trans=4 -qopenmp
-DSPEC_OPENMP -mbranches-within-32B-boundaries -nostandard-realloc-lhs
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc

Peak Compiler Invocation

C benchmarks (except as noted below):
icc

644.nab_s: icx

Fortran benchmarks:
ifort

Benchmarks using both Fortran and C:
ifort icc

Benchmarks using Fortran, C, and C++:
icpc icc ifort
Dell Inc.
PowerEdge R750 xa (Intel Xeon Platinum 8352S, 2.20 GHz)

SPECspeed®2017_fp_base = 207
SPECspeed®2017_fp_peak = 209

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

Peak Portability Flags
Same as Base Portability Flags

Peak Optimization Flags

C benchmarks:
619.lbm_s: basepeak = yes
638.imagick_s: basepeak = yes
644.nab_s: -m64 -Wl,-z,muldefs -xCORE-AVX512 -Ofast -ffast-math
-f1to -mfpmath=sse -funroll-loops -fiopenmp
-DSPEC_OPENMP -qopt-mem-layout-trans=4
-fimf-accuracy-bits=14:sqrt
-mbranches-within-32B-boundaries
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc

Fortran benchmarks:
603.bwaves_s: -m64 -Wl,-z,muldefs -prof-gen(pass 1) -prof-use(pass 2)
-DSPEC_SUPPRESS_OPENMP -DSPEC_OPENMP -ipo -xCORE-AVX512
-03 -no-prec-div -qopt-prefetch -ffinite-math-only
-qqpt-mem-layout-trans=4 -qopenmp -nostandard-realloc-lhs
-mbranches-within-32B-boundaries
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
649.fotonik3d_s: Same as 603.bwaves_s
654.roms_s: basepeak = yes

Benchmarks using both Fortran and C:
621.wrf_s: -m64 -std=c11 -Wl,-z,muldefs -prof-gen(pass 1)
-prof-use(pass 2) -ipo -xCORE-AVX512 -03 -no-prec-div
-qqopt-prefetch -ffinite-math-only -qqpt-mem-layout-trans=4
-DSPEC_SUPPRESS_OPENMP -qopenmp -DSPEC_OPENMP
-mbranches-within-32B-boundaries -nostandard-realloc-lhs
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
627.cam4_s: basepeak = yes
628.pop2_s: basepeak = yes

(Continued on next page)
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Peak Optimization Flags (Continued)

Benchmarks using Fortran, C, and C++:

607.cactuBSSN_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:
http://www.spec.org/cpu2017/flags/Intel-ic2021-official-linux64_revA.xml

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For questions about this result, please contact the tester. For other inquiries, please contact info@spec.org.

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