



SPEC® CPU2017 Floating Point Rate Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

Huawei

Huawei 5885H V5 (Intel Xeon Gold 6136)

CPU2017 License: 3175

Test Sponsor: Huawei

Tested by: Huawei

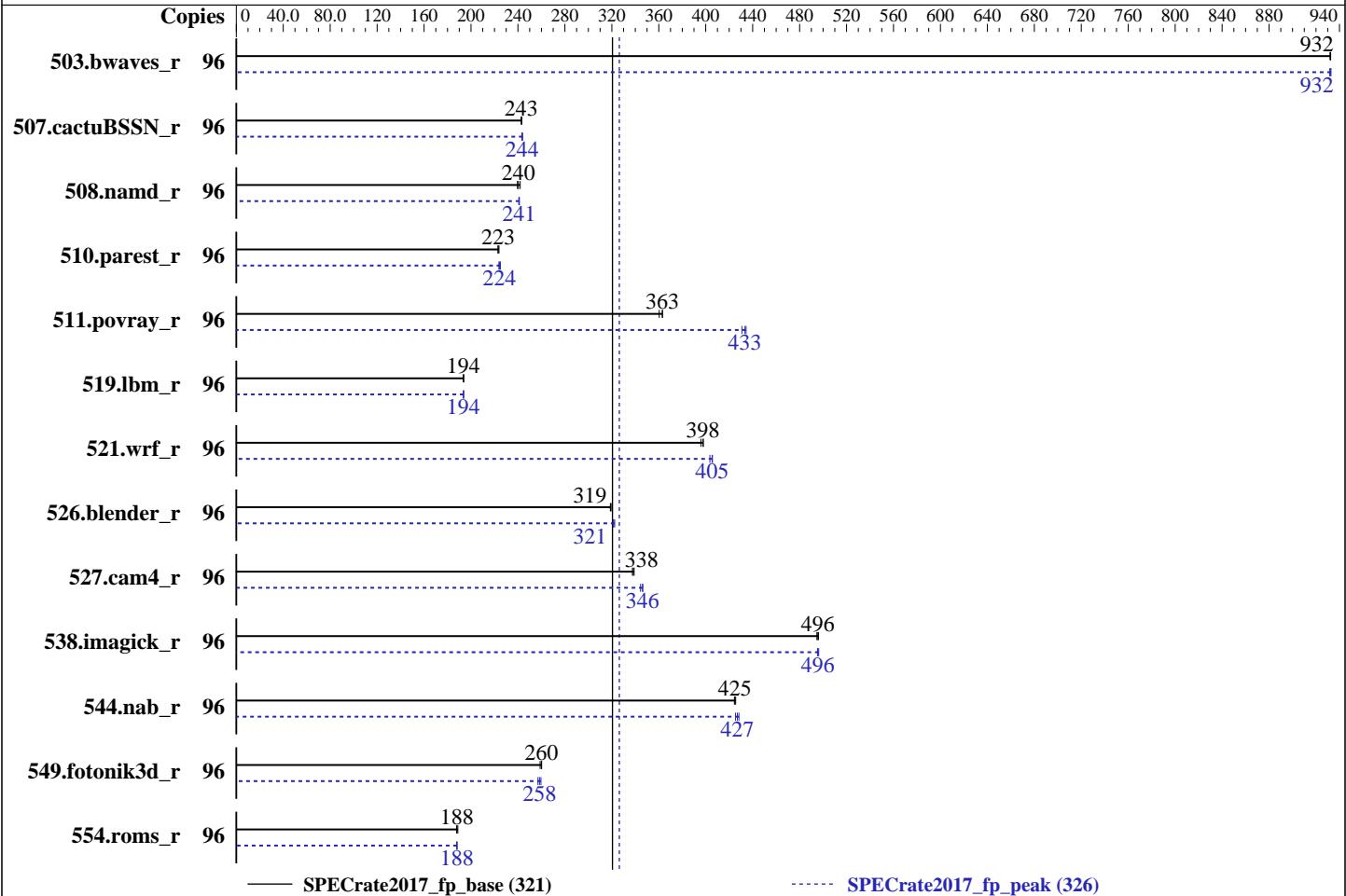
SPECrate2017_fp_base = 321

SPECrate2017_fp_peak = 326

Test Date: May-2018

Hardware Availability: May-2018

Software Availability: Mar-2018



— SPECrate2017_fp_base (321)

