



# SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2021 Standard Performance Evaluation Corporation

## Dell Inc.

PowerEdge T550 (Intel Xeon Platinum 8352M, 2.30 GHz)

SPECspeed®2017\_fp\_base = 204

SPECspeed®2017\_fp\_peak = 207

CPU2017 License: 55

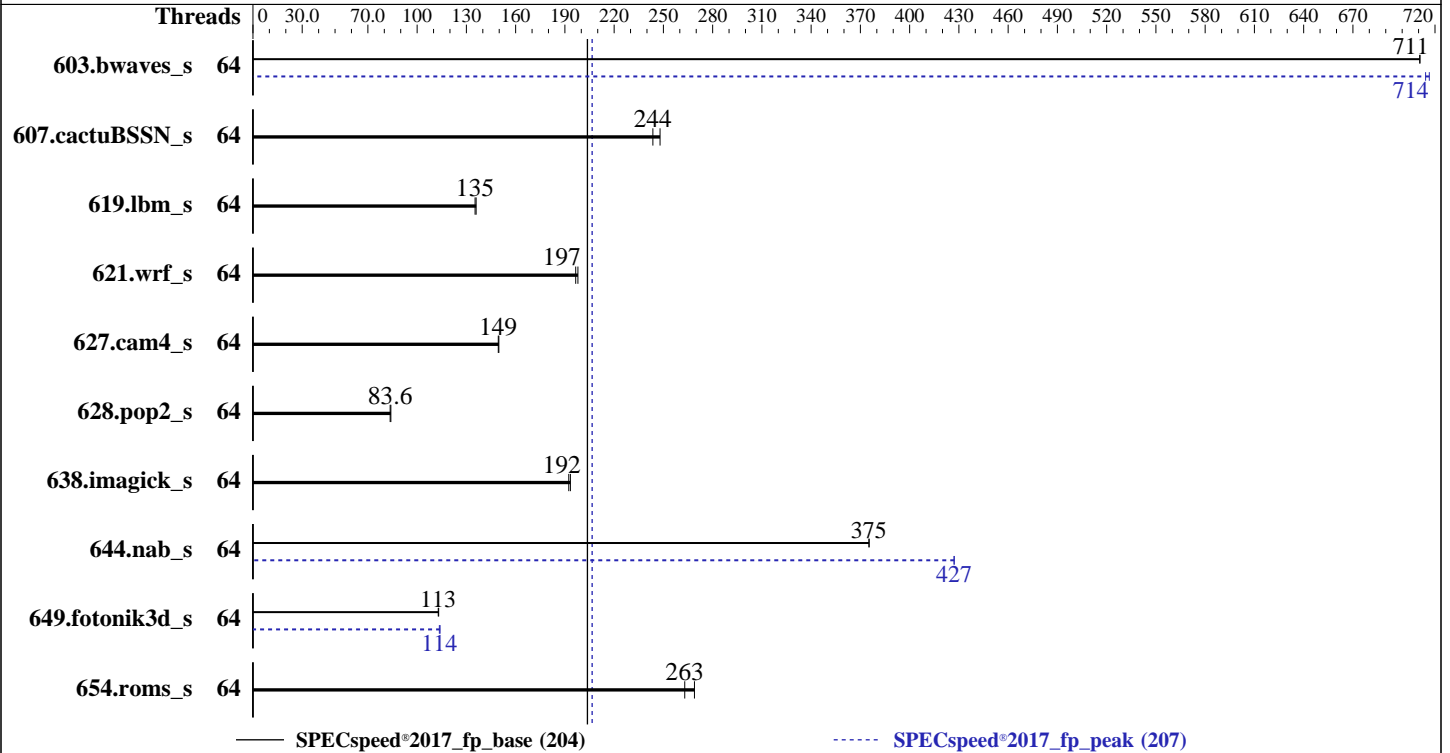
Test Sponsor: Dell Inc.

Tested by: Dell Inc.

