



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2020 Standard Performance Evaluation Corporation

Dell Inc.

SPECspeed®2017_fp_base = 151

PowerEdge C6420 (Intel Xeon Gold 6248R, 3.00 GHz)

SPECspeed®2017_fp_peak = 153

CPU2017 License: 55

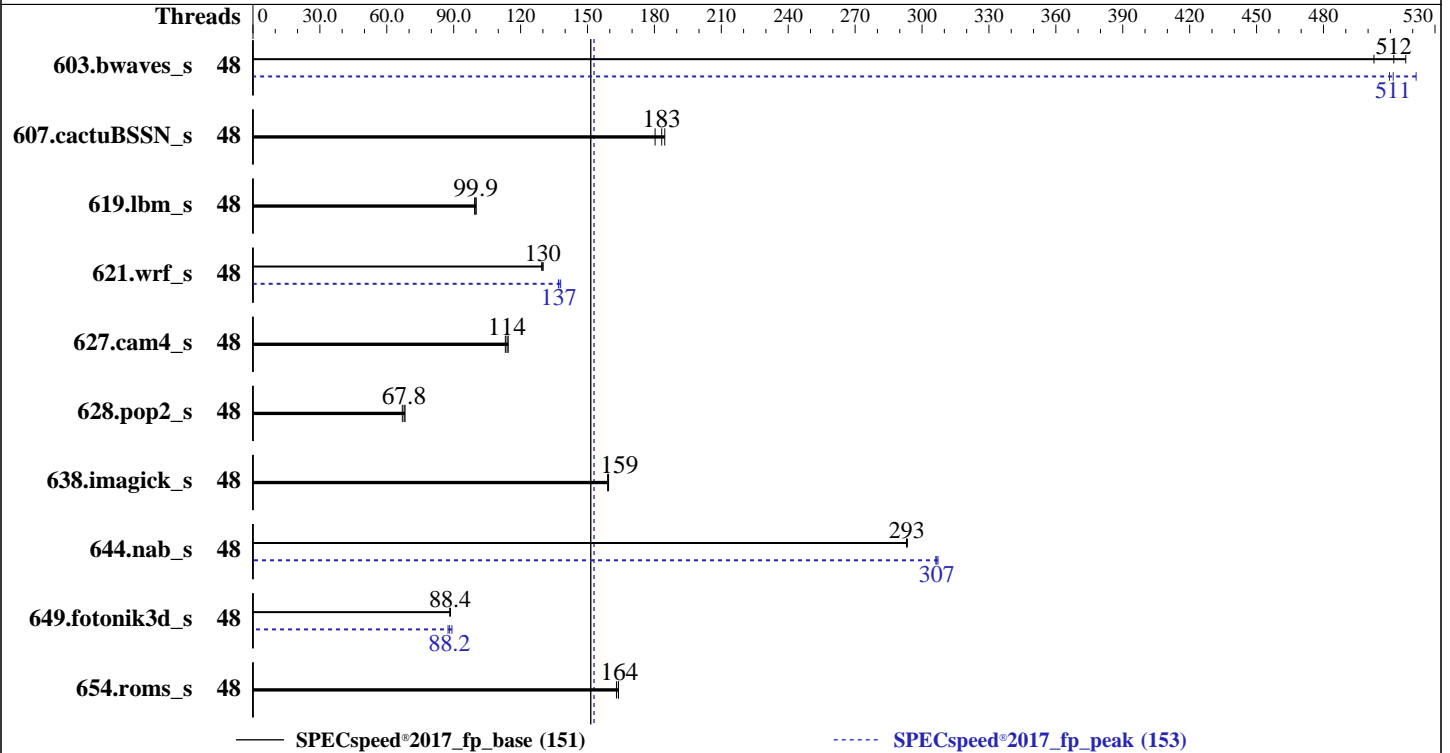
Test Date: May-2020

Test Sponsor: Dell Inc.

Hardware Availability: Feb-2020

Tested by: Dell Inc.

