



SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2020 Standard Performance Evaluation Corporation

NEC Corporation

Express5800/R120h-1M (Intel Xeon Gold 6244)

CPU2017 License: 9006

Test Sponsor: NEC Corporation

Tested by: NEC Corporation

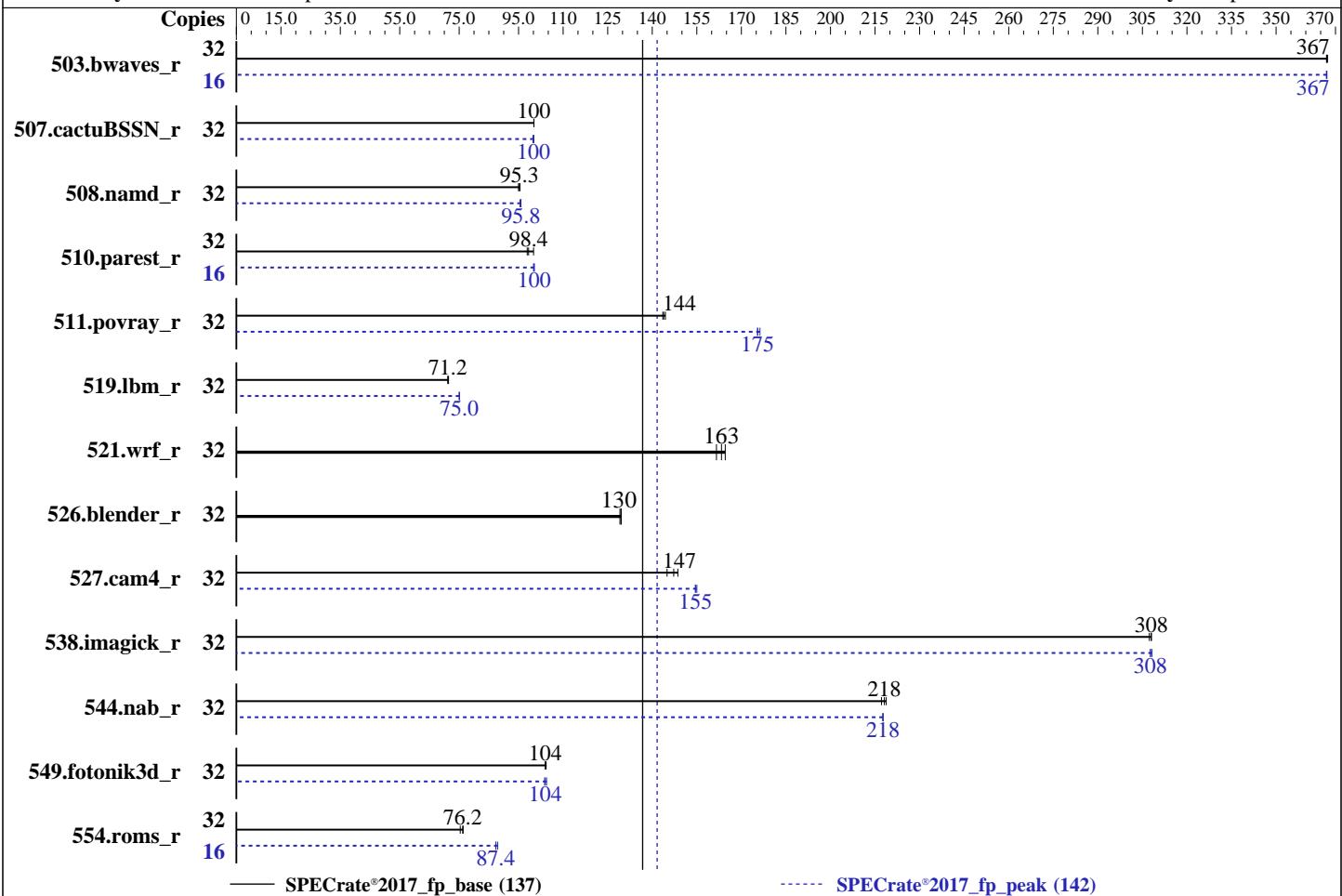
SPECrate®2017_fp_base = 137

SPECrate®2017_fp_peak = 142

Test Date: Oct-2020

Hardware Availability: Dec-2019

Software Availability: Sep-2019



Hardware

CPU Name: Intel Xeon Gold 6244
 Max MHz: 4400
 Nominal: 3600
 Enabled: 16 cores, 2 chips, 2 threads/core
 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: 24.75 MB I+D on chip per chip
 Other: None
 Memory: 384 GB (24 x 16 GB 2Rx8 PC4-2933Y-R)
 Storage: 1 x 1 TB SATA, 7200 RPM, RAID 0
 Other: None

OS:

Red Hat Enterprise Linux Server release 7.7 (Maipo)

Kernel 3.10.0-1062.1.1.el7.x86_64

C/C++: Version 19.0.4.227 of Intel C/C++ Compiler Build 20190416 for Linux;
 Fortran: Version 19.0.4.227 of Intel Fortran Compiler Build 20190416 for Linux

No

NEC BIOS Version U32 v2.32 03/09/2020 released Jun-2020

ext4

Run level 3 (multi-user)

64-bit

64-bit

None

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

Software

Red Hat Enterprise Linux Server release 7.7 (Maipo)

Kernel 3.10.0-1062.1.1.el7.x86_64

C/C++: Version 19.0.4.227 of Intel C/C++ Compiler Build 20190416 for Linux;
 Fortran: Version 19.0.4.227 of Intel Fortran Compiler Build 20190416 for Linux

No

NEC BIOS Version U32 v2.32 03/09/2020 released Jun-2020

ext4

Run level 3 (multi-user)

64-bit

64-bit

None

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



SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2020 Standard Performance Evaluation Corporation