Test Date: Nov-2021

Hardware Availability: Oct-2021

Software Availability: May-2021



### Hardware

CPU Name: Intel Xeon Platinum 8352M  
 Max MHz: 3500  
 Nominal: 2300  
 Enabled: 64 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: 48 MB I+D on chip per chip  
 Other: None  
 Memory: 512 GB (16 x 32 GB 2Rx8 PC4-3200AA-R)  
 Storage: 125 GB on tmpfs  
 Other: None

### Software

OS: Red Hat Enterprise Linux 8.4 (Ootpa)  
 4.18.0-305.el8.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 1.3.7 released Jul-2021  
 File System: tmpfs  
 System State: Run level 3 (multi-user)  
 Base Pointers: 64-bit  
 Peak Pointers: 64-bit  
 Other: 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 Floating Point Speed Result

Copyright 2017-2021 Standard Performance Evaluation Corporation

## Dell Inc.

PowerEdge T550 (Intel Xeon Platinum 8352M, 2.30 GHz)

SPECspeed®2017\_fp\_base = 204

SPECspeed®2017\_fp\_peak = 207

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

Test Date: Nov-2021  
Hardware Availability: Oct-2021  
Software Availability: May-2021

## Results Table

Benchmark	Base							Peak						
	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
603.bwaves_s	64	<b>83.0</b>	<b>711</b>	83.0	711			64	<b>82.6</b>	<b>714</b>	82.3	717		
607.cactuBSSN_s	64	<b>68.4</b>	<b>244</b>	67.2	248			64	<b>68.4</b>	<b>244</b>	67.2	248		
619.lbm_s	64	38.5	136	<b>38.7</b>	<b>135</b>			64	38.5	136	<b>38.7</b>	<b>135</b>		
621.wrf_s	64	66.8	198	<b>67.3</b>	<b>197</b>			64	66.8	198	<b>67.3</b>	<b>197</b>		
627.cam4_s	64	<b>59.3</b>	<b>149</b>	59.2	150			64	<b>59.3</b>	<b>149</b>	59.2	150		
628.pop2_s	64	<b>142</b>	<b>83.6</b>	141	84.0			64	<b>142</b>	<b>83.6</b>	141	84.0		
638.imagick_s	64	<b>75.0</b>	<b>192</b>	74.6	193			64	<b>75.0</b>	<b>192</b>	74.6	193		
644.nab_s	64	46.6	375	<b>46.6</b>	<b>375</b>			64	<b>40.9</b>	<b>427</b>	40.9	427		
649.fotonik3d_s	64	80.6	113	<b>80.8</b>	<b>113</b>			64	<b>80.3</b>	<b>114</b>	80.0	114		
654.roms_s	64	<b>59.9</b>	<b>263</b>	58.5	269			64	<b>59.9</b>	<b>263</b>	58.5	269		

SPECspeed®2017\_fp\_base = 204

SPECspeed®2017\_fp\_peak = 207

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/cpu2017-1.1.8-ic2021.1/lib/intel64:/mnt/ramdisk/cpu2017-1.
  1.8-ic2021.1/je5.0.1-64"
MALLOCONF = "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  
 sources available from jemalloc.net or <https://github.com/jemalloc/jemalloc/releases>

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 Floating Point Speed Result

Copyright 2017-2021 Standard Performance Evaluation Corporation

**Dell Inc.**

PowerEdge T550 (Intel Xeon Platinum 8352M, 2.30 GHz)

SPECspeed®2017\_fp\_base = 204

SPECspeed®2017\_fp\_peak = 207

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

**Test Date:** Nov-2021  
**Hardware Availability:** Oct-2021  
**Software Availability:** May-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 125 GB ramdisk created with the cmd: "mount -t tmpfs -o size=125G 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  
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 982a61ec0915b55891ef0e16acafc64d  
running on localhost.localdomain Sat Nov 13 20:21:08 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 8352M CPU @ 2.30GHz
 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
```

(Continued on next page)



# SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2021 Standard Performance Evaluation Corporation

**Dell Inc.**

PowerEdge T550 (Intel Xeon Platinum 8352M, 2.30 GHz)

SPECspeed®2017\_fp\_base = 204

SPECspeed®2017\_fp\_peak = 207

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

**Test Date:** Nov-2021  
**Hardware Availability:** Oct-2021  
**Software Availability:** May-2021

## Platform Notes (Continued)