Software Availability: Apr-2020



Hardware

CPU Name: Intel Xeon Gold 6248R
 Max MHz: 4000
 Nominal: 3000
 Enabled: 48 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: 35.75 MB I+D on chip per chip
 Other: None
 Memory: 384 GB (10 x 32 GB 2Rx4 PC4-2933Y-R; 2 x 32 GB 2Rx4 PC4-3200AA-R, running at 2933)
 Storage: 1 x 960GB SATA SSD
 Other: None

Software

OS: Red Hat Enterprise Linux 8.1
 kernel 4.18.0-147.el8.x86_64
 Compiler: C/C++: Version 19.1.1.217 of Intel C/C++ Compiler for Linux;
 Fortran: Version 19.1.1.217 of Intel Fortran Compiler for Linux
 Parallel: Yes
 Firmware: Version 2.7.3 released Mar-2020
 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 set to prefer performance at the cost of additional power usage.



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2020 Standard Performance Evaluation Corporation

Dell Inc.

SPECSpeed®2017_fp_base = 151

PowerEdge C6420 (Intel Xeon Gold 6248R, 3.00 GHz)

SPECSpeed®2017_fp_peak = 153

CPU2017 License: 55

Test Date: May-2020

Test Sponsor: Dell Inc.

Hardware Availability: Feb-2020

Tested by: Dell Inc.

Software Availability: Apr-2020

Results Table

Benchmark	Base							Peak						
	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
603.bwaves_s	48	114	517	117	503	115	512	48	113	522	115	511	116	510
607.cactuBSSN_s	48	90.3	185	91.0	183	92.5	180	48	90.3	185	91.0	183	92.5	180
619.lbm_s	48	52.3	100	52.7	99.4	52.4	99.9	48	52.3	100	52.7	99.4	52.4	99.9
621.wrf_s	48	102	130	102	129	102	130	48	96.4	137	96.6	137	95.9	138
627.cam4_s	48	77.4	114	78.3	113	77.8	114	48	77.4	114	78.3	113	77.8	114
628.pop2_s	48	174	68.2	175	67.8	177	67.0	48	174	68.2	175	67.8	177	67.0
638.imagick_s	48	90.7	159	90.5	159	90.6	159	48	90.7	159	90.5	159	90.6	159
644.nab_s	48	59.6	293	59.6	293	59.5	293	48	57.0	307	57.1	306	56.9	307
649.fotonik3d_s	48	103	88.4	103	88.6	103	88.3	48	104	87.5	102	89.2	103	88.2
654.roms_s	48	96.1	164	96.6	163	96.1	164	48	96.1	164	96.6	163	96.1	164

SPECSpeed®2017_fp_base = 151

SPECSpeed®2017_fp_peak = 153

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:

```
KMP_AFFINITY = "granularity=fine,compact"
LD_LIBRARY_PATH =
"/dev/shm/cpu2017-ic19.lul/lib/intel64:/dev/shm/cpu2017-ic19.lul/je5.0.1-64"
MALLOC_CONF = "retain:true"
OMP_STACKSIZE = "192M"
```

General Notes

Binaries compiled on a system with 1x Intel Core i9-9900K CPU + 64GB RAM memory using Redhat Enterprise Linux 8.0

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)

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2020 Standard Performance Evaluation Corporation

Dell Inc.

SPECspeed®2017_fp_base = 151

PowerEdge C6420 (Intel Xeon Gold 6248R, 3.00 GHz)

SPECspeed®2017_fp_peak = 153

CPU2017 License: 55

Test Sponsor: Dell Inc.

Tested by: Dell Inc.

Test Date: May-2020

Hardware Availability: Feb-2020

Software Availability: Apr-2020

General Notes (Continued)

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.

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>
```

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

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>

Platform Notes

BIOS settings:

Sub NUMA Cluster enabled

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 set to standard

Logical Processor disabled

CPU Interconnect Bus Link Power Management disabled

PCI ASPM L1 Link Power Management disabled

UPI Prefetch enabled

LLC Prefetch disabled

Dead Line LLC Alloc enabled

Directory AtoS disabled

Sysinfo program /dev/shm/cpu2017-ic19.1ul/bin/sysinfo

Rev: r6365 of 2019-08-21 295195f888a3d7edble6e46a485a0011

running on localhost.localdomain Fri Jul 3 23:00:19 2020

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) Gold 6248R CPU @ 3.00GHz
```

```
2 "physical id"s (chips)
```

```
48 "processors"
```

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2020 Standard Performance Evaluation Corporation

Dell Inc.

SPECspeed®2017_fp_base = 151

PowerEdge C6420 (Intel Xeon Gold 6248R, 3.00 GHz)

SPECspeed®2017_fp_peak = 153

CPU2017 License: 55

Test Date: May-2020

Test Sponsor: Dell Inc.

Hardware Availability: Feb-2020

Tested by: Dell Inc.

