# SPEC CPU®2017 Floating Point Speed Result

**Dell Inc.**

PowerEdge M640 (Intel Xeon Bronze 3206R, 1.90 GHz)

<table>
<thead>
<tr>
<th>SPECspeed®2017_fp_base</th>
<th>SPECspeed®2017_fp_peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>55.1</td>
<td>55.8</td>
</tr>
</tbody>
</table>

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

| Test Date: Oct-2021 | Hardware Availability: Feb-2020 | Software Availability: May-2021 |

### Threads

<table>
<thead>
<tr>
<th>SPECspeed®2017_fp_base (55.1)</th>
<th>SPECspeed®2017_fp_peak (55.8)</th>
</tr>
</thead>
<tbody>
<tr>
<td>603.bwaves_s 16</td>
<td></td>
</tr>
<tr>
<td>607.cactuBSSN_s 16</td>
<td></td>
</tr>
<tr>
<td>619.lbm_s 16</td>
<td></td>
</tr>
<tr>
<td>621.wrf_s 16</td>
<td></td>
</tr>
<tr>
<td>627.cam4_s 16</td>
<td></td>
</tr>
<tr>
<td>628.pop2_s 16</td>
<td></td>
</tr>
<tr>
<td>638.imagick_s 16</td>
<td></td>
</tr>
<tr>
<td>644.nab_s 16</td>
<td></td>
</tr>
<tr>
<td>649.fotonik3d_s 16</td>
<td></td>
</tr>
<tr>
<td>654.roms_s 16</td>
<td></td>
</tr>
</tbody>
</table>

### Hardware

<table>
<thead>
<tr>
<th>CPU Name: Intel Xeon Bronze 3206R</th>
<th>OS: Red Hat Enterprise Linux 8.4 (Ootpa)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max MHz: 1900</td>
<td>4.18.0-305.el8.x86_64</td>
</tr>
<tr>
<td>Nominal: 1900</td>
<td></td>
</tr>
<tr>
<td>Enabled: 16 cores, 2 chips</td>
<td>Compiler: Fortran Version 2021.1 of Intel Fortran Compiler</td>
</tr>
<tr>
<td>Orderable: 1.2 chips</td>
<td>Classic Build 20201112 for Linux;</td>
</tr>
<tr>
<td>Cache L1: 32 KB I + 32 KB D on chip per core</td>
<td>C/C++: Version 2021.1 of Intel C/C++ Compiler</td>
</tr>
<tr>
<td>L2: 1 MB I+D on chip per core</td>
<td>Classic Build 20201112 for Linux;</td>
</tr>
<tr>
<td>L3: 11 MB I+D on chip per chip</td>
<td></td>
</tr>
<tr>
<td>Other: None</td>
<td>Parallel: Yes</td>
</tr>
<tr>
<td>Memory: 384 GB (12 x 32 GB 2Rx4 PC4-2933Y-R, running at</td>
<td>Firmware: Version 2.12.2 released Jul-2021</td>
</tr>
<tr>
<td>Storage: 125 GB on tmpfs</td>
<td>File System: tmpfs</td>
</tr>
<tr>
<td>Other: None</td>
<td>System State: Run level 3 (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: jemalloc memory allocator V5.0.1</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>

**Power Management:** BIOS and OS set to prefer performance at the cost of additional power usage.

---

Page 1  
Standard Performance Evaluation Corporation (info@spec.org)  
https://www.spec.org/
Dell Inc.