```

From lscpu from util-linux 2.32.1:
Architecture:          x86_64
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
BIOS Vendor ID:       Intel
CPU family:           6
Model:                106
Model name:           Intel(R) Xeon(R) Platinum 8352M CPU @ 2.30GHz
BIOS Model name:      Intel(R) Xeon(R) Platinum 8352M CPU @ 2.30GHz
Stepping:             6
CPU MHz:              3494.573
BogoMIPS:             4600.00
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 art arch_perfmon pebs bts rep_good nopl xtopology nonstop_tsc cpuid
aperfperf 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 fl6c rdrand lahf_lm abm 3dnowprefetch cpuid_fault epb cat_l3 invpcid_single
intel_ppin ssbd mba ibrs ibpb stibp ibrs_enhanced fsgsbase tsc_adjust bmil hle avx2
smep bmi2 erms invpcid cqm rdt_a avx512f avx512dq rdseed adx smap avx512ifma
clflushopt clwb intel_pt avx512cd sha_ni avx512bw avx512vl xsaveopt xsavec xgetbv1
xsaves cqm_llc cqm_occup_llc cqm_mbm_total cqm_mbm_local split_lock_detect wbnoinvd
dtherm ida arat pln pts avx512vbmi umip pku ospke avx512_vbmi2 gfni vaes vpclmulqdq
avx512_vnni avx512_bitalg tme avx512_vpopcntdq la57 rdpid fsrm md_clear pconfig
flush_lld arch_capabilities

/proc/cpuinfo cache data
cache size : 49152 KB

```

(Continued on next page)



# SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2021 Standard Performance Evaluation Corporation

## Dell Inc.

PowerEdge T550 (Intel Xeon Platinum 8352M, 2.30 GHz)

SPECspeed®2017\_fp\_base = 204

SPECspeed®2017\_fp\_peak = 207

CPU2017 License: 55

Test Sponsor: Dell Inc.

Tested by: Dell Inc.

Test Date: Nov-2021

Hardware Availability: Oct-2021

Software Availability: May-2021

## Platform Notes (Continued)

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  
52 54 56 58 60 62

node 0 size: 257142 MB

node 0 free: 251350 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: 258038 MB

node 1 free: 247674 MB

node distances:

```
node  0  1
  0:  10  20
  1:  20  10
```

From /proc/meminfo

MemTotal: 527545224 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="8.4 (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): Not affected

CVE-2018-3620 (L1 Terminal Fault): Not affected

Microarchitectural Data Sampling: Not affected

(Continued on next page)



# SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2021 Standard Performance Evaluation Corporation

**Dell Inc.**

PowerEdge T550 (Intel Xeon Platinum 8352M, 2.30 GHz)

SPECspeed®2017\_fp\_base = 204

SPECspeed®2017\_fp\_peak = 207

CPU2017 License: 55

Test Sponsor: Dell Inc.

Tested by: Dell Inc.

Test Date: Nov-2021

Hardware Availability: Oct-2021

Software Availability: May-2021

## Platform Notes (Continued)

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
CVE-2020-0543 (Special Register Buffer Data Sampling):	Not affected
CVE-2019-11135 (TSX Asynchronous Abort):	Not affected

run-level 3 Nov 13 17:39

```

SPEC is set to: /mnt/ramdisk/cpu2017-1.1.8-ic2021.1
Filesystem      Type  Size  Used Avail Use% Mounted on
tmpfs            tmpfs 125G   10G 116G   8% /mnt/ramdisk

```

```

From /sys/devices/virtual/dmi/id
Vendor:          Dell Inc.
Product:         PowerEdge T550
Product Family: PowerEdge
Serial:          3LM1509

```

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:
16x 002C00B3002C 18ASF4G72PDZ-3G2E1 32 GB 2 rank 3200

