Huawei

Huawei 2288H V5 (Intel Xeon Silver 4210)  

<table>
<thead>
<tr>
<th>SPECrate2017_fp_base = 119</th>
<th>SPECrate2017_fp_peak = 122</th>
</tr>
</thead>
</table>

CPU2017 License: 3175  
Test Sponsor: Huawei  
Tested by: Huawei  

Test Date: Mar-2019  
Hardware Availability: Apr-2019  
Software Availability: Dec-2018  

<table>
<thead>
<tr>
<th>SPECrate2017_fp_base (119)</th>
<th>SPECrate2017_fp_peak (122)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copies</td>
<td></td>
</tr>
<tr>
<td>503.bwaves_r 40</td>
<td></td>
</tr>
<tr>
<td>507.cactuBSSN_r 40</td>
<td></td>
</tr>
<tr>
<td>508.namd_r 40</td>
<td></td>
</tr>
<tr>
<td>510.parest_r 40</td>
<td></td>
</tr>
<tr>
<td>511.povray_r 40</td>
<td></td>
</tr>
<tr>
<td>519.lbm_r 40</td>
<td></td>
</tr>
<tr>
<td>521.wrf_r 40</td>
<td></td>
</tr>
<tr>
<td>526.blender_r 40</td>
<td></td>
</tr>
<tr>
<td>527.cam4_r 40</td>
<td></td>
</tr>
<tr>
<td>538.imagick_r 40</td>
<td></td>
</tr>
<tr>
<td>544.nab_r 40</td>
<td></td>
</tr>
<tr>
<td>549.fotonik3d_r 40</td>
<td></td>
</tr>
<tr>
<td>554.roms_r 40</td>
<td></td>
</tr>
</tbody>
</table>

Hardware

CPU Name: Intel Xeon Silver 4210  
Max MHz.: 3200  
Nominal: 2200  
Enabled: 20 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: 13.75 MB I+D on chip per chip  
Other: None  
Memory: 384 GB (24 x 16 GB 2Rx8 PC4-2933Y-R, running at 2400)  
Storage: 1 x 1200 GB SAS, 10000 RPM  
Other: None

Software

OS: SUSE Linux Enterprise Server 12 SP4 (x86_64)  
4.12.14-94.41-default  
Compiler: C/C++: Version 19.0.1.144 of Intel C/C++  
Compiler Build 20181018 for Linux;  
Fortran: Version 19.0.1.144 of Intel Fortran  
Compiler Build 20181018 for Linux  
Parallel: No  
Firmware: Version 6.36 Released Feb-2019  
File System: xfs  
System State: Run level 3 (multi-user)  
Base Pointers: 64-bit  
Peak Pointers: 64-bit  
Other: None
Huawei

Huawei 2288H V5 (Intel Xeon Silver 4210)