PowerEdge M640 (Intel Xeon Bronze 3206R, 1.90 GHz)

SPEC CPU®2017 Floating Point Speed Result

SPECspeed®2017_fp_base = 55.1

SPECspeed®2017_fp_peak = 55.8

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>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>603.bwaves_s</td>
<td>16</td>
<td>241</td>
<td>245</td>
<td>241</td>
<td>245</td>
<td></td>
<td></td>
</tr>
<tr>
<td>607.cactuBSSN_s</td>
<td>16</td>
<td>253</td>
<td>65.8</td>
<td>255</td>
<td>65.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>619.lbm_s</td>
<td>16</td>
<td>125</td>
<td>42.0</td>
<td>125</td>
<td>42.1</td>
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<td></td>
</tr>
<tr>
<td>621.wrf_s</td>
<td>16</td>
<td>240</td>
<td>55.2</td>
<td>237</td>
<td>55.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>627.cam4_s</td>
<td>16</td>
<td>295</td>
<td>30.1</td>
<td>295</td>
<td>30.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>628.pop2_s</td>
<td>16</td>
<td>291</td>
<td>40.8</td>
<td>289</td>
<td>41.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>638.imagick_s</td>
<td>16</td>
<td>426</td>
<td>33.9</td>
<td>425</td>
<td>33.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>644.nab_s</td>
<td>16</td>
<td>279</td>
<td>62.6</td>
<td>279</td>
<td>62.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>649.fotonik3d_s</td>
<td>16</td>
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<td>49.3</td>
<td>187</td>
<td>48.7</td>
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<td></td>
</tr>
<tr>
<td>654.roms_s</td>
<td>16</td>
<td>285</td>
<td>55.2</td>
<td>285</td>
<td>55.2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SPECspeed®2017_fp_base = 55.1

SPECspeed®2017_fp_peak = 55.8

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/cpu2017-1.1.8-ic2021.1/lib/intel64:/mnt/ramdisk/cpu2017-1.1.8-ic2021.1/je5.0.1-64"
MALLOCCONF = "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.

Results appear in the order in which they were run. Bold underlined text indicates a median measurement.
Dell Inc.
PowerEdge M640 (Intel Xeon Bronze 3206R, 1.90 GHz)

<table>
<thead>
<tr>
<th>SPECspeed®2017_fp_base</th>
<th>55.1</th>
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<tr>
<td>SPECspeed®2017_fp_peak</td>
<td>55.8</td>
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</tbody>
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CPU2017 License: 55
Test Sponsor: Dell Inc.
Tested by: Dell Inc.

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 125 GB ramdisk created with the cmd: "mount -t tmpfs -o size=125G tmpfs /mnt/ramdisk"

Platform Notes

BIOS Settings:
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
PCI ASPM L1 Link
Power Management : Disabled

Sysinfo program /mnt/ramdisk/cpu2017-1.1.8-ic2021.1/bin/sysinfo
Rev: r6622 of 2021-04-07 982a61ec0915b5891ef0e16acaf64d
running on localhost.localdomain Thu Oct 21 20:12:44 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) 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 from util-linux 2.32.1:
Architecture: x86_64
CPU op-mode(s): 32-bit, 64-bit
Dell Inc. PowerEdge M640 (Intel Xeon Bronze 3206R, 1.90 GHz) SPECspeed®2017_fp_base = 55.1
SPECspeed®2017_fp_peak = 55.8

CPU2017 License: 55
Test Sponsor: Dell Inc.
Tested by: Dell Inc.
Test Date: Oct-2021
Hardware Availability: Feb-2020
Software Availability: May-2021

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
BIOS Vendor ID: Intel
CPU family: 6
Model: 85
Model name: Intel(R) Xeon(R) Bronze 3206R CPU @ 1.90GHz
BIOS Model name: Intel(R) Xeon(R) Bronze 3206R CPU @ 1.90GHz
Stepping: 7
CPU MHz: 1146.820
CPU max MHz: 1900.0000
CPU min MHz: 1000.0000
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 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
aperfmpref pni pclmulqdq dtes64 monitor ds_cpl vmx smx est tm2 ssse3 sdbg fma cx16
xptr 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
invpcid_single intel_puin ssbd mba ibrs ibpb stibp ibrs enhanced fsqsbse tsc_adjust
bmi1 hle avx2 smep bmi2 erms invpcid cqm mpx rdt_a avx512f avx512dq rdseed adx smap
ciflushopt clwb intel_pt avx512cd avx512bw avx512vl xsaveopt xsavec xgetbv1 xsavees
cqm_llc cqm_occup_llc cqm_mbb_total cqm_mbb_local dtherm arat pln pts pku ospke
avx512_vnni md_clear flush_l1d arch_capabilities

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: 192075 MB
node 0 free: 181594 MB
node 1 cpus: 1 3 5 7 9 11 13 15

(Continued on next page)
Dell Inc.