----- SPECrate2017_fp_peak (326)

Hardware

CPU Name: Intel Xeon Gold 6136
 Max MHz.: 3700
 Nominal: 3000
 Enabled: 48 cores, 4 chips, 2 threads/core
 Orderable: 2,4 chips
 Cache L1: 32 KB I + 32 KB D on chip per core
 L2: 1 MB I+D on chip per core
 L3: 24.75 MB I+D on chip per chip
 Other: None
 Memory: 1536 GB (48 x 32 GB 2Rx4 PC4-2666V-R)
 Storage: 1 x 900 GB SAS HDD 10K RPM, RAID 0
 Other: None

Software

OS: SUSE Linux Enterprise Server 12 SP2 4.4.120-92.70-default
 Compiler: C/C++: Version 18.0.0.128 of Intel C/C++ Compiler for Linux;
 Fortran: Version 18.0.0.128 of Intel Fortran Compiler for Linux
 Parallel: No
 Firmware: Version 0.80 released Feb-2018
 File System: ext4
 System State: Run level 5 (multi-user)
 Base Pointers: 64-bit
 Peak Pointers: 64-bit
 Other: None



SPEC CPU2017 Floating Point Rate Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

Huawei

Huawei 5885H V5 (Intel Xeon Gold 6136)

CPU2017 License: 3175

Test Sponsor: Huawei

Tested by: Huawei

SPECrate2017_fp_base = 321

SPECrate2017_fp_peak = 326

Test Date: May-2018

Hardware Availability: May-2018

Software Availability: Mar-2018

Results Table

| Benchmark | Base | | | | | | | | Peak | | | | | | | |
|------------------|--------|------------|------------|-------------|------------|-------------|------------|--------|-------------|------------|-------------|------------|------------|------------|---------|-------|
| | Copies | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio | Copies | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio |
| 503.bwaves_r | 96 | 1033 | 932 | 1032 | 933 | 1033 | 932 | 96 | 1033 | 932 | 1033 | 932 | 1032 | 933 | | |
| 507.cactusBSSN_r | 96 | 500 | 243 | 499 | 243 | 500 | 243 | 96 | 499 | 244 | 500 | 243 | 498 | 244 | | |
| 508.namd_r | 96 | 379 | 240 | 377 | 242 | 381 | 240 | 96 | 378 | 241 | 379 | 241 | 379 | 241 | | |
| 510.parest_r | 96 | 1122 | 224 | 1125 | 223 | 1126 | 223 | 96 | 1119 | 224 | 1122 | 224 | 1116 | 225 | | |
| 511.povray_r | 96 | 617 | 363 | 617 | 363 | 622 | 360 | 96 | 520 | 431 | 517 | 433 | 516 | 434 | | |
| 519.lbm_r | 96 | 523 | 194 | 523 | 194 | 523 | 194 | 96 | 523 | 194 | 522 | 194 | 523 | 194 | | |
| 521.wrf_r | 96 | 540 | 398 | 543 | 396 | 541 | 398 | 96 | 533 | 404 | 530 | 405 | 530 | 406 | | |
| 526.blender_r | 96 | 459 | 319 | 458 | 319 | 458 | 319 | 96 | 453 | 322 | 455 | 321 | 455 | 321 | | |
| 527.cam4_r | 96 | 497 | 338 | 495 | 339 | 496 | 338 | 96 | 487 | 344 | 485 | 346 | 485 | 346 | | |
| 538.imagick_r | 96 | 482 | 496 | 481 | 496 | 483 | 495 | 96 | 482 | 496 | 482 | 495 | 481 | 496 | | |
| 544.nab_r | 96 | 380 | 425 | 381 | 424 | 380 | 426 | 96 | 378 | 427 | 380 | 425 | 377 | 428 | | |
| 549.fotonik3d_r | 96 | 1445 | 259 | 1438 | 260 | 1439 | 260 | 96 | 1448 | 258 | 1455 | 257 | 1441 | 260 | | |
| 554.roms_r | 96 | 808 | 189 | 813 | 188 | 811 | 188 | 96 | 812 | 188 | 811 | 188 | 812 | 188 | | |