SPECrate2017_fp_base = 119
SPECrate2017_fp_peak = 122

Results Table

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Copies</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>503.bwaves_r</td>
<td>40</td>
<td>1126</td>
<td>356</td>
<td>1127</td>
<td>356</td>
<td>1127</td>
<td>356</td>
</tr>
<tr>
<td>507.cactuBSSN_r</td>
<td>40</td>
<td>553</td>
<td>91.6</td>
<td>553</td>
<td>91.6</td>
<td>553</td>
<td>91.6</td>
</tr>
<tr>
<td>508.namd_r</td>
<td>40</td>
<td>480</td>
<td>79.1</td>
<td>479</td>
<td>79.4</td>
<td>483</td>
<td>78.7</td>
</tr>
<tr>
<td>510.parest_r</td>
<td>40</td>
<td>1529</td>
<td>68.4</td>
<td>1526</td>
<td>68.6</td>
<td>1526</td>
<td>68.6</td>
</tr>
<tr>
<td>511.povray_r</td>
<td>40</td>
<td>740</td>
<td>126</td>
<td>749</td>
<td>125</td>
<td>742</td>
<td>126</td>
</tr>
<tr>
<td>519.lbm_r</td>
<td>40</td>
<td>526</td>
<td>80.1</td>
<td>526</td>
<td>80.1</td>
<td>527</td>
<td>80.0</td>
</tr>
<tr>
<td>521.wrf_r</td>
<td>40</td>
<td>643</td>
<td>139</td>
<td>640</td>
<td>140</td>
<td>651</td>
<td>138</td>
</tr>
<tr>
<td>526.blender_r</td>
<td>40</td>
<td>525</td>
<td>116</td>
<td>525</td>
<td>116</td>
<td>525</td>
<td>116</td>
</tr>
<tr>
<td>527.cam4_r</td>
<td>40</td>
<td>622</td>
<td>113</td>
<td>621</td>
<td>113</td>
<td>618</td>
<td>113</td>
</tr>
<tr>
<td>538.imagick_r</td>
<td>40</td>
<td>427</td>
<td>233</td>
<td>428</td>
<td>232</td>
<td>426</td>
<td>233</td>
</tr>
<tr>
<td>544.nab_r</td>
<td>40</td>
<td>383</td>
<td>176</td>
<td>387</td>
<td>174</td>
<td>389</td>
<td>173</td>
</tr>
<tr>
<td>549.fotonik3d_r</td>
<td>40</td>
<td>1373</td>
<td>114</td>
<td>1334</td>
<td>117</td>
<td>1347</td>
<td>116</td>
</tr>
<tr>
<td>554.roms_r</td>
<td>40</td>
<td>1057</td>
<td>60.2</td>
<td>1053</td>
<td>60.4</td>
<td>1055</td>
<td>60.3</td>
</tr>
</tbody>
</table>

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"

General Notes

Environment variables set by runcpu before the start of the run:
LD_LIBRARY_PATH = "/*/spec/lib/ia32:/spec/lib/intel64"

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.:
numactl --interleave=all runcpu <etc>
Yes: 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)
Huawei

Huawei 2288H V5 (Intel Xeon Silver 4210)

SPECrate2017_fp_base = 119
SPECrate2017_fp_peak = 122

CPU2017 License: 3175
Test Sponsor: Huawei
Test Date: Mar-2019
Tested by: Huawei
Hardware Availability: Apr-2019
Software Availability: Dec-2018

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.

Platform Notes

BIOS configuration:
Power Policy Set to Performance
SNC Set to Enabled
IMC Interleaving Set to 1-way Interleave
XPT Prefetch Set to Enabled
Sysinfo program /spec/bin/sysinfo
Rev: r5974 of 2018-05-19 9bcde8f2999c33d61f64985e45859ea9
running on linux-7ejo Sat Mar 23 04:18:15 2019

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) Silver 4210 CPU @ 2.20GHz
 2 "physical id"s (chips)
 40 "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 : 10
siblings : 20
physical 0: cores 0 1 2 3 4 8 9 10 11 12
physical 1: cores 0 1 2 3 4 8 9 10 11 12

From lscpu:
Architecture: x86_64
CPU op-mode(s): 32-bit, 64-bit
Byte Order: Little Endian
CPU(s): 40
On-line CPU(s) list: 0-39
Thread(s) per core: 2
Core(s) per socket: 10
Socket(s): 2
NUMA node(s): 2
Vendor ID: GenuineIntel
CPU family: 6
Model: 85
Model name: Intel(R) Xeon(R) Silver 4210 CPU @ 2.20GHz
Stepping: 6

(Continued on next page)
Huawei

Huawei 2288H V5 (Intel Xeon Silver 4210)

SPECrate2017_fp_base = 119
SPECrate2017_fp_peak = 122

CPU2017 License: 3175
Test Sponsor: Huawei
Tested by: Huawei

CPU MHz: 2200.000
CPU max MHz: 3200.0000
CPU min MHz: 1000.0000
BogoMIPS: 4400.00
Virtualization: VT-x
L1d cache: 32K
L1i cache: 32K
L2 cache: 1024K
L3 cache: 14080K
NUMA node0 CPU(s): 0-9,20-29
NUMA node1 CPU(s): 10-19,30-39