Software Availability: Apr-2020

Platform Notes (Continued)

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 : 24
siblings  : 24
physical 0: cores 0 1 2 3 4 5 6 8 9 10 11 12 13 16 17 18 19 20 21 25 26 27 28 29
physical 1: cores 0 1 2 3 4 5 6 9 10 11 12 13 16 17 18 19 20 21 24 25 26 27 28 29
```

From lscpu:

```
Architecture:          x86_64
CPU op-mode(s):        32-bit, 64-bit
Byte Order:            Little Endian
CPU(s):                48
On-line CPU(s) list:  0-47
Thread(s) per core:    1
Core(s) per socket:   24
Socket(s):             2
NUMA node(s):         2
Vendor ID:             GenuineIntel
CPU family:            6
Model:                85
Model name:            Intel(R) Xeon(R) Gold 6248R CPU @ 3.00GHz
Stepping:              7
CPU MHz:               2592.513
CPU max MHz:           4000.0000
CPU min MHz:           1200.0000
BogoMIPS:              6000.00
Virtualization:       VT-x
L1d cache:             32K
L1i cache:             32K
L2 cache:              1024K
L3 cache:              36608K
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
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
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
aperfmpperf 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 abm 3dnowprefetch cpuid_fault epb cat_l3 cdp_l3
invpcid_single intel_ppin ssbd mba ibrs ibpb stibp ibrs_enhanced tpr_shadow vnmi
flexpriority ept vpid fsgsbase tsc_adjust bmil hle avx2 smep 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_occup_llc cqm_mbm_total
cqm_mbm_local dtherm ida arat pln pts pku ospke avx512_vnni md_clear flush_l1d
arch_capabilities
```

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2020 Standard Performance Evaluation Corporation

Dell Inc.

SPECspeed®2017_fp_base = 151

PowerEdge C6420 (Intel Xeon Gold 6248R, 3.00 GHz)

SPECspeed®2017_fp_peak = 153

CPU2017 License: 55

Test Sponsor: Dell Inc.

Tested by: Dell Inc.

Test Date: May-2020

Hardware Availability: Feb-2020

Software Availability: Apr-2020

Platform Notes (Continued)

```
/proc/cpuinfo cache data
cache size : 36608 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
node 0 size: 192072 MB
node 0 free: 182958 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
node 1 size: 193505 MB
node 1 free: 192543 MB
node distances:
node  0  1
  0:  10  21
  1:  21  10
```

```
From /proc/meminfo
MemTotal:      394831408 kB
HugePages_Total:      0
Hugepagesize:    2048 kB
```

```
From /etc/*release* /etc/*version*
os-release:
NAME="Red Hat Enterprise Linux"
VERSION="8.1 (Ootpa)"
ID="rhel"
ID_LIKE="fedora"
VERSION_ID="8.1"
PLATFORM_ID="platform:el8"
PRETTY_NAME="Red Hat Enterprise Linux 8.1 (Ootpa)"
ANSI_COLOR="0;31"
redhat-release: Red Hat Enterprise Linux release 8.1 (Ootpa)
system-release: Red Hat Enterprise Linux release 8.1 (Ootpa)
system-release-cpe: cpe:/o:redhat:enterprise_linux:8.1:ga
```

```
uname -a:
Linux localhost.localdomain 4.18.0-147.el8.x86_64 #1 SMP Thu Sep 26 15:52:44 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
```

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2020 Standard Performance Evaluation Corporation

Dell Inc.

SPECspeed®2017_fp_base = 151

PowerEdge C6420 (Intel Xeon Gold 6248R, 3.00 GHz)

SPECspeed®2017_fp_peak = 153

CPU2017 License: 55

Test Sponsor: Dell Inc.

Tested by: Dell Inc.

Test Date: May-2020

Hardware Availability: Feb-2020

Software Availability: Apr-2020

Platform Notes (Continued)

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

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

run-level 3 Jul 3 22:49

SPEC is set to: /dev/shm/cpu2017-ic19.lul

Filesystem	Type	Size	Used	Avail	Use%	Mounted on
tmpfs	tmpfs	189G	4.2G	185G	3%	/dev/shm

From /sys/devices/virtual/dmi/id

BIOS: Dell Inc. 2.7.3 03/25/2020

Vendor: Dell Inc.

Product: PowerEdge C6420

Product Family: PowerEdge

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:

6x 00AD00B300AD HMA84GR7CJR4N-WM 32 GB 2 rank 2933

1x 00AD063200AD HMA84GR7CJR4N-WM 32 GB 2 rank 2933

2x 00AD063200AD HMA84GR7CJR4N-XN 32 GB 2 rank 3200

3x 00AD069D00AD HMA84GR7CJR4N-WM 32 GB 2 rank 2933

4x Not Specified Not Specified

(End of data from sysinfo program)

Compiler Version Notes

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