```

```

BIOS:
BIOS Vendor:      Dell Inc.
BIOS Version:     1.3.7
BIOS Date:        07/30/2021
BIOS Revision:    1.3

```

(End of data from sysinfo program)

## 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)

(Continued on next page)



# SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2021 Standard Performance Evaluation Corporation

**Dell Inc.**

PowerEdge T550 (Intel Xeon Platinum 8352M, 2.30 GHz)

SPECspeed®2017\_fp\_base = 204

SPECspeed®2017\_fp\_peak = 207

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

**Test Date:** Nov-2021  
**Hardware Availability:** Oct-2021  
**Software Availability:** May-2021

## Compiler Version Notes (Continued)

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 | 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)

(Continued on next page)



# SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2021 Standard Performance Evaluation Corporation

**Dell Inc.**

PowerEdge T550 (Intel Xeon Platinum 8352M, 2.30 GHz)

SPECspeed®2017\_fp\_base = 204

SPECspeed®2017\_fp\_peak = 207

CPU2017 License: 55

Test Sponsor: Dell Inc.

Tested by: Dell Inc.

Test Date: Nov-2021

Hardware Availability: Oct-2021

Software Availability: May-2021

## Compiler Version Notes (Continued)

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, 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

```
603.bwaves_s: -DSPEC_LP64
607.cactuBSSN_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
```

(Continued on next page)





# SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2021 Standard Performance Evaluation Corporation

**Dell Inc.**

PowerEdge T550 (Intel Xeon Platinum 8352M, 2.30 GHz)

SPECspeed®2017\_fp\_base = 204

SPECspeed®2017\_fp\_peak = 207

CPU2017 License: 55

Test Sponsor: Dell Inc.

Tested by: Dell Inc.

Test Date: Nov-2021

Hardware Availability: Oct-2021

Software Availability: May-2021

## Base Portability Flags (Continued)

654.roms\_s: -DSPEC\_LP64

## 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

(Continued on next page)



# SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2021 Standard Performance Evaluation Corporation

**Dell Inc.**

PowerEdge T550 (Intel Xeon Platinum 8352M, 2.30 GHz)

SPECspeed®2017\_fp\_base = 204

SPECspeed®2017\_fp\_peak = 207

CPU2017 License: 55

Test Sponsor: Dell Inc.

Tested by: Dell Inc.

Test Date: Nov-2021

Hardware Availability: Oct-2021

Software Availability: May-2021

## Peak Compiler Invocation (Continued)

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: -m64 -Wl,-z,muldefs -xCORE-AVX512 -Ofast -ffast-math  
-flto -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  
-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: Same as 603.bwaves\_s

654.roms\_s: basepeak = yes

Benchmarks using both Fortran and C:

621.wrf\_s: basepeak = yes

627.cam4\_s: basepeak = yes

(Continued on next page)



# SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2021 Standard Performance Evaluation Corporation

**Dell Inc.**

PowerEdge T550 (Intel Xeon Platinum 8352M, 2.30 GHz)

SPECspeed®2017\_fp\_base = 204

SPECspeed®2017\_fp\_peak = 207

**CPU2017 License:** 55

**Test Sponsor:** Dell Inc.

**Tested by:** Dell Inc.

**Test Date:** Nov-2021

**Hardware Availability:** Oct-2021

**Software Availability:** May-2021

## Peak Optimization Flags (Continued)

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

[http://www.spec.org/cpu2017/flags/Intel-ic2021-official-linux64\\_revA.html](http://www.spec.org/cpu2017/flags/Intel-ic2021-official-linux64_revA.html)

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

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/Intel-ic2021-official-linux64_revA.xml)

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

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](mailto:info@spec.org).

Tested with SPEC CPU®2017 v1.1.8 on 2021-11-13 21:21:07-0500.

Report generated on 2021-12-07 17:02:57 by CPU2017 PDF formatter v6442.

Originally published on 2021-12-07.