NEC Corporation

Express5800/R120h-1M (Intel Xeon Gold 6244)

SPECrate®2017_fp_base = 137

SPECrate®2017_fp_peak = 142

CPU2017 License: 9006

Test Date: Oct-2020

Test Sponsor: NEC Corporation

Hardware Availability: Dec-2019

Tested by: NEC Corporation

Software Availability: Sep-2019

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
503.bwaves_r	32	874	367	874	367	874	367	16	437	367	437	367	437	367
507.cactuBSSN_r	32	404	100	405	100	404	100	32	405	100	406	99.8	405	100
508.namd_r	32	319	95.3	320	95.0	318	95.5	32	317	95.8	318	95.5	317	95.8
510.parest_r	32	837	100	851	98.4	855	97.9	16	418	100	417	100	417	100
511.povray_r	32	519	144	520	144	517	144	32	426	175	426	175	424	176
519.lbm_r	32	472	71.4	474	71.2	474	71.2	32	449	75.1	449	75.0	449	75.0
521.wrf_r	32	436	165	439	163	444	162	32	436	165	439	163	444	162
526.blender_r	32	377	129	376	130	376	130	32	377	129	376	130	376	130
527.cam4_r	32	380	147	377	149	386	145	32	361	155	362	154	362	155
538.imagick_r	32	258	308	259	307	258	308	32	259	308	258	308	259	308
544.nab_r	32	247	218	246	219	248	217	32	247	218	247	218	247	218
549.fotonik3d_r	32	1196	104	1198	104	1199	104	32	1199	104	1194	104	1202	104
554.roms_r	32	667	76.2	675	75.4	666	76.3	16	289	88.0	291	87.4	291	87.4

SPECrate®2017_fp_base = 137

SPECrate®2017_fp_peak = 142

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:
LD_LIBRARY_PATH = "/home/cpu2017/lib/intel64"

General Notes

Binaries compiled on a system with 1x Intel Core i9-7900X CPU + 32GB RAM memory using Redhat Enterprise Linux 7.5
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.:

(Continued on next page)



SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2020 Standard Performance Evaluation Corporation

