Huawei

Huawei 5288 V5 (Intel Xeon Gold 6148)

SPECrate2017_fp_base = 216
SPECrate2017_fp_peak = 220

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

Test Date: Aug-2018
Hardware Availability: Jul-2017
Software Availability: Mar-2018

503.bwaves_r 80
507.cactuBSSN_r 80
508.namd_r 80
510.parest_r 80
511.povray_r 80
519.lbm_r 80
521.wrf_r 80
526.blender_r 80
527.cam4_r 80
538.imagick_r 80
544.nab_r 80
549.fotonik3d_r 80
554.roms_r 80

<table>
<thead>
<tr>
<th>Software</th>
<th>Hardware</th>
</tr>
</thead>
<tbody>
<tr>
<td>OS: Red Hat Enterprise Linux Server release 7.4 (Maipo)</td>
<td>CPU Name: Intel Xeon Gold 6148</td>
</tr>
<tr>
<td>Compiler: C/C++: Version 18.0.2.199 of Intel C/C++ Compiler for Linux; Fortran: Version 18.0.2.199 of Intel Fortran Compiler for Linux</td>
<td>Max MHz.: 3700</td>
</tr>
<tr>
<td>Firmware: Version 0.62 Released Mar-2018</td>
<td>Nominal: 2400</td>
</tr>
<tr>
<td>File System: xfs</td>
<td>Enabled: 40 cores, 2 chips, 2 threads/core</td>
</tr>
<tr>
<td>System State: Run level 3 (multi-user)</td>
<td>Orderable: 1.2 chips</td>
</tr>
<tr>
<td>Base Pointers: 64-bit</td>
<td>Cache L1: 32 KB I + 32 KB D on chip per core</td>
</tr>
<tr>
<td>Peak Pointers: 64-bit</td>
<td>L2: 1 MB I+D on chip per core</td>
</tr>
<tr>
<td>Other: None</td>
<td>L3: 27.5 MB I+D on chip per chip</td>
</tr>
<tr>
<td>Memory: 384 GB (24 x 16 GB 2Rx8 PC4-2666V-R)</td>
<td>Other: None</td>
</tr>
<tr>
<td>Storage: 1 x 2000 GB SATA, 7200 RPM</td>
<td></td>
</tr>
</tbody>
</table>

Hardware

<table>
<thead>
<tr>
<th>SPECrate2017_fp_base (216)</th>
<th>SPECrate2017_fp_peak (220)</th>
</tr>
</thead>
</table>

503.bwaves_r
507.cactuBSSN_r
508.namd_r
510.parest_r
511.povray_r
519.lbm_r
521.wrf_r
526.blender_r
527.cam4_r
538.imagick_r
544.nab_r
549.fotonik3d_r
554.roms_r

80 copies

503.bwaves_r 196
507.cactuBSSN_r 171
508.namd_r 109
510.parest_r 109
511.povray_r 270
519.lbm_r 116
521.wrf_r 216
526.blender_r 253
527.cam4_r 242
538.imagick_r 533
544.nab_r 397
549.fotonik3d_r 159
554.roms_r 92.5

SPEC® CPU2017 Floating Point Rate Result
Copyright 2017-2018 Standard Performance Evaluation Corporation

Page 1

Standard Performance Evaluation Corporation (info@spec.org) https://www.spec.org/
Huawei
Huawei 5288 V5 (Intel Xeon Gold 6148)