```
Intel(R) C Intel(R) 64 Compiler for applications running on Intel(R) 64,
Version 19.1.1.217 Build 20200306
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.
=====
```

```
=====
C++, C, Fortran | 607.cactuBSSN_s(base, peak)
=====
```

```
Intel(R) C++ Intel(R) 64 Compiler for applications running on Intel(R) 64,
```

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2020 Standard Performance Evaluation Corporation

Dell Inc.

SPECspeed®2017_fp_base = 151

PowerEdge C6420 (Intel Xeon Gold 6248R, 3.00 GHz)

SPECspeed®2017_fp_peak = 153

CPU2017 License: 55

Test Sponsor: Dell Inc.

Tested by: Dell Inc.

Test Date: May-2020

Hardware Availability: Feb-2020

Software Availability: Apr-2020

Compiler Version Notes (Continued)

Version 19.1.1.217 Build 20200306
 Copyright (C) 1985-2020 Intel Corporation. All rights reserved.
 Intel(R) C Intel(R) 64 Compiler for applications running on Intel(R) 64,
 Version 19.1.1.217 Build 20200306
 Copyright (C) 1985-2020 Intel Corporation. All rights reserved.
 Intel(R) Fortran Intel(R) 64 Compiler for applications running on Intel(R)
 64, Version 19.1.1.217 Build 20200306
 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 for applications running on Intel(R)
 64, Version 19.1.1.217 Build 20200306
 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 for applications running on Intel(R)
 64, Version 19.1.1.217 Build 20200306
 Copyright (C) 1985-2020 Intel Corporation. All rights reserved.
 Intel(R) C Intel(R) 64 Compiler for applications running on Intel(R) 64,
 Version 19.1.1.217 Build 20200306
 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



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2020 Standard Performance Evaluation Corporation

Dell Inc.

SPECspeed®2017_fp_base = 151

PowerEdge C6420 (Intel Xeon Gold 6248R, 3.00 GHz)

SPECspeed®2017_fp_peak = 153

CPU2017 License: 55

Test Sponsor: Dell Inc.

Tested by: Dell Inc.

Test Date: May-2020

Hardware Availability: Feb-2020

Software Availability: Apr-2020

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
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

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2020 Standard Performance Evaluation Corporation

Dell Inc.

SPECspeed®2017_fp_base = 151

PowerEdge C6420 (Intel Xeon Gold 6248R, 3.00 GHz)

SPECspeed®2017_fp_peak = 153

CPU2017 License: 55

Test Sponsor: Dell Inc.

Tested by: Dell Inc.

Test Date: May-2020

Hardware Availability: Feb-2020

Software Availability: Apr-2020

Peak Compiler Invocation (Continued)

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: -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
-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-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: Same as 603.bwaves_s

654.roms_s: basepeak = yes

Benchmarks using both Fortran and C:

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2020 Standard Performance Evaluation Corporation

Dell Inc.

SPECspeed®2017_fp_base = 151

PowerEdge C6420 (Intel Xeon Gold 6248R, 3.00 GHz)

SPECspeed®2017_fp_peak = 153

CPU2017 License: 55

Test Sponsor: Dell Inc.

Tested by: Dell Inc.

Test Date: May-2020

Hardware Availability: Feb-2020

Software Availability: Apr-2020

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

http://www.spec.org/cpu2017/flags/Intel-ic19.1ul-official-linux64_revA.html

<http://www.spec.org/cpu2017/flags/Dell-Platform-Flags-PowerEdge-revE11.html>

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

http://www.spec.org/cpu2017/flags/Intel-ic19.1ul-official-linux64_revA.xml

<http://www.spec.org/cpu2017/flags/Dell-Platform-Flags-PowerEdge-revE11.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.

Tested with SPEC CPU®2017 v1.1.0 on 2020-07-03 23:00:18-0400.

Report generated on 2020-08-04 14:36:13 by CPU2017 PDF formatter v6255.

Originally published on 2020-08-04.