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 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
rdseed lahf_lm abm 3nowprefetch cpuid_fault ebp cat_13 cdp_13 invpcid_single ssbd
mba ibrs ibpb stibp tpr_shadow vnmi flexpriority ept vpid fsgsbase tsc_adjust bmi1
hle avx2 smep bmi2 ibrms invpcid rtm cgxmp rdt_a avx512f avx512dq rdseed adx smap
ciflushopt clwb intel_pt avx512cd avx512bw avx512vl xsaveopt xsavecp xsavec xsavees
cqm_llc cqm_occup_llc cqm_mbb_total cqm_mbb_local dtherm ida arat pln pts pkp ospke
avx512_vnni flush_l1d arch_capabilities

/platform Notes (Continued)

/proc/cpuinfo cache data
   cache size : 14080 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 1 2 3 4 5 6 7 8 9 20 21 22 23 24 25 26 27 28 29
      node 0 size: 191903 MB
      node 0 free: 173186 MB
      node 1 cpus: 10 11 12 13 14 15 16 17 18 19 30 31 32 33 34 35 36 37 38 39
      node 1 size: 193279 MB
      node 1 free: 182285 MB
      node distances:
         node 0 1
         0: 10 21
         1: 21 10

From /proc/meminfo
   MemTotal: 394427596 kB
   HugePages_Total: 0
   Hugepagesize: 2048 kB

From /etc/*release* /etc/*version*
   SuSE-release:

(Continued on next page)
Huawei

Huawei 2288H V5 (Intel Xeon Silver 4210)

<table>
<thead>
<tr>
<th>SPECrate2017_fp_base</th>
<th>119</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECrate2017_fp_peak</td>
<td>122</td>
</tr>
</tbody>
</table>

SPEC CPU2017 Floating Point Rate Result

CPU2017 License: 3175
Test Sponsor: Huawei
Test Date: Mar-2019
CPU2017 License: 3175
Test Sponsor: Huawei
Test Date: Mar-2019

Platform Notes (Continued)

SUSE Linux Enterprise Server 12 (x86_64)
VERSION = 12
PATCHLEVEL = 4
# 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-SP4"
VERSION_ID="12.4"
PRETTY_NAME="SUSE Linux Enterprise Server 12 SP4"
ID="sles"
ANSI_COLOR="0;32"
CPE_NAME="cpe:/o:suse:sles:12:sp4"
uname -a:
x86_64 x86_64 x86_64 GNU/Linux

Kernel self-reported vulnerability status:
CVE-2017-5754 (Meltdown): Not affected
CVE-2017-5753 (Spectre variant 1): Mitigation: __user pointer sanitization
CVE-2017-5715 (Spectre variant 2): Mitigation: Indirect Branch Restricted Speculation, IBPB, IBRS_FW
run-level 3 Mar 22 19:00

SPEC is set to: /spec
Filesystem Type Size Used Avail Use% Mounted on
/dev/sda3 xfs 734G 91G 644G 13% /

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. 6.36 02/15/2019
Memory:
24x Samsung M393A2K43CB2-CVF 16 GB 2 rank 2933, configured at 2400

Compiler Version Notes

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

(Continued on next page)
Huawei

Huawei 2288H V5 (Intel Xeon Silver 4210)

SPECrate2017_fp_base = 119
SPECrate2017_fp_peak = 122

CPU2017 License: 3175
Test Sponsor: Huawei
Tested by: Huawei

Test Date: Mar-2019
Hardware Availability: Apr-2019
Software Availability: Dec-2018

Compiler Version Notes (Continued)

Intel(R) C Intel(R) 64 Compiler for applications running on Intel(R) 64,
Version 19.0.1.144 Build 20181018
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.

------------------------------------------------------------------------------
|                               |
------------------------------------------------------------------------------

CC 519.lbm_r(peak)

Intel(R) C Intel(R) 64 Compiler for applications running on Intel(R) 64,
Version 19.0.1.144 Build 20181018
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.

------------------------------------------------------------------------------
|                               |
------------------------------------------------------------------------------

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

Intel(R) C++ Intel(R) 64 Compiler for applications running on Intel(R) 64,
Version 19.0.1.144 Build 20181018
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.

------------------------------------------------------------------------------
|                               |
------------------------------------------------------------------------------

CXXC 508.namd_r(peak)

Intel(R) C++ Intel(R) 64 Compiler for applications running on Intel(R) 64,
Version 19.0.1.144 Build 20181018
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.

