# SPEC® CPU2017 Floating Point Speed Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

## Lenovo Global Technology

ThinkSystem SN550
(3.40 GHz, Intel Xeon Gold 6128)

$SPECspeed2017\_fp\_base = 72.1$

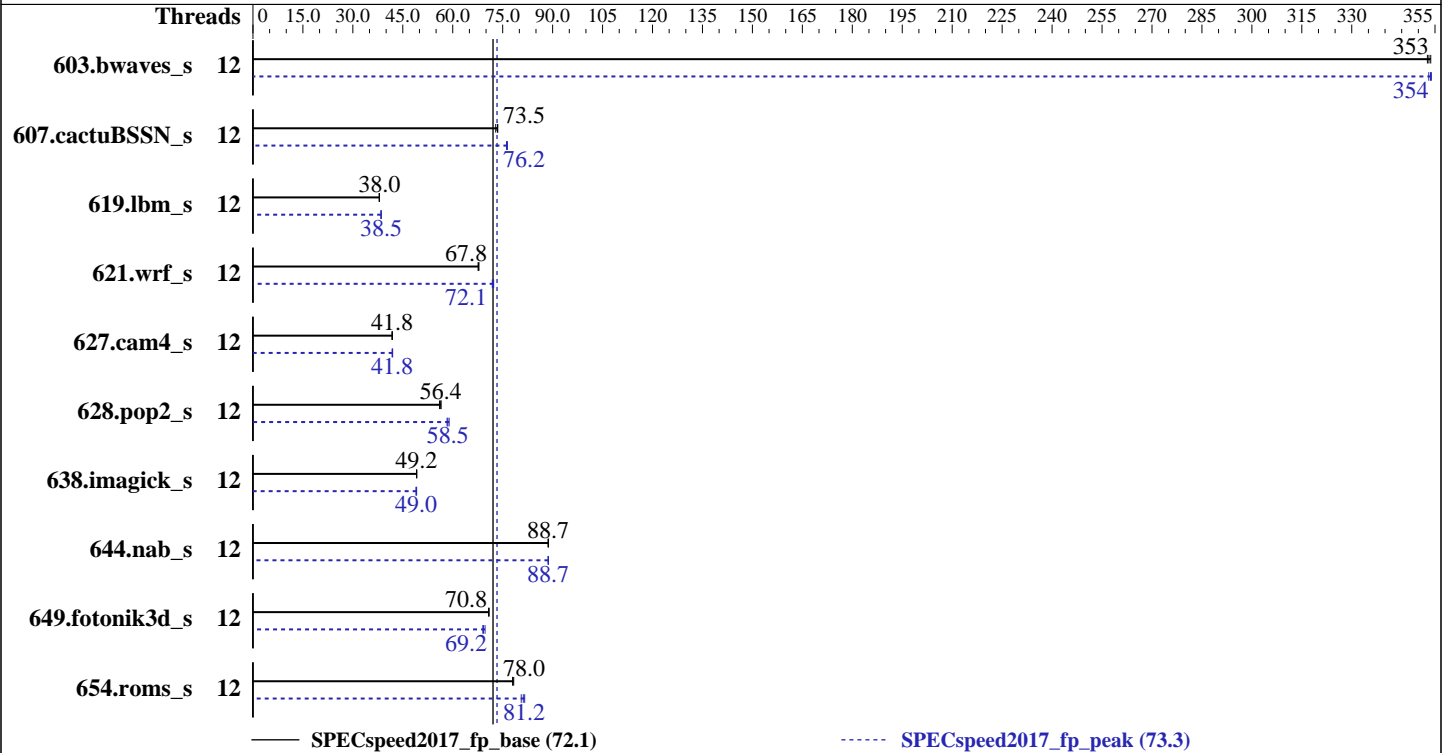$SPECspeed2017\_fp\_peak = 73.3$

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

**Test Date:** Mar-2018  
**Hardware Availability:** Aug-2017  
**Software Availability:** Sep-2017

Threads: 0 15.0 30.0 45.0 60.0 75.0 90.0 105 120 135 150 165 180 195 210 225 240 255 270 285 300 315 330 355

| Benchmark | Threads | Base | Peak |
|---|---|---|---|
| 603.bwaves_s | 12 | 353 | 354 |
| 607.cactuBSSN_s | 12 | 73.5 | 76.2 |
| 619.lbm_s | 12 | 38.0 | 38.5 |
| 621.wrf_s | 12 | 67.8 | 72.1 |
| 627.cam4_s | 12 | 41.8 | 41.8 |
| 628.pop2_s | 12 | 56.4 | 58.5 |
| 638.imagick_s | 12 | 49.2 | 49.0 |
| 644.nab_s | 12 | 88.7 | 88.7 |
| 649.fotonik3d_s | 12 | 70.8 | 69.2 |
| 654.roms_s | 12 | 78.0 | 81.2 |

SPECspeed2017_fp_base (72.1)  
SPECspeed2017_fp_peak (73.3)

## Hardware

CPU Name: Intel Xeon Gold 6128  
 Max MHz.: 3700  
 Nominal: 3400  
Enabled: 12 cores, 2 chips  
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: 19.25 MB I+D on chip per chip  
 Other: None  
Memory: 768 GB (24 x 32 GB 2Rx4 PC4-2666V-R)  
Storage: 1 x 800 GB SAS SSD  
Other: None

