**Lenovo Global Technology**  
ThinkSystem SR570  
(2.60 GHz, Intel Xeon Gold 6126T)  

**SPECrate2017_fp_base** = 142  
**SPECrate2017_fp_peak** = 146

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>48 Copies</th>
<th>SPECrate2017_fp_base</th>
<th>SPECrate2017_fp_peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>503.bwaves_r</td>
<td>117</td>
<td></td>
<td></td>
</tr>
<tr>
<td>507.cactuBSSN_r</td>
<td>116</td>
<td></td>
<td></td>
</tr>
<tr>
<td>508.namd_r</td>
<td>103</td>
<td></td>
<td></td>
</tr>
<tr>
<td>510.parest_r</td>
<td>95.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>511.povray_r</td>
<td>164</td>
<td></td>
<td></td>
</tr>
<tr>
<td>519.lbm_r</td>
<td>87.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>521.wrf_r</td>
<td>171</td>
<td></td>
<td></td>
</tr>
<tr>
<td>526.blender_r</td>
<td>144</td>
<td></td>
<td></td>
</tr>
<tr>
<td>527.cam4_r</td>
<td>152</td>
<td></td>
<td></td>
</tr>
<tr>
<td>538.imagick_r</td>
<td>220</td>
<td></td>
<td></td>
</tr>
<tr>
<td>544.nab_r</td>
<td>188</td>
<td></td>
<td></td>
</tr>
<tr>
<td>549.fotonik3d_r</td>
<td>119</td>
<td></td>
<td></td>
</tr>
<tr>
<td>554.roms_r</td>
<td>76.1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Hardware**

- **CPU Name:** Intel Xeon Gold 6126T  
- **Max MHz.:** 3700  
- **Nominal:** 2600  
- **Enabled:** 24 cores, 2 chips, 2 threads/core  
- **Orderable:** 1.2 chips  
- **Cache L1:** 32 KB I + 32 KB D on chip per core  
- **Cache L2:** 1 MB I+D on chip per core  
- **Cache L3:** 19.25 MB I+D on chip per chip  
- **Memory:** 192 GB (12 x 16 GB 2Rx8 PC4-2666V-R)  
- **Storage:** 1 x 800 GB SAS SSD  
- **Other:** None

**Software**

- **OS:** Red Hat Enterprise Linux Server release 7.4  
  (Maipo)  
- **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:** Lenovo BIOS Version TEE119R 1.22 released Feb-2018  
- **File System:** xfs  
- **System State:** Run level 3 (multi-user)  
- **Base Pointers:** 64-bit  
- **Peak Pointers:** 64-bit  
- **Other:** None
Lenovo Global Technology
ThinkSystem SR570
(2.60 GHz, Intel Xeon Gold 6126T)

CPU2017 License: 9017
Test Sponsor: Lenovo Global Technology
Tested by: Lenovo Global Technology

CPU2017 Floating Point Rate Result

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

Lenovo Global Technology
ThinkSystem SR570
(2.60 GHz, Intel Xeon Gold 6126T)

SPECrate2017_fp_base = 142
SPECrate2017_fp_peak = 146

Results Table

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Base</th>
<th>Peak</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Copies</td>
<td>Seconds</td>
</tr>
<tr>
<td>503.bwaves_r</td>
<td>48</td>
<td>1160</td>
</tr>
<tr>
<td>507.cactuBSSN_r</td>
<td>48</td>
<td>518</td>
</tr>
<tr>
<td>508.namd_r</td>
<td>48</td>
<td>439</td>
</tr>
<tr>
<td>510.parest_r</td>
<td>48</td>
<td>1316</td>
</tr>
<tr>
<td>511.povray_r</td>
<td>48</td>
<td>684</td>
</tr>
<tr>
<td>519.lbm_r</td>
<td>48</td>
<td>578</td>
</tr>
<tr>
<td>521.wrf_r</td>
<td>48</td>
<td>630</td>
</tr>
<tr>
<td>526.blender_r</td>
<td>48</td>
<td>508</td>
</tr>
<tr>
<td>527.cam4_r</td>
<td>48</td>
<td>553</td>
</tr>
<tr>
<td>538.imagick_r</td>
<td>48</td>
<td>544</td>
</tr>
<tr>
<td>544.nab_r</td>
<td>48</td>
<td>431</td>
</tr>
<tr>
<td>549.fotonik3d_r</td>
<td>48</td>
<td>1568</td>
</tr>
<tr>
<td>554.roms_r</td>
<td>48</td>
<td>1002</td>
</tr>
</tbody>
</table>

SPECrate2017_fp_base = 142
SPECrate2017_fp_peak = 146

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 = "/home/cpu2017.1.0.2.ic18.0/lib/ia32:/home/cpu2017.1.0.2.ic18.0/lib/intel64"
LD_LIBRARY_PATH = "/$LD_LIBRARY_PATH:/home/cpu2017.1.0.2.ic18.0/je5.0.1-32:/home/cpu2017.1.0.2.ic18.0/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>
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)
## Lenovo Global Technology