SPECrate2017_fp_base = 321

SPECrate2017_fp_peak = 326

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"

Numa balancing was disabled using "echo 0 > /proc/sys/kernel/numa_balancing"

General Notes

Environment variables set by runcpu before the start of the run:

LD_LIBRARY_PATH = "/home/cpu2017/lib/ia32:/home/cpu2017/lib/intel64:/home/cpu2017/je5.0.1-32:/home/cpu2017/je5.0.1-64"

Binaries compiled on a system with 1x Intel Core i7-4790 CPU + 32GB RAM memory using Redhat Enterprise Linux 7.4

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>

(Continued on next page)



SPEC CPU2017 Floating Point Rate Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

Huawei

SPECrate2017_fp_base = 321

Huawei 5885H V5 (Intel Xeon Gold 6136)

SPECrate2017_fp_peak = 326

CPU2017 License: 3175

Test Date: May-2018

Test Sponsor: Huawei

Hardware Availability: May-2018

Tested by: Huawei

Software Availability: Mar-2018

General Notes (Continued)

Yes: 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) 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.

Platform Notes

BIOS configuration:

Sub NUMA Cluster (SNC) set to enabled

IMC (Integrated memory controller) Interleaving set to 1 way interleave

Xtended Prediction Table (XPT) Prefetch set to Enable

Memory Patrol Scrub set to Disable

Last Level Cache (LLC) Prefetch set to Disable

Sysinfo program /home/cpu2017/bin/sysinfo

Rev: r5797 of 2017-06-14 96c45e4568ad54c135fd618bcc091c0f
running on linux-52qc Mon May 14 20:05:53 2018

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 6136 CPU @ 3.00GHz
  4 "physical id"s (chips)
  96 "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 : 12
siblings : 24
physical 0: cores 0 1 2 3 4 9 10 16 18 19 25 26
physical 1: cores 0 1 2 3 4 8 10 11 18 24 25 27
physical 2: cores 0 1 2 3 4 8 9 11 17 18 19 20
physical 3: cores 0 1 2 3 4 8 9 11 17 18 19 20
```

From lscpu:

```
Architecture:           x86_64
CPU op-mode(s):        32-bit, 64-bit
Byte Order:             Little Endian
CPU(s):                96
On-line CPU(s) list:   0-95
Thread(s) per core:    2
Core(s) per socket:    12
Socket(s):              4
```

(Continued on next page)



SPEC CPU2017 Floating Point Rate Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

Huawei

Huawei 5885H V5 (Intel Xeon Gold 6136)

CPU2017 License: 3175

Test Sponsor: Huawei

Tested by: Huawei

SPECrate2017_fp_base = 321

SPECrate2017_fp_peak = 326

Test Date: May-2018

Hardware Availability: May-2018

Software Availability: Mar-2018

Platform Notes (Continued)

```

NUMA node(s):          4
Vendor ID:            GenuineIntel
CPU family:           6
Model:                85
Model name:           Intel(R) Xeon(R) Gold 6136 CPU @ 3.00GHz
Stepping:              4
CPU MHz:              1200.000
CPU max MHz:          3001.0000
CPU min MHz:          1200.0000
BogoMIPS:              6000.10
Virtualization:       VT-x
L1d cache:             32K
L1i cache:             32K
L2 cache:              1024K
L3 cache:              25344K
NUMA node0 CPU(s):    0-11,48-59
NUMA node1 CPU(s):    12-23,60-71
NUMA node2 CPU(s):    24-35,72-83
NUMA node3 CPU(s):    36-47,84-95
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
                       aperfmpfperf eagerfpu 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 ida arat epb invpcid_single pln pts
                       dtherm intel_pt rsb_ctxtsw spec_ctrl stibp retpoline kaiser tpr_shadow vnmi
                       flexpriority ept vpid fsgsbbase tsc_adjust bmi1 hle avx2 smep bmi2 erms invpcid rtm
                       cqmq mpx avx512f avx512dq rdseed adx smap clflushopt clwb avx512cd avx512bw avx512vl
                       xsaveopt xsavec xgetbv1 cqmq_llc cqmq_occup_llc

```