------------------------------------------------------------------------------
|                               |
------------------------------------------------------------------------------

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

Intel(R) C++ Intel(R) 64 Compiler for applications running on Intel(R) 64,
Version 19.0.1.144 Build 20181018
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.

------------------------------------------------------------------------------
|                               |
------------------------------------------------------------------------------

CC 511.povray_r(peak)

Intel(R) C++ Intel(R) 64 Compiler for applications running on Intel(R) 64,
Version 19.0.1.144 Build 20181018
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.

Intel(R) C Intel(R) 64 Compiler for applications running on Intel(R) 64,
Version 19.0.1.144 Build 20181018
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.

(Continued on next page)
Huawei

Huawei 2288H V5 (Intel Xeon Silver 4210)

**SPECrate2017_fp_base** = 119

**SPECrate2017_fp_peak** = 122

**CPU2017 License:** 3175

**Test Sponsor:** Huawei

**Test Date:** Mar-2019

**Hardware Availability:** Apr-2019

**Tested by:** Huawei

**Software Availability:** Dec-2018

---

**Compiler Version Notes (Continued)**

```
Version 19.0.1.144 Build 20181018
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
```

---

```
FC  507.cactuBSSN_r(base, peak)

Intel(R) C++  Intel(R) 64 Compiler for applications running on Intel(R) 64,
Version 19.0.1.144 Build 20181018
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
```

---

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

Intel(R) Fortran Intel(R) 64 Compiler for applications running on Intel(R)
64, Version 19.0.1.144 Build 20181018
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
```

---

```
FC  554.roms_r(peak)

Intel(R) Fortran Intel(R) 64 Compiler for applications running on Intel(R)
64, Version 19.0.1.144 Build 20181018
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
```

---

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

Intel(R) Fortran Intel(R) 64 Compiler for applications running on Intel(R)
64, Version 19.0.1.144 Build 20181018
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
```

---

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

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

Intel(R) Fortran Intel(R) 64 Compiler for applications running on Intel(R)
64, Version 19.0.1.144 Build 20181018
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
Intel(R) C Intel(R) 64 Compiler for applications running on Intel(R) 64,
Version 19.0.1.144 Build 20181018
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.

### Base 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
```

### 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
519шиб_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
Huawei

Huawei 2288H V5 (Intel Xeon Silver 4210)  

<table>
<thead>
<tr>
<th>SPECrate2017_fp_base</th>
<th>SPECrate2017_fp_peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>119</td>
<td>122</td>
</tr>
</tbody>
</table>

CPU2017 License: 3175  
Test Sponsor: Huawei  
Tested by: Huawei  

Test Date: Mar-2019  
Hardware Availability: Apr-2019  
Software Availability: Dec-2018

### Base Portability Flags (Continued)

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

**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

(Continued on next page)
Peak Compiler Invocation (Continued)

Benchmarks using both Fortran and C:
```bash
ifort -m64 icc -m64 -std=c11
```

Benchmarks using both C and C++:
```bash
icpc -m64 icc -m64 -std=c11
```

Benchmarks using Fortran, C, and C++:
```bash
icpc -m64 icc -m64 -std=c11 ifort -m64
```

Peak Portability Flags

Same as Base Portability Flags

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: basepeak = yes
```
```
544.nab_r: -xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch
-ffinite-math-only -qopt-mem-layout-trans=4
```

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: basepeak = yes
```

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
```

(Continued on next page)
Huawei
Huawei 2288H V5 (Intel Xeon Silver 4210)

SPECrate2017_fp_base = 119
SPECrate2017_fp_peak = 122

CPU2017 License: 3175
Test Sponsor: Huawei
Test Date: Mar-2019
Hardware Availability: Apr-2019
Tested by: Huawei
Software Availability: Dec-2018

Peak Optimization Flags (Continued)

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:
-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
-qopt-mem-layout-trans=4

526.blender_r: -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

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/Huawei-Platform-Settings-SKL-V1.9-revC.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 v1.05 on 2019-03-22 16:18:15-0400.