**ThinkSystem SR570**  
(2.60 GHz, Intel Xeon Gold 6126T)

<table>
<thead>
<tr>
<th>SPECrate2017_fp_base</th>
<th>142</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECrate2017_fp_peak</td>
<td>146</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CPU2017 License</th>
<th>9017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Sponsor</td>
<td>Lenovo Global Technology</td>
</tr>
<tr>
<td>Tested by</td>
<td>Lenovo Global Technology</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Test Date</th>
<th>Jun-2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware Availability</td>
<td>Nov-2017</td>
</tr>
<tr>
<td>Software Availability</td>
<td>Jan-2018</td>
</tr>
</tbody>
</table>

### 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:**
- Choose Operating Mode set to Maximum Performance
- Execute Disable Bit set to Disable
- MONITOR/MWAIT set to Enable
- SNC set to Enable
- DCA set to Enable

**Sysinfo program** /home/cpu2017.1.0.2.ic18.0/bin/sysinfo

Rev: r5797 of 2017-06-14 96c45e4568a54c135fd618b091c0f
running on localhost.localdomain Fri Jun 15 10:01:21 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 6126T CPU @ 2.60GHz
- 2 "physical id"s (chips)
- 48 "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 3 4 5 6 8 9 10 11 12 13
  - physical 1: cores 0 1 3 4 5 6 8 9 10 11 12 13

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: 2
- Core(s) per socket: 12
- Socket(s): 2
- NUMA node(s): 4
- Vendor ID: GenuineIntel
- CPU family: 6
- Model: 85
- Model name: Intel(R) Xeon(R) Gold 6126T CPU @ 2.60GHz

(Continued on next page)
spec

SPEC CPU2017 Floating Point Rate Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

Lenovo Global Technology
ThinkSystem SR570
(2.60 GHz, Intel Xeon Gold 6126T)

CPU2017 License: 9017
Test Sponsor: Lenovo Global Technology
Tested by: Lenovo Global Technology

SPECrate2017_fp_base = 142
SPECrate2017_fp_peak = 146

Test Date: Jun-2018
Hardware Availability: Nov-2017
Software Availability: Jan-2018

Platform Notes (Continued)

Stepping: 4
CPU MHz: 2600.000
BogoMIPS: 5200.00
Virtualization: VT-x
L1d cache: 32K
L1i cache: 32K
L2 cache: 1024K
L3 cache: 19712K
NUMA node0 CPU(s): 0-2,6-8,24-26,30-32
NUMA node1 CPU(s): 3-5,9-11,27-29,33-35
NUMA node2 CPU(s): 12-14,18-20,36-38,42-44
NUMA node3 CPU(s): 15-17,21-23,39-41,45-47
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 arch_perfmon pebs bts rep_good nopl xtopology nonstop_tsc
aperfmpref eagerfpu pni pclmulqdq dtes64 monitor 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 3nowprefetch epb cat_13 cdp_13 invpcid_single
intel_pt spec_ctrl ibpb_support tpr_shadow vmmi 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 xsavec xgetbv1
cqm_llc cqm_occup_llc cqm_mbb_total cqm_mbb_local dtherm ida arat pln pts

/proc/cpuinfo cache data
cache size : 19712 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 6 7 8 24 25 26 30 31 32
node 0 size: 48530 MB
node 0 free: 47202 MB
node 1 cpus: 3 4 5 9 10 11 27 28 29 33 34 35
node 1 size: 49152 MB
node 1 free: 47886 MB
node 2 cpus: 12 13 14 18 19 20 36 37 38 42 43 44
node 2 size: 49152 MB
node 2 free: 47759 MB
node 3 cpus: 15 16 17 21 22 23 39 40 41 45 46 47
node 3 size: 49152 MB
node 3 free: 47881 MB
node distances:
node 0 1 2 3
  0: 10 11 21 21
  1: 11 10 21 21
  2: 21 21 10 11
  3: 21 21 11 10

(Continued on next page)
Lenovo Global Technology
ThinkSystem SR570
(2.60 GHz, Intel Xeon Gold 6126T)

SPECrate2017_fp_base = 142
SPECrate2017_fp_peak = 146

CPU2017 License: 9017
Test Sponsor: Lenovo Global Technology
Test Date: Jun-2018
Hardware Availability: Nov-2017
Tested by: Lenovo Global Technology
Software Availability: Jan-2018

Platform Notes (Continued)

From /proc/meminfo
    MemTotal:       197407676 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 Jun 15 09:59

SPEC is set to: /home/cpu2017.1.0.2.ic18.0
    Filesystem     Type  Size  Used Avail Use% Mounted on
    /dev/sdb2      xfs   689G   22G  668G   4% /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 SM BIOS" standard.
    BIOS Lenovo -[TEE119R-1.22]- 02/06/2018
    Memory:
        4x NO DIMM NO DIMM
        12x 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)
==============================================================================

(Continued on next page)
Lenovo Global Technology
ThinkSystem SR570
(2.60 GHz, Intel Xeon Gold 6126T)