NEC Corporation

Express5800/R120h-1M (Intel Xeon Gold 6244)

CPU2017 License: 9006

Test Sponsor: NEC Corporation

Tested by: NEC Corporation

SPECrate®2017_fp_base = 137

SPECrate®2017_fp_peak = 142

Test Date: Oct-2020

Hardware Availability: Dec-2019

Software Availability: Sep-2019

General Notes (Continued)

```
numactl --interleave=all runcpu <etc>
```

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) 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 Settings:

Thermal Configuration: Maximum Cooling

Workload Profile: General Throughput Compute

Memory Patrol Scrubbing: Disabled

LLC Dead Line Allocation: Disabled

LLC Prefetch: Enabled

Enhanced Processor Performance: Enabled

```
Sysinfo program /home/cpu2017/bin/sysinfo
Rev: r6365 of 2019-08-21 295195f888a3d7edb1e6e46a485a0011
running on r120h1m Tue Oct 13 15:46:54 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 6244 CPU @ 3.60GHz
  2 "physical id"s (chips)
  32 "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 : 16
  physical 0: cores 3 8 17 18 24 25 27
  physical 1: cores 2 9 18 19 20 25 26
```

From lscpu:

```
Architecture:           x86_64
CPU op-mode(s):        32-bit, 64-bit
Byte Order:            Little Endian
CPU(s):                32
On-line CPU(s) list:  0-31
Thread(s) per core:   2
```

(Continued on next page)



SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2020 Standard Performance Evaluation Corporation

NEC Corporation

Express5800/R120h-1M (Intel Xeon Gold 6244)

SPECrate®2017_fp_base = 137

SPECrate®2017_fp_peak = 142

CPU2017 License: 9006

Test Date: Oct-2020

Test Sponsor: NEC Corporation

Hardware Availability: Dec-2019

Tested by: NEC Corporation

Software Availability: Sep-2019

Platform Notes (Continued)

Core(s) per socket: 8
Socket(s): 2
NUMA node(s): 4
Vendor ID: GenuineIntel
CPU family: 6
Model: 85
Model name: Intel(R) Xeon(R) Gold 6244 CPU @ 3.60GHz
Stepping: 6
CPU MHz: 3600.000
BogoMIPS: 7200.00
Virtualization: VT-x
L1d cache: 32K
L1i cache: 32K
L2 cache: 1024K
L3 cache: 25344K
NUMA node0 CPU(s): 4-7,20-23
NUMA node1 CPU(s): 0-3,16-19
NUMA node2 CPU(s): 8-11,24-27
NUMA node3 CPU(s): 12-15,28-31
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 epb cat_l3 cdp_l3 invpcid_single intel_ppin intel_pt ssbd mba ibrs ibpb stibp ibrs_enhanced tpr_shadow vnmi flexpriority ept vpid fsgsbase tsc_adjust bmi1 hle avx2 smep bmi2 erms invpcid rtm cqm mpn rdt_a avx512f avx512dq rdseed adx smap clflushopt clwb avx512cd avx512bw avx512vl xsaveopt xsavec xgetbv1 cqm_llc cqm_occup_llc cqm_mbm_total cqm_mbm_local dtherm ida arat pln pts pku ospke avx512_vnni md_clear spec_ctrl intel_stibp flush_l1d arch_capabilities

/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: 4 5 6 7 20 21 22 23
node 0 size: 98304 MB
node 0 free: 96023 MB
node 1 cpus: 0 1 2 3 16 17 18 19
node 1 size: 97960 MB
node 1 free: 95594 MB
node 2 cpus: 8 9 10 11 24 25 26 27
node 2 size: 65536 MB
node 2 free: 63898 MB

(Continued on next page)



SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2020 Standard Performance Evaluation Corporation

NEC Corporation

Express5800/R120h-1M (Intel Xeon Gold 6244)