```
/proc/cpuinfo cache data
cache size : 25344 KB
```

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

```

available: 4 nodes (0-3)
node 0 cpus: 0 1 2 3 4 5 6 7 8 9 10 11 48 49 50 51 52 53 54 55 56 57 58 59
node 0 size: 385280 MB
node 0 free: 370475 MB
node 1 cpus: 12 13 14 15 16 17 18 19 20 21 22 23 60 61 62 63 64 65 66 67 68 69 70 71
node 1 size: 387048 MB
node 1 free: 376885 MB
node 2 cpus: 24 25 26 27 28 29 30 31 32 33 34 35 72 73 74 75 76 77 78 79 80 81 82 83
node 2 size: 387048 MB
node 2 free: 376872 MB
node 3 cpus: 36 37 38 39 40 41 42 43 44 45 46 47 84 85 86 87 88 89 90 91 92 93 94 95
node 3 size: 386888 MB

```

(Continued on next page)



SPEC CPU2017 Floating Point Rate Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

Huawei

SPECrate2017_fp_base = 321

Huawei 5885H V5 (Intel Xeon Gold 6136)

SPECrate2017_fp_peak = 326

CPU2017 License: 3175

Test Date: May-2018

Test Sponsor: Huawei

Hardware Availability: May-2018

Tested by: Huawei

Software Availability: Mar-2018

Platform Notes (Continued)

```
node 3 free: 376615 MB
node distances:
node   0   1   2   3
 0: 10  21  21  21
 1: 21  10  21  21
 2: 21  21  10  21
 3: 21  21  21  10

From /proc/meminfo
  MemTotal:      1583377308 kB
  HugePages_Total:       0
  Hugepagesize:     2048 kB

/usr/bin/lsb_release -d
  SUSE Linux Enterprise Server 12 SP2

From /etc/*release* /etc/*version*
SuSE-release:
  SUSE Linux Enterprise Server 12 (x86_64)
  VERSION = 12
  PATCHLEVEL = 2
  # This file is deprecated and will be removed in a future service pack or release.
  # Please check /etc/os-release for details about this release.
os-release:
  NAME="SLES"
  VERSION="12-SP2"
  VERSION_ID="12.2"
  PRETTY_NAME="SUSE Linux Enterprise Server 12 SP2"
  ID="sles"
  ANSI_COLOR="0;32"
  CPE_NAME="cpe:/o:suse:sles:12:sp2"

uname -a:
  Linux linux-52qc 4.4.120-92.70-default #1 SMP Wed Mar 14 15:59:43 UTC 2018 (52a83de)
  x86_64 x86_64 x86_64 GNU/Linux

run-level 5 May 11 18:03

SPEC is set to: /home/cpu2017
  Filesystem      Type  Size  Used Avail Use% Mounted on
  /dev/sda4      btrfs  697G  182G  514G  27%  /home