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SPECspeed®2017_fp_base = 55.1
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CPU2017 License: 55
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Platform Notes (Continued)

node 1 size: 193496 MB
node 1 free: 187801 MB
node distances:
node 0 1
 0: 10 21
 1: 21 10

From /proc/meminfo
MemTotal: 394825512 kB
HugePages_Total: 0
Hugepagesize: 2048 kB

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

/sys/devices/system/cpu/cpu*/cpufreq/scaling_governor has
performance

From /etc/*release* /etc/*version*
  os-release:
    NAME="Red Hat Enterprise Linux"
    VERSION="8.4 (Ootpa)"
    ID="rhel"
    ID_LIKE="fedora"
    VERSION_ID="8.4"
    PLATFORM_ID="platform:el8"
    PRETTY_NAME="Red Hat Enterprise Linux 8.4 (Ootpa)"
    ANSI_COLOR="0;31"
  redhat-release: Red Hat Enterprise Linux release 8.4 (Ootpa)
  system-release: Red Hat Enterprise Linux release 8.4 (Ootpa)
  system-release-cpe: cpe:/o:redhat:enterprise_linux:8.4:ga

uname -a:
Linux localhost.localdomain 4.18.0-305.el8.x86_64 #1 SMP Thu Apr 29 08:54:30 EDT 2021
x86_64 x86_64 x86_64 GNU/Linux

Kernel self-reported vulnerability status:

CVE-2018-12207 (iTLB Multihit):
  KVM: Mitigation: Split huge pages
CVE-2018-3620 (L1 Terminal Fault):
  Not affected
Microarchitectural Data Sampling:
  Not affected
CVE-2017-5754 (Meltdown):
  Mitigation: Speculative Store Bypass disabled via prctl and seccomp
CVE-2018-3639 (Speculative Store Bypass):
  Mitigation: usercopy/swapps barriers and __user pointer
CVE-2017-5753 (Spectre variant 1):

(Continued on next page)
Dell Inc.  
PowerEdge M640 (Intel Xeon Bronze 3206R, 1.90 GHz)  

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

**SPECspeed®2017_fp_base = 55.1**

**SPECspeed®2017_fp_peak = 55.8**

<table>
<thead>
<tr>
<th>CPU2017 License:</th>
<th>Dell Inc.</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>Test Date:</td>
<td>Oct-2021</td>
</tr>
<tr>
<td>Hardware Availability:</td>
<td>Feb-2020</td>
</tr>
<tr>
<td>Software Availability:</td>
<td>May-2021</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Platform Notes (Continued)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVE-2017-5715 (Spectre variant 2):</td>
</tr>
<tr>
<td>Mitigation: Enhanced IBRS, IBPB: conditional, RSB filling</td>
</tr>
<tr>
<td>CVE-2020-0543 (Special Register Buffer Data Sampling):</td>
</tr>
<tr>
<td>Not affected</td>
</tr>
<tr>
<td>CVE-2019-11135 (TSX Asynchronous Abort):</td>
</tr>
<tr>
<td>Mitigation: TSX disabled</td>
</tr>
</tbody>
</table>

run-level 3 Oct 21 14:02

SPEC is set to: /mnt/ramdisk/cpu2017-1.1.8-ic2021.1

<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>tmpfs</td>
<td>tmpfs</td>
<td>125G</td>
<td>11G</td>
<td>115G</td>
<td>9%</td>
<td>/mnt/ramdisk</td>
</tr>
</tbody>
</table>

From /sys/devices/virtual/dmi/id

Vendor: Dell Inc.