SPECrate®2017_fp_base = 137

SPECrate®2017_fp_peak = 142

CPU2017 License: 9006

Test Date: Oct-2020

Test Sponsor: NEC Corporation

Hardware Availability: Dec-2019

Tested by: NEC Corporation

Software Availability: Sep-2019

Platform Notes (Continued)

```
node 3 cpus: 12 13 14 15 28 29 30 31
node 3 size: 98303 MB
node 3 free: 96063 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:      362893468 kB
HugePages_Total:      0
Hugepagesize:     2048 kB

From /etc/*release* /etc/*version*
os-release:
NAME="Red Hat Enterprise Linux Server"
VERSION="7.7 (Maipo)"
ID="rhel"
ID_LIKE="fedora"
VARIANT="Server"
VARIANT_ID="server"
VERSION_ID="7.7"
PRETTY_NAME="Red Hat Enterprise Linux Server 7.7 (Maipo)"
redhat-release: Red Hat Enterprise Linux Server release 7.7 (Maipo)
system-release: Red Hat Enterprise Linux Server release 7.7 (Maipo)
system-release-cpe: cpe:/o:redhat:enterprise_linux:7.7:ga:server

uname -a:
Linux r120h1m 3.10.0-1062.1.1.el7.x86_64 #1 SMP Tue Aug 13 18:39:59 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
                                                via prctl and seccomp
CVE-2017-5753 (Spectre variant 1):        Mitigation: Load fences, usercopy/swapgs
                                                barriers and __user pointer sanitization
CVE-2017-5715 (Spectre variant 2):        Mitigation: Full retpoline, IBPB

run-level 3 Oct 13 15:41

SPEC is set to: /home/cpu2017
```

(Continued on next page)



SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2020 Standard Performance Evaluation Corporation

NEC Corporation

Express5800/R120h-1M (Intel Xeon Gold 6244)

CPU2017 License: 9006

Test Sponsor: NEC Corporation

Tested by: NEC Corporation

SPECCrate®2017_fp_base = 137

SPECCrate®2017_fp_peak = 142

Test Date: Oct-2020

Hardware Availability: Dec-2019

Software Availability: Sep-2019

Platform Notes (Continued)

Filesystem	Type	Size	Used	Avail	Use%	Mounted on
/dev/sda3	ext4	908G	186G	677G	22%	/

```
From /sys/devices/virtual/dmi/id
  BIOS:      NEC U32 03/09/2020
  Vendor:    NEC
  Product:   Express5800/R120h-1M
  Serial:    JPN0084094
```

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:

```
24x HPE P03050-091 16 GB 2 rank 2933
```

(End of data from sysinfo program)

Compiler Version Notes

```
=====
| C           | 519.lbm_r(base, peak) 538.imagick_r(base, peak)
|             | 544.nab_r(base, peak)
-----
```

```
Intel(R) C Intel(R) 64 Compiler for applications running on Intel(R) 64,
Version 19.0.4.227 Build 20190416
Copyright (C) 1985-2019 Intel Corporation. All rights reserved.
-----
```

```
=====
| C++          | 508.namd_r(base, peak) 510.parest_r(base, peak)
-----
```

```
Intel(R) C++ Intel(R) 64 Compiler for applications running on Intel(R) 64,
Version 19.0.4.227 Build 20190416
Copyright (C) 1985-2019 Intel Corporation. All rights reserved.
-----
```

```
=====
| C++, C       | 511.povray_r(base, peak) 526.blender_r(base, peak)
-----
```

```
Intel(R) C++ Intel(R) 64 Compiler for applications running on Intel(R) 64,
Version 19.0.4.227 Build 20190416
Copyright (C) 1985-2019 Intel Corporation. All rights reserved.
Intel(R) C Intel(R) 64 Compiler for applications running on Intel(R) 64,
Version 19.0.4.227 Build 20190416
Copyright (C) 1985-2019 Intel Corporation. All rights reserved.
-----
```

(Continued on next page)



SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2020 Standard Performance Evaluation Corporation

NEC Corporation

Express5800/R120h-1M (Intel Xeon Gold 6244)

SPECrate®2017_fp_base = 137

SPECrate®2017_fp_peak = 142

CPU2017 License: 9006

Test Sponsor: NEC Corporation

Tested by: NEC Corporation

Test Date: Oct-2020

Hardware Availability: Dec-2019

Software Availability: Sep-2019

Compiler Version Notes (Continued)

=====

C++, C, Fortran | 507.cactusBSSN_r(base, peak)

Intel(R) C++ Intel(R) 64 Compiler for applications running on Intel(R) 64,
Version 19.0.4.227 Build 20190416

Copyright (C) 1985-2019 Intel Corporation. All rights reserved.