SPECrate2017_fp_base = 216
SPECrate2017_fp_peak = 220

Results Table

<table>
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<tr>
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<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
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<tbody>
<tr>
<td>503.bwaves_r</td>
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<td>1669</td>
<td>481</td>
<td>1667</td>
<td>481</td>
<td>1670</td>
<td>480</td>
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<tr>
<td>507.cactuBSSN_r</td>
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<td>515</td>
<td>197</td>
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<td>196</td>
<td>515</td>
<td>196</td>
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<td>508.namd_r</td>
<td>80</td>
<td>444</td>
<td>171</td>
<td>442</td>
<td>172</td>
<td>445</td>
<td>171</td>
</tr>
<tr>
<td>510.parest_r</td>
<td>80</td>
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<td>109</td>
<td>1913</td>
<td>109</td>
<td>1924</td>
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<tr>
<td>511.povray_r</td>
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<td>270</td>
<td>690</td>
<td>271</td>
<td>695</td>
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<td>519.lbn_r</td>
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<td>116</td>
<td>729</td>
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<tr>
<td>521.wrf_r</td>
<td>80</td>
<td>827</td>
<td>217</td>
<td>832</td>
<td>215</td>
<td>828</td>
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<tr>
<td>526.blender_r</td>
<td>80</td>
<td>481</td>
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<td>482</td>
<td>253</td>
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<td>253</td>
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<td>527.cam4_r</td>
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<td>579</td>
<td>242</td>
<td>580</td>
<td>241</td>
<td>564</td>
<td>248</td>
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<td>538.imagick_r</td>
<td>80</td>
<td>373</td>
<td>533</td>
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<td>533</td>
<td>373</td>
<td>533</td>
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<td>544.nab_r</td>
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<td>397</td>
<td>341</td>
<td>395</td>
<td>339</td>
<td>397</td>
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<td>549.fotonik3d_r</td>
<td>80</td>
<td>1965</td>
<td>159</td>
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<td>159</td>
<td>1968</td>
<td>158</td>
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<tr>
<td>554.roms_r</td>
<td>80</td>
<td>1374</td>
<td>92.6</td>
<td>1373</td>
<td>92.6</td>
<td>1378</td>
<td>92.3</td>
</tr>
</tbody>
</table>

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:

Binaries compiled on a system with 1x Intel Core i7-6700K 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 5288 V5 (Intel Xeon Gold 6148)

<table>
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<tr>
<th>SPECrate2017_fp_base</th>
<th>SPECrate2017_fp_peak</th>
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<td>220</td>
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</table>

CPU2017 License: 3175
Test Sponsor: Huawei
Test Date: Aug-2018
Hardware Availability: Jul-2017
Tested by: Huawei
Software Availability: Mar-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 /spec2017/bin/sysinfo
Rev: r5797 of 2017-06-14 96c45e4568ad54c135fd618bccc09c0f
running on localhost.localdomain Tue Aug 7 17:29:13 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 6148 CPU @ 2.40GHz
  2 "physical id"s (chips)
  80 "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 : 20
  siblings : 40
  physical 0: cores 0 1 2 3 4 8 9 10 11 12 16 17 18 19 20 24 25 26 27 28
  physical 1: cores 0 1 2 3 4 8 9 10 11 12 16 17 18 19 20 24 25 26 27 28

From lscpu:

Architecture: x86_64
CPU op-mode(s): 32-bit, 64-bit
Byte Order: Little Endian
CPU(s): 80
On-line CPU(s) list: 0-79
Thread(s) per core: 2
Core(s) per socket: 20
Socket(s): 2
NUMA node(s): 4
Vendor ID: GenuineIntel
CPU family: 6
Model: 85
Model name: Intel(R) Xeon(R) Gold 6148 CPU @ 2.40GHz
Stepping: 4

(Continued on next page)
Huawei

Huawei 5288 V5 (Intel Xeon Gold 6148)

**SPECrate2017_fp_base = 216**

**SPECrate2017_fp_peak = 220**

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<td>Huawei</td>
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<tr>
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<td>Huawei</td>
</tr>
<tr>
<td>Test Date:</td>
<td>Aug-2018</td>
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<tr>
<td>Hardware Availability:</td>
<td>Jul-2017</td>
</tr>
<tr>
<td>Software Availability:</td>
<td>Mar-2018</td>
</tr>
</tbody>
</table>

**Platform Notes (Continued)**

- CPU MHz: 2400.000
- BogoMIPS: 4800.00
- Virtualization: VT-x
- L1d cache: 32K
- L1i cache: 32K
- L2 cache: 1024K
- L3 cache: 28160K
- CPU MHz: 2400.000
- BogoMIPS: 4800.00
- Virtualization: VT-x
- L1d cache: 32K
- L1i cache: 32K
- L2 cache: 1024K
- L3 cache: 28160K