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

Lenovo Global Technology
ThinkSystem SR570
(2.60 GHz, Intel Xeon Gold 6126T)

SPECrate2017_fp_peak = 146
SPECrate2017_fp_base = 142

CPU2017 License: 9017
Test Date: Jun-2018
Test Sponsor: Lenovo Global Technology
Hardware Availability: Nov-2017
Tested by: Lenovo Global Technology
Software Availability: Jan-2018

Compiler Version Notes (Continued)

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

==============================================================================
CC  511.povray_r(peak) 526.blender_r(peak)
==============================================================================
icpc (ICC) 18.0.0 20170811
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.
icpc (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

(Continued on next page)
Lenovo Global Technology

ThinkSystem SR570
(2.60 GHz, Intel Xeon Gold 6126T)

SPEC CPU2017 Floating Point Rate Result

CPU2017 License: 9017
Test Sponsor: Lenovo Global Technology
Tested by: Lenovo Global Technology

Test Date: Jun-2018
Hardware Availability: Nov-2017
Software Availability: Jan-2018

SPECrate2017_fp_base = 142
SPECrate2017_fp_peak = 146

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.
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
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.

(Continued on next page)
## Lenovo Global Technology

**ThinkSystem SR570**  
(2.60 GHz, Intel Xeon Gold 6126T)

### SPEC CPU2017 Floating Point Rate Result

<table>
<thead>
<tr>
<th>CPU2017 License</th>
<th>Test Sponsor</th>
<th>SPECrate2017_fp_base</th>
<th>Test Date</th>
<th>Hardware Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>9017</td>
<td>Lenovo Global Technology</td>
<td>142</td>
<td>Jun-2018</td>
<td>Nov-2017</td>
</tr>
</tbody>
</table>

### Test Sponsor: Lenovo Global Technology

### Tested by: Lenovo Global Technology

#### SPECrate2017_fp_peak = 146

### Compiler Version Notes (Continued)

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

--------------------------------------------------------------------------

## Base 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++:**

- icpc icc

**Benchmarks using Fortran, C, and C++:**

- icpc icc ifort

## 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 -funsinged-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
SPEC CPU2017 Floating Point Rate Result

Lenovo Global Technology
ThinkSystem SR570
(2.60 GHz, Intel Xeon Gold 6126T)

SPECrate2017_fp_base = 142
SPECrate2017_fp_peak = 146

CPU2017 License: 9017
Test Sponsor: Lenovo Global Technology
Tested by: Lenovo Global Technology

Test Date: Jun-2018
Hardware Availability: Nov-2017
Software Availability: Jan-2018

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 -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=3 -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=3

Benchmarks using Fortran, C, and C++:
-xCORE-AVX2 -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

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
Lenovo Global Technology
ThinkSystem SR570
(2.60 GHz, Intel Xeon Gold 6126T)

SPECrater2017_fp_base = 142
SPECrater2017_fp_peak = 146

CPU2017 License: 9017
Test Sponsor: Lenovo Global Technology
Tested by: Lenovo Global Technology
Test Date: Jun-2018
Hardware Availability: Nov-2017
Software Availability: Jan-2018

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++:
icpc icc

Benchmarks using Fortran, C, and C++:
icpc icc ifort

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=3
538.imagick_r: -xCORE-AVX2 -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-AVX2 -O3 -no-prec-div -qopt-prefetch -ffinite-math-only -qopt-mem-layout-trans=3

Fortran benchmarks:

(Continued on next page)
Lenovo Global Technology
ThinkSystem SR570
(2.60 GHz, Intel Xeon Gold 6126T)

SPECrate2017_fp_base = 142
SPECrate2017_fp_peak = 146

CPU2017 License: 9017
Test Sponsor: Lenovo Global Technology
Tested by: Lenovo Global Technology

Test Date: Jun-2018
Hardware Availability: Nov-2017
Software Availability: Jan-2018

Peak Optimization Flags (Continued)

503.bwaves_r: -xCORE-AVX2 -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-AVX2 -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-AVX2 -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-AVX2 -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-AVX2 -O3
-no-prec-div -qopt-prefetch -ffinite-math-only
-qopt-mem-layout-trans=3 -nostandard-realloc-lhs -align array32byte

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

(Continued on next page)
Lenovo Global Technology
ThinkSystem SR570
(2.60 GHz, Intel Xeon Gold 6126T)

SPECrate2017_fp_base = 142
SPECrate2017_fp_peak = 146

CPU2017 License: 9017
Test Sponsor: Lenovo Global Technology
Tested by: Lenovo Global Technology
Test Date: Jun-2018
Hardware Availability: Nov-2017
Software Availability: Jan-2018

Peak Other Flags (Continued)

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/Lenovo-Platform-SPECcpu2017-Flags-V1.2-SKL-C.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/Lenovo-Platform-SPECcpu2017-Flags-V1.2-SKL-C.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 2018-06-14 22:01:21-0400.
Report generated on 2018-10-31 19:01:50 by CPU2017 PDF formatter v6067.
Originally published on 2018-07-10.