Intel(R) C Intel(R) 64 Compiler for applications running on Intel(R) 64,
Version 19.0.4.227 Build 20190416

Copyright (C) 1985-2019 Intel Corporation. All rights reserved.

Intel(R) Fortran Intel(R) 64 Compiler for applications running on Intel(R)
64, Version 19.0.4.227 Build 20190416

Copyright (C) 1985-2019 Intel Corporation. All rights reserved.

=====

Fortran | 503.bwaves_r(base, peak) 549.fotonik3d_r(base, peak)

| 554.roms_r(base, peak)

Intel(R) Fortran Intel(R) 64 Compiler for applications running on Intel(R)
64, Version 19.0.4.227 Build 20190416

Copyright (C) 1985-2019 Intel Corporation. All rights reserved.

=====

Fortran, C | 521.wrf_r(base, peak) 527.cam4_r(base, peak)

Intel(R) Fortran Intel(R) 64 Compiler for applications running on Intel(R)
64, Version 19.0.4.227 Build 20190416

Copyright (C) 1985-2019 Intel Corporation. All rights reserved.

Intel(R) C Intel(R) 64 Compiler for applications running on Intel(R) 64,
Version 19.0.4.227 Build 20190416

Copyright (C) 1985-2019 Intel Corporation. All rights reserved.

Base Compiler Invocation

C benchmarks:

icc -m64 -std=c11

C++ benchmarks:

icpc -m64

Fortran benchmarks:

ifort -m64

(Continued on next page)



SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2020 Standard Performance Evaluation Corporation

NEC Corporation

Express5800/R120h-1M (Intel Xeon Gold 6244)

CPU2017 License: 9006

Test Sponsor: NEC Corporation

Tested by: NEC Corporation

SPECrate®2017_fp_base = 137

SPECrate®2017_fp_peak = 142

Test Date: Oct-2020

Hardware Availability: Dec-2019

Software Availability: Sep-2019

Base Compiler Invocation (Continued)

Benchmarks using both Fortran and C:

```
ifort -m64 icc -m64 -std=c11
```

Benchmarks using both C and C++:

```
icpc -m64 icc -m64 -std=c11
```

Benchmarks using Fortran, C, and C++:

```
icpc -m64 icc -m64 -std=c11 ifort -m64
```

Base Portability Flags

```
503.bwaves_r: -DSPEC_LP64
507.cactubSSN_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
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-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch -ffinite-math-only
-qopt-mem-layout-trans=4
```

C++ benchmarks:

```
-xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch -ffinite-math-only
-qopt-mem-layout-trans=4
```

Fortran benchmarks:

```
-xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch -ffinite-math-only
-qopt-mem-layout-trans=4 -auto -nostandard-realloc-lhs
-align array32byte
```

(Continued on next page)



SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2020 Standard Performance Evaluation Corporation

NEC Corporation

Express5800/R120h-1M (Intel Xeon Gold 6244)

CPU2017 License: 9006

Test Sponsor: NEC Corporation

Tested by: NEC Corporation

SPECrate®2017_fp_base = 137

SPECrate®2017_fp_peak = 142

Test Date: Oct-2020

Hardware Availability: Dec-2019

Software Availability: Sep-2019

Base Optimization Flags (Continued)

Benchmarks using both Fortran and C:

```
-xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch -ffinite-math-only  
-qopt-mem-layout-trans=4 -auto -nostandard-realloc-lhs  
-align array32byte
```