**NUMA node0 CPU(s):**
0-2, 5, 6, 10-12, 15, 16, 40-42, 45, 46, 50-52, 55, 56

**NUMA node1 CPU(s):**
3, 4, 7-9, 13, 14, 17-19, 43, 44, 47-49, 53, 54, 57-59

**NUMA node2 CPU(s):**
20-22, 25, 26, 30-32, 35, 36, 60-62, 65, 66, 70-72, 75, 76

**NUMA node3 CPU(s):**
23, 24, 27-29, 33, 34, 37-39, 63, 64, 67-69, 73, 74, 77-79

**Flags:**
- fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov
- pat pse36 clflush dtst acpi mmx fxsr sse sse2 ss ht tm pbe syscall nx pdpe1gb rdtsscp
- lm constant_tsc arch_perfmon pebs bts rep_good nopl xtopology nonstop_tsc
- aperfmperf eagerfpu pni pclmulqdq dtes64 ds_cpl vmx smx est tm2 ssse3 fma cx16 xtpr
- pdcm pcid dca sse4_1 sse4_2 x2apic movbe popcnt tsc_deadline_timer aes xsave avx
- f16c rdrand lahf_lm abm 3dispatch epb cat_l3 cdp_l3 invpcid_single intel_pt
- spec_ctrl ibpb_support tpr_shadow vnmi flexpriority ept vpid fsgsbase tsc_adjust
- bmi1 hle avx2 smep bmi2 erts invpcid rtm cqm mpx rdt_a avx512f avx512dq rdseed adx
- smap clflushopt clwb avx512cd avx512bw avx512vl xsaveopt xsavevc xgetbv1 cqm_llc
- cqm_occurs_llc cqm_mbb_total cqm_mbb_local dtherm ida arat pln pts

From numactl --hardware

```
WARNING: a numactl 'node' might or might not correspond to a physical chip.
```

<table>
<thead>
<tr>
<th>available</th>
<th>4 nodes (0-3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>node 0 cpus:</td>
<td>0 1 2 5 6 10 11 12 15 16 40 41 42 45 46 50 51 52 55 56</td>
</tr>
<tr>
<td>node 0 size:</td>
<td>96437 MB</td>
</tr>
<tr>
<td>node 0 free:</td>
<td>93280 MB</td>
</tr>
<tr>
<td>node 1 cpus:</td>
<td>3 4 7 8 9 13 14 17 18 19 43 44 47 48 49 53 54 57 58 59</td>
</tr>
<tr>
<td>node 1 size:</td>
<td>98304 MB</td>
</tr>
<tr>
<td>node 1 free:</td>
<td>94890 MB</td>
</tr>
<tr>
<td>node 2 cpus:</td>
<td>20 21 22 25 26 30 31 32 35 36 60 61 62 65 66 70 71 72 75 76</td>
</tr>
<tr>
<td>node 2 size:</td>
<td>98304 MB</td>
</tr>
<tr>
<td>node 2 free:</td>
<td>95531 MB</td>
</tr>
<tr>
<td>node 3 cpus:</td>
<td>23 24 27 28 29 33 34 37 38 39 63 64 67 68 69 73 74 77 78 79</td>
</tr>
<tr>
<td>node 3 size:</td>
<td>98304 MB</td>
</tr>
<tr>
<td>node 3 free:</td>
<td>95549 MB</td>
</tr>
<tr>
<td>node distances:</td>
<td></td>
</tr>
<tr>
<td>node 0 1 2 3</td>
<td></td>
</tr>
<tr>
<td>0: 10 11 21 21</td>
<td></td>
</tr>
<tr>
<td>1: 11 10 21 21</td>
<td></td>
</tr>
<tr>
<td>2: 21 21 10 11</td>
<td></td>
</tr>
<tr>
<td>3: 21 21 11 10</td>
<td></td>
</tr>
</tbody>
</table>

(Continued on next page)
Huawei 5288 V5 (Intel Xeon Gold 6148)