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.
  BIOS INSYDE Corp. 0.80 02/24/2018
```

(Continued on next page)



SPEC CPU2017 Floating Point Rate Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

Huawei

Huawei 5885H V5 (Intel Xeon Gold 6136)

SPECrate2017_fp_base = 321

SPECrate2017_fp_peak = 326

CPU2017 License: 3175

Test Sponsor: Huawei

Tested by: Huawei

Test Date: May-2018

Hardware Availability: May-2018

Software Availability: Mar-2018

Platform Notes (Continued)

Memory:

48x Samsung M393A4K40BB2-CTD 32 GB 2 rank 2666

(End of data from sysinfo program)

Compiler Version Notes

=====

CC 519.lbm_r(base) 538.imagick_r(base, peak) 544.nab_r(base)

=====

icc (ICC) 18.0.0 20170811

Copyright (C) 1985-2017 Intel Corporation. All rights reserved.

=====

CC 519.lbm_r(peak) 544.nab_r(peak)

=====

icc (ICC) 18.0.0 20170811

Copyright (C) 1985-2017 Intel Corporation. All rights reserved.

=====

CXXC 508.namd_r(base) 510.parest_r(base)

=====

icpc (ICC) 18.0.0 20170811

Copyright (C) 1985-2017 Intel Corporation. All rights reserved.

=====

CXXC 508.namd_r(peak) 510.parest_r(peak)

=====

icpc (ICC) 18.0.0 20170811

Copyright (C) 1985-2017 Intel Corporation. All rights reserved.

=====

CC 511.povray_r(base) 526.blender_r(base)

=====

icpc (ICC) 18.0.0 20170811

Copyright (C) 1985-2017 Intel Corporation. All rights reserved.

icc (ICC) 18.0.0 20170811

Copyright (C) 1985-2017 Intel Corporation. All rights reserved.

=====

CC 511.povray_r(peak) 526.blender_r(peak)

=====

(Continued on next page)



SPEC CPU2017 Floating Point Rate Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

Huawei

Huawei 5885H V5 (Intel Xeon Gold 6136)

CPU2017 License: 3175

Test Sponsor: Huawei

Tested by: Huawei

SPECrate2017_fp_base = 321

SPECrate2017_fp_peak = 326

Test Date: May-2018

Hardware Availability: May-2018

Software Availability: Mar-2018

Compiler Version Notes (Continued)

```
icpc (ICC) 18.0.0 20170811
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.
icc (ICC) 18.0.0 20170811
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.
```

```
=====
```

FC 507.cactuBSSN_r(base)

```
=====
```

```
icpc (ICC) 18.0.0 20170811
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.
icc (ICC) 18.0.0 20170811
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.
ifort (IFORT) 18.0.0 20170811
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.
```

```
=====
```

FC 507.cactuBSSN_r(peak)

```
=====
```

```
icpc (ICC) 18.0.0 20170811
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.
icc (ICC) 18.0.0 20170811
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.
ifort (IFORT) 18.0.0 20170811
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.
```

```
=====
```

FC 503.bwaves_r(base, peak) 549.fotonik3d_r(base, peak) 554.roms_r(base)

```
=====
```

```
ifort (IFORT) 18.0.0 20170811
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.
```

```
=====
```

FC 554.roms_r(peak)

```
=====
```

```
ifort (IFORT) 18.0.0 20170811
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.
```

```
=====
```

CC 521.wrf_r(base) 527.cam4_r(base)

```
=====
```

```
ifort (IFORT) 18.0.0 20170811
```

(Continued on next page)



SPEC CPU2017 Floating Point Rate Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

Huawei

SPECrate2017_fp_base = 321

Huawei 5885H V5 (Intel Xeon Gold 6136)

SPECrate2017_fp_peak = 326

CPU2017 License: 3175

Test Date: May-2018

Test Sponsor: Huawei

Hardware Availability: May-2018

Tested by: Huawei

Software Availability: Mar-2018

Compiler Version Notes (Continued)

Copyright (C) 1985-2017 Intel Corporation. All rights reserved.

icc (ICC) 18.0.0 20170811

Copyright (C) 1985-2017 Intel Corporation. All rights reserved.

=====

CC 521.wrf_r(peak) 527.cam4_r(peak)

=====

ifort (IFORT) 18.0.0 20170811

Copyright (C) 1985-2017 Intel Corporation. All rights reserved.

icc (ICC) 18.0.0 20170811

Copyright (C) 1985-2017 Intel Corporation. All rights reserved.

Base Compiler Invocation

C benchmarks:

icc

C++ benchmarks:

icpc

Fortran benchmarks:

fort

Benchmarks using both Fortran and C:

fort icc

Benchmarks using both C and C++:

icpc icc

Benchmarks using Fortran, C, and C++:

icpc icc fort

Base Portability Flags

503.bwaves_r: -DSPEC_LP64
507.cactusBSSN_r: -DSPEC_LP64
508.namd_r: -DSPEC_LP64
510.parest_r: -DSPEC_LP64
511.povray_r: -DSPEC_LP64
519.lbm_r: -DSPEC_LP64
521.wrf_r: -DSPEC_LP64 -DSPEC_CASE_FLAG -convert big_endian

(Continued on next page)



SPEC CPU2017 Floating Point Rate Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

Huawei

SPECrate2017_fp_base = 321

Huawei 5885H V5 (Intel Xeon Gold 6136)

SPECrate2017_fp_peak = 326

CPU2017 License: 3175

Test Date: May-2018

Test Sponsor: Huawei

Hardware Availability: May-2018

Tested by: Huawei

Software Availability: Mar-2018

Base Portability Flags (Continued)