Benchmarks using both C and C++:

```
-xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch -ffinite-math-only  
-qopt-mem-layout-trans=4
```

Benchmarks using Fortran, C, and C++:

```
-xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch -ffinite-math-only  
-qopt-mem-layout-trans=4 -auto -nostandard-realloc-lhs  
-align array32byte
```

Peak Compiler Invocation

C benchmarks:

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

C++ benchmarks:

```
icpc -m64
```

Fortran benchmarks:

```
ifort -m64
```

Benchmarks using both Fortran and C:

```
ifort -m64 icc -m64 -std=c11
```

Benchmarks using both C and C++:

```
icpc -m64 icc -m64 -std=c11
```

Benchmarks using Fortran, C, and C++:

```
icpc -m64 icc -m64 -std=c11 ifort -m64
```

Peak Portability Flags

Same as Base Portability Flags



SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2020 Standard Performance Evaluation Corporation

NEC Corporation

Express5800/R120h-1M (Intel Xeon Gold 6244)

CPU2017 License: 9006

Test Sponsor: NEC Corporation

Tested by: NEC Corporation

SPECrate®2017_fp_base = 137

SPECrate®2017_fp_peak = 142

Test Date: Oct-2020

Hardware Availability: Dec-2019

Software Availability: Sep-2019

Peak Optimization Flags

C benchmarks:

```
519.lbm_r: -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
```

```
538.imagick_r: -xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch  
-ffinite-math-only -qopt-mem-layout-trans=4
```

544.nab_r: Same as 538.imagick_r

C++ benchmarks:

```
508.namd_r: -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
```

```
510.parest_r: -xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch  
-ffinite-math-only -qopt-mem-layout-trans=4
```

Fortran benchmarks:

```
503.bwaves_r: -xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch  
-ffinite-math-only -qopt-mem-layout-trans=4 -auto  
-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-AVX2 -O3  
-no-prec-div -qopt-prefetch -ffinite-math-only  
-qopt-mem-layout-trans=4 -auto -nostandard-realloc-lhs  
-align array32byte
```

Benchmarks using both Fortran and C:

521.wrf_r: basepeak = yes

```
527.cam4_r: -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 -auto -nostandard-realloc-lhs  
-align array32byte
```

Benchmarks using both C and C++:

```
511.povray_r: -prof-gen(pass 1) -prof-use(pass 2) -ipo -xCORE-AVX2 -O3  
-no-prec-div -qopt-prefetch -ffinite-math-only
```

(Continued on next page)



SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2020 Standard Performance Evaluation Corporation

NEC Corporation

Express5800/R120h-1M (Intel Xeon Gold 6244)

SPECrate®2017_fp_base = 137

SPECrate®2017_fp_peak = 142

CPU2017 License: 9006

Test Sponsor: NEC Corporation

Tested by: NEC Corporation

Test Date: Oct-2020

Hardware Availability: Dec-2019

Software Availability: Sep-2019

Peak Optimization Flags (Continued)

511.povray_r (continued):

-qopt-mem-layout-trans=4

526.blender_r: basepeak = yes

Benchmarks using Fortran, C, and C++:

-xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch -ffinite-math-only
-qopt-mem-layout-trans=4 -auto -nostandard-realloc-lhs
-align array32byte

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

<http://www.spec.org/cpu2017/flags/Intel-ic19.0ul-official-linux64.2019-07-09.html>
<http://www.spec.org/cpu2017/flags/NEC-Platform-Settings-V1.2-R120h-RevE.html>

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

<http://www.spec.org/cpu2017/flags/Intel-ic19.0ul-official-linux64.2019-07-09.xml>
<http://www.spec.org/cpu2017/flags/NEC-Platform-Settings-V1.2-R120h-RevE.xml>

SPEC CPU and SPECrate 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 2020-10-13 02:46:53-0400.

Report generated on 2020-11-10 15:22:56 by CPU2017 PDF formatter v6255.

Originally published on 2020-11-10.