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

Platform Notes (Continued)

From /proc/meminfo
MemTotal: 394174408 kB
HugePages_Total: 0
Hugepagesize: 2048 kB

From /etc/*release* /etc/*version*
  os-release:
    NAME="Red Hat Enterprise Linux Server"
    VERSION="7.4 (Maipo)"
    ID="rhel"
    ID_LIKE="fedora"
    VARIANT="Server"
    VARIANT_ID="server"
    VERSION_ID="7.4"
    PRETTY_NAME="Red Hat Enterprise Linux Server 7.4 (Maipo)"
  redhat-release: Red Hat Enterprise Linux Server release 7.4 (Maipo)
  system-release: Red Hat Enterprise Linux Server release 7.4 (Maipo)
  system-release-cpe: cpe:/o:redhat:enterprise_linux:7.4:ga:server

uname -a:
  Linux localhost.localdomain 3.10.0-693.11.6.el7.x86_64 #1 SMP Thu Dec 28 14:23:39 EST 2017 x86_64 x86_64 x86_64 GNU/Linux

run-level 3 Aug 7 07:50

SPEC is set to: /spec2017
  Filesystem Type Size Used Avail Use% Mounted on
  /dev/mapper/rhel-root xfs 1.8T 52G 1.7T 3% /

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. 0.62 03/26/2018
  Memory:
    24x Samsung M393A2K43BB1-CTD 16 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, peak)
==============================================================================
icc (ICC) 18.0.2 20180210
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
### SPEC CPU2017 Floating Point Rate Result

**Huawei**

**Huawei 5288 V5 (Intel Xeon Gold 6148)**

<table>
<thead>
<tr>
<th>SPECrate2017_fp_base</th>
<th>SPECrate2017_fp_peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>216</td>
<td>220</td>
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</tbody>
</table>

**CPU2017 License:** 3175  
**Test Sponsor:** Huawei  
**Test Date:** Aug-2018  
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**Compiler Version Notes (Continued)**

<table>
<thead>
<tr>
<th>Compiler Version Notes (Continued)</th>
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</thead>
<tbody>
<tr>
<td>CC  519.lbm_r(peak)</td>
</tr>
<tr>
<td>icc (ICC) 18.0.2 20180210</td>
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<table>
<thead>
<tr>
<th>Compiler Version Notes (Continued)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CXXC 508.namd_r(base) 510.parest_r(base, peak)</td>
</tr>
<tr>
<td>icpc (ICC) 18.0.2 20180210</td>
</tr>
<tr>
<td>Copyright (C) 1985-2018 Intel Corporation. All rights reserved.</td>
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</table>

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<tbody>
<tr>
<td>CXXC 508.namd_r(peak)</td>
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<thead>
<tr>
<th>Compiler Version Notes (Continued)</th>
</tr>
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<tbody>
<tr>
<td>CC  511.povray_r(base) 526.blender_r(base, peak)</td>
</tr>
<tr>
<td>icpc (ICC) 18.0.2 20180210</td>
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<tr>
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</tr>
<tr>
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</tr>
<tr>
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Test Date: Aug-2018
Hardware Availability: Jul-2017
Software Availability: Mar-2018

Compiler Version Notes (Continued)

Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
ifort (IFORT) 18.0.2 20180210
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.

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

ifort (IFORT) 18.0.2 20180210
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.

FC 554.roms_r(peak)

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Copyright (C) 1985-2018 Intel Corporation. All rights reserved.

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

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icc (ICC) 18.0.2 20180210
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.