```
526.blender_r: -DSPEC_LP64 -DSPEC_LINUX -funsigned-char  
527.cam4_r: -DSPEC_LP64 -DSPEC_CASE_FLAG  
538.imagick_r: -DSPEC_LP64  
544.nab_r: -DSPEC_LP64  
549.fotonik3d_r: -DSPEC_LP64  
554.roms_r: -DSPEC_LP64
```

Base Optimization Flags

C benchmarks:

```
-xCORE-AVX512 -ipo -O3 -no-prec-div -qopt-prefetch  
-ffinite-math-only -qopt-mem-layout-trans=3
```

C++ benchmarks:

```
-xCORE-AVX512 -ipo -O3 -no-prec-div -qopt-prefetch  
-ffinite-math-only -qopt-mem-layout-trans=3
```

Fortran benchmarks:

```
-xCORE-AVX512 -ipo -O3 -no-prec-div -qopt-prefetch  
-ffinite-math-only -qopt-mem-layout-trans=3 -nostandard-realloc-lhs  
-align array32byte
```

Benchmarks using both Fortran and C:

```
-xCORE-AVX512 -ipo -O3 -no-prec-div -qopt-prefetch  
-ffinite-math-only -qopt-mem-layout-trans=3 -nostandard-realloc-lhs  
-align array32byte
```

Benchmarks using both C and C++:

```
-xCORE-AVX512 -ipo -O3 -no-prec-div -qopt-prefetch  
-ffinite-math-only -qopt-mem-layout-trans=3
```

Benchmarks using Fortran, C, and C++:

```
-xCORE-AVX512 -ipo -O3 -no-prec-div -qopt-prefetch  
-ffinite-math-only -qopt-mem-layout-trans=3 -nostandard-realloc-lhs  
-align array32byte
```

Base Other Flags

C benchmarks:

```
-m64 -std=c11
```

(Continued on next page)



SPEC CPU2017 Floating Point Rate Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

Huawei

SPECrate2017_fp_base = 321

Huawei 5885H V5 (Intel Xeon Gold 6136)

SPECrate2017_fp_peak = 326

CPU2017 License: 3175

Test Date: May-2018

Test Sponsor: Huawei

Hardware Availability: May-2018

Tested by: Huawei

Software Availability: Mar-2018

Base Other Flags (Continued)

C++ benchmarks:

-m64

Fortran benchmarks:

-m64

Benchmarks using both Fortran and C:

-m64 -std=c11

Benchmarks using both C and C++:

-m64 -std=c11

Benchmarks using Fortran, C, and C++:

-m64 -std=c11

Peak Compiler Invocation

C benchmarks:

icc

C++ benchmarks:

icpc

Fortran benchmarks:

ifort

Benchmarks using both Fortran and C:

ifort icc

Benchmarks using both C and C++:

icpcicc

Benchmarks using Fortran, C, and C++:

icpciccifort

Peak Portability Flags

Same as Base Portability Flags



SPEC CPU2017 Floating Point Rate Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

Huawei

Huawei 5885H V5 (Intel Xeon Gold 6136)

CPU2017 License: 3175

Test Sponsor: Huawei

Tested by: Huawei

SPECrate2017_fp_base = 321

SPECrate2017_fp_peak = 326

Test Date: May-2018

Hardware Availability: May-2018

Software Availability: Mar-2018

Peak Optimization Flags

C benchmarks:

```
519.lbm_r: -prof-gen(pass 1) -prof-use(pass 2) -ipo -xCORE-AVX512  
-O3 -no-prec-div -qopt-prefetch -ffinite-math-only  
-qopt-mem-layout-trans=3
```

```
538.imagick_r: -xCORE-AVX512 -ipo -O3 -no-prec-div -qopt-prefetch  
-ffinite-math-only -qopt-mem-layout-trans=3
```

544.nab_r: Same as 519.lbm_r

C++ benchmarks:

```
-prof-gen(pass 1) -prof-use(pass 2) -ipo -xCORE-AVX512 -O3  
-no-prec-div -qopt-prefetch -ffinite-math-only  
-qopt-mem-layout-trans=3
```

Fortran benchmarks:

```
503.bwaves_r: -xCORE-AVX512 -ipo -O3 -no-prec-div -qopt-prefetch  
-ffinite-math-only -qopt-mem-layout-trans=3  
-nostandard-realloc-lhs -align array32byte
```

549.fotonik3d_r: Same as 503.bwaves_r

```
554.roms_r: -prof-gen(pass 1) -prof-use(pass 2) -ipo -xCORE-AVX512  
-O3 -no-prec-div -qopt-prefetch -ffinite-math-only  
-qopt-mem-layout-trans=3 -nostandard-realloc-lhs  
-align array32byte
```

Benchmarks using both Fortran and C:

```
-prof-gen(pass 1) -prof-use(pass 2) -ipo -xCORE-AVX512 -O3  
-no-prec-div -qopt-prefetch -ffinite-math-only  
-qopt-mem-layout-trans=3 -nostandard-realloc-lhs -align array32byte
```

Benchmarks using both C and C++:

```
-prof-gen(pass 1) -prof-use(pass 2) -ipo -xCORE-AVX512 -O3  
-no-prec-div -qopt-prefetch -ffinite-math-only  
-qopt-mem-layout-trans=3
```

Benchmarks using Fortran, C, and C++:

```
-prof-gen(pass 1) -prof-use(pass 2) -ipo -xCORE-AVX512 -O3  
-no-prec-div -qopt-prefetch -ffinite-math-only  
-qopt-mem-layout-trans=3 -nostandard-realloc-lhs -align array32byte
```



SPEC CPU2017 Floating Point Rate Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

Huawei

Huawei 5885H V5 (Intel Xeon Gold 6136)

CPU2017 License: 3175

Test Sponsor: Huawei

Tested by: Huawei

SPECrate2017_fp_base = 321

SPECrate2017_fp_peak = 326

Test Date: May-2018

Hardware Availability: May-2018

Software Availability: Mar-2018

Peak Other Flags

C benchmarks:

-m64 -std=c11

C++ benchmarks:

-m64

Fortran benchmarks:

-m64

Benchmarks using both Fortran and C:

-m64 -std=c11

Benchmarks using both C and C++:

-m64 -std=c11

Benchmarks using Fortran, C, and C++:

-m64 -std=c11

The flags files that were used to format this result can be browsed at

<http://www.spec.org/cpu2017/flags/Intel-ic18.0-official-linux64.html>

<http://www.spec.org/cpu2017/flags/Huawei-Platform-Settings-SKL-V1.7.html>

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

<http://www.spec.org/cpu2017/flags/Intel-ic18.0-official-linux64.xml>

<http://www.spec.org/cpu2017/flags/Huawei-Platform-Settings-SKL-V1.7.xml>

SPEC is a registered trademark 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 CPU2017 v1.0.2 on 2018-05-14 08:05:52-0400.

Report generated on 2018-10-31 17:24:04 by CPU2017 PDF formatter v6067.

Originally published on 2018-06-26.