Product: PowerEdge M640

Product Family: PowerEdge

Additional information from dmidecode 3.2 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:

| 5x 00AD00B300AD HMA84GR7CJR4N-WM 32 GB 2 rank 2933, configured at 2133 |
| 4x 00AD063200AD HMA84GR7CJR4N-WM 32 GB 2 rank 2933, configured at 2133 |
| 3x 00AD069D00AD HMA84GR7CJR4N-WM 32 GB 2 rank 2933, configured at 2133 |

BIOS:

<table>
<thead>
<tr>
<th>BIOS Vendor:</th>
<th>Dell Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOS Version:</td>
<td>2.12.2</td>
</tr>
<tr>
<td>BIOS Date:</td>
<td>07/12/2021</td>
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<tr>
<td>BIOS Revision:</td>
<td>2.12</td>
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</table>

(End of data from sysinfo program)

**Compiler Version Notes**

==============================================================================

<table>
<thead>
<tr>
<th>C</th>
<th>619.lbm_s(base, peak) 638.imagick_s(base, peak) 644.nab_s(base, 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

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

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  
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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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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  
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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  
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Base Compiler Invocation

C benchmarks:
  icc

Fortran benchmarks:
  ifort

Benchmarks using both Fortran and C:
  ifort icc

(Continued on next page)
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SPECspeed®2017_fp_base = 55.1
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CPU2017 License: 55
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Base Compiler Invocation (Continued)

Benchmarks using Fortran, C, and C++:

icpc icc icf

Base Portability Flags

603.bwaves_s: -DSPEC_LP64
607.cactusBSSN_s: -DSPEC_LP64
619.lbm_s: -DSPEC_LP64
621.wrf_s: -DSPEC_LP64 -DSPEC_CASE_FLAG -convert big_endian
627.cam4_s: -DSPEC_LP64 -DSPEC_CASE_FLAG
628.pop2_s: -DSPEC_LP64 -DSPEC_CASE_FLAG -convert big_endian
   -assume byterecl
638.imagick_s: -DSPEC_LP64
644.nab_s: -DSPEC_LP64
649.fotonik3d_s: -DSPEC_LP64
654.roms_s: -DSPEC_LP64

Base Optimization Flags

C benchmarks:
-m64 -std=c11 -xCORE-AVX2 -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-AVX2 -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-AVX2 -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-AVX2 -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:
  icc

Fortran benchmarks:
  ifort

Benchmarks using both Fortran and C:
  ifort icc

Benchmarks using Fortran, C, and C++:
  icpc icc ifort

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: basepeak = yes

Fortran benchmarks:
  603.bwaves_s: -m64 -Wl,-z,muldefs -prof-gen(pass 1) -prof-use(pass 2)
  -DSPEC_SUPPRESS_OPENMP -DSPEC_OPENMP -ipo -xCORE-AVX2
  -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
  649.fotonik3d_s: basepeak = yes
  654.roms_s: basepeak = yes

Benchmarks using both Fortran and C:
# SPEC CPU®2017 Floating Point Speed Result

**Dell Inc.**

**PowerEdge M640 (Intel Xeon Bronze 3206R, 1.90 GHz)**

<table>
<thead>
<tr>
<th>SPECspeed®2017_fp_base</th>
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<td>SPECspeed®2017_fp_peak</td>
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<td>Test Sponsor</td>
<td>Dell Inc.</td>
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<td>Tested by</td>
<td>Dell Inc.</td>
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<tr>
<td>Test Date</td>
<td>Oct-2021</td>
</tr>
<tr>
<td>Hardware Availability</td>
<td>Feb-2020</td>
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<tr>
<td>Software Availability</td>
<td>May-2021</td>
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</table>

## Peak Optimization Flags (Continued)

621.wrf_s: -m64 -std=c11 -Wl,-z,muldefs -prof-gen(pass 1)
-prof-use(pass 2) -ipo -xCORE-AVX2 -O3 -no-prec-div
-qopt-prefetch -ffinite-math-only -qopt-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

**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

http://www.spec.org/cpu2017/flags/Dell-Platform-Flags-PowerEdge-Intel-ICX-rev1.4.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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