Base Compiler Invocation

C benchmarks:
icc -m64 -std=c11

C++ benchmarks:
icpc -m64
SPEC CPU2017 Floating Point Rate Result
Copyright 2017-2018 Standard Performance Evaluation Corporation

Huawei
Huawei 5288 V5 (Intel Xeon Gold 6148)

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Base Compiler Invocation (Continued)

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.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=3

C++ benchmarks:
-xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch -ffinite-math-only
-qopt-mem-layout-trans=3

Fortran benchmarks:
-xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch -ffinite-math-only
-qopt-mem-layout-trans=3 -auto -nostandard-realloc-lhs

(Continued on next page)
## Huawei

**Huawei 5288 V5 (Intel Xeon Gold 6148)**

<table>
<thead>
<tr>
<th>SPECrate2017_fp_base = 216</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECrate2017_fp_peak = 220</td>
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</table>

**CPU2017 License:** 3175  
**Test Sponsor:** Huawei  
**Tested by:** Huawei  
**Test Date:** Aug-2018  
**Hardware Availability:** Jul-2017  
**Software Availability:** Mar-2018

### 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=3 -auto -nostandard-realloc-lhs`

Benchmarks using both C and C++:
- `xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch -ffinite-math-only -qopt-mem-layout-trans=3`

Benchmarks using Fortran, C, and C++:
- `xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch -ffinite-math-only -qopt-mem-layout-trans=3 -auto -nostandard-realloc-lhs`

### 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

### Peak Optimization Flags

(Continued on next page)
Huawei

Huawei 5288 V5 (Intel Xeon Gold 6148)

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---

### Peak Optimization Flags (Continued)

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Flags</th>
</tr>
</thead>
<tbody>
<tr>
<td>519.lbm_r</td>
<td>-prof-gen(pass 1) -prof-use(pass 2) -ipo -xCORE-AVX2 -O3 -no-prec-div -qopt-prefetch -ffinite-math-only -qopt-mem-layout-trans=3</td>
</tr>
<tr>
<td>538.imagick_r</td>
<td>-xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch -ffinite-math-only -qopt-mem-layout-trans=3</td>
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<tr>
<td>544.nab_r</td>
<td>basepeak = yes</td>
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</table>

**C++ benchmarks:**

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Flags</th>
</tr>
</thead>
<tbody>
<tr>
<td>508.namd_r</td>
<td>-prof-gen(pass 1) -prof-use(pass 2) -ipo -xCORE-AVX2 -O3 -no-prec-div -qopt-prefetch -ffinite-math-only -qopt-mem-layout-trans=3</td>
</tr>
<tr>
<td>510.parest_r</td>
<td>-xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch -ffinite-math-only -qopt-mem-layout-trans=3</td>
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</table>

**Fortran benchmarks:**

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Flags</th>
</tr>
</thead>
<tbody>
<tr>
<td>503.bwaves_r</td>
<td>-xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch -ffinite-math-only -qopt-mem-layout-trans=3 -auto -nostandard-realloc-lhs</td>
</tr>
<tr>
<td>549.fotonik3d_r</td>
<td>basepeak = yes</td>
</tr>
<tr>
<td>554.roms_r</td>
<td>-prof-gen(pass 1) -prof-use(pass 2) -ipo -xCORE-AVX2 -O3 -no-prec-div -qopt-prefetch -ffinite-math-only -qopt-mem-layout-trans=3 -auto -nostandard-realloc-lhs</td>
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</tbody>
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**Benchmarks using both Fortran and C:**

<table>
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<tbody>
<tr>
<td>511.povray_r</td>
<td>-prof-gen(pass 1) -prof-use(pass 2) -ipo -xCORE-AVX2 -O3 -no-prec-div -qopt-prefetch -ffinite-math-only -qopt-mem-layout-trans=3</td>
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**Benchmarks using both C and C++:**

<table>
<thead>
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</thead>
<tbody>
<tr>
<td>526.blender_r</td>
<td>-xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch -ffinite-math-only -qopt-mem-layout-trans=3</td>
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</tbody>
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Huawei
Huawei 5288 V5 (Intel Xeon Gold 6148)

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CPU2017 License: 3175
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Peak Optimization Flags (Continued)

Benchmarks using Fortran, C, and C++ (continued):
-qopt-mem-layout-trans=3 -auto -nostandard-realloc-lhs

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/Intel-ic18.0-official-linux64.2017-12-21.xml
http://www.spec.org/cpu2017/flags/Huawei-Platform-Settings-SKL-V1.9-revC.xml

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