## Software

OS: SUSE Linux Enterprise Server 12 SP2 (x86_64)  
 Kernel 4.4.114-92.64-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: Yes  
Firmware: Lenovo BIOS Version IVE113W 1.12 released Feb-2018  
File System: xfs  
System State: Run level 3 (multi-user)  
Base Pointers: 64-bit  
Peak Pointers: 64-bit  
Other: None

# SPEC CPU2017 Floating Point Speed Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

## Lenovo Global Technology

ThinkSystem SN550
(3.40 GHz, Intel Xeon Gold 6128)

SPECspeed2017_fp_base =   72.1

SPECspeed2017_fp_peak =   73.3

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

**Test Date:** Mar-2018
**Hardware Availability:** Aug-2017
**Software Availability:** Sep-2017

## Results Table

| Benchmark | Base | | | | | | Peak | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | Threads | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio | Threads | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio |
| 603.bwaves_s | 12 | 167 | 354 | 167 | 353 | **167** | **353** | 12 | 167 | 353 | **167** | **354** | 167 | 354 |
| 607.cactuBSSN_s | 12 | 229 | 72.9 | 227 | 73.5 | **227** | **73.5** | 12 | 219 | 76.2 | 218 | 76.4 | **219** | **76.2** |
| 619.lbm_s | 12 | 138 | 38.0 | 138 | 37.9 | **138** | **38.0** | 12 | 136 | 38.5 | 136 | 38.5 | **136** | **38.5** |
| 621.wrf_s | 12 | 195 | 67.8 | **195** | **67.8** | 196 | 67.6 | 12 | **184** | **72.1** | 184 | 71.9 | 183 | 72.3 |
| 627.cam4_s | 12 | 212 | 41.8 | **212** | **41.8** | 212 | 41.8 | 12 | 211 | 42.0 | 212 | 41.8 | **212** | **41.8** |
| 628.pop2_s | 12 | **211** | **56.4** | 212 | 56.0 | 210 | 56.5 | 12 | 202 | 58.9 | 204 | 58.3 | **203** | **58.5** |
| 638.imagick_s | 12 | 293 | 49.2 | **293** | **49.2** | 293 | 49.2 | 12 | 295 | 49.0 | **294** | **49.0** | 293 | 49.2 |
| 644.nab_s | 12 | 197 | 88.8 | 197 | 88.6 | **197** | **88.7** | 12 | **197** | **88.7** | 197 | 88.7 | 197 | 88.6 |
| 649.fotonik3d_s | 12 | 129 | 70.8 | 129 | 70.9 | **129** | **70.8** | 12 | **132** | **69.2** | 131 | 69.7 | 132 | 69.0 |
| 654.roms_s | 12 | 201 | 78.3 | **202** | **78.0** | 202 | 78.0 | 12 | **194** | **81.2** | 193 | 81.6 | 195 | 80.6 |

| | |
| --- | --- |
| SPECspeed2017_fp_base = | **72.1** |
| SPECspeed2017_fp_peak = | **73.3** |

Results appear in the order in which they were run. Bold underlined text indicates a median measurement.

## 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"
OMP_STACKSIZE = "192M"

 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
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:
Choose Operating Mode set to Maximum Performance
Hyper-Threading set to Disable

**(Continued on next page)**

## Lenovo Global Technology

ThinkSystem SN550
(3.40 GHz, Intel Xeon Gold 6128)

SPECspeed2017_fp_base =  72.1

SPECspeed2017_fp_peak =  73.3

**CPU2017 License:** 9017

**Test Sponsor:**     Lenovo Global Technology

**Tested by:**        Lenovo Global Technology

**Test Date:**             Mar-2018

**Hardware Availability:** Aug-2017

**Software Availability:** Sep-2017

## Platform Notes (Continued)

```
Adjacent Cache Prefetcher set to Disable
MONITOR/MWAIT set to Enable
LLC dead line alloc set to Disable
 Sysinfo program /home/cpu2017.1.0.2.ic18.0/bin/sysinfo
 Rev: r5797 of 2017-06-14 96c45e4568ad54c135fd618bcc091c0f
 running on SN550 Tue Mar 27 16:13:58 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 6128 CPU @ 3.40GHz
       2  "physical id"s (chips)
       12 "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 : 6
       siblings  : 6
       physical 0: cores 0 6 9 10 11 13
       physical 1: cores 2 3 4 5 10 11

 From lscpu:
      Architecture:        x86_64
      CPU op-mode(s):      32-bit, 64-bit
      Byte Order:          Little Endian
      CPU(s):              12
      On-line CPU(s) list: 0-11
      Thread(s) per core:  1
      Core(s) per socket:  6
      Socket(s):           2
      NUMA node(s):        2
      Vendor ID:           GenuineIntel
      CPU family:          6
      Model:               85
      Model name:          Intel(R) Xeon(R) Gold 6128 CPU @ 3.40GHz
      Stepping:            4
      CPU MHz:             3392.031
      BogoMIPS:            6784.06
      Virtualization:      VT-x
      L1d cache:           32K
      L1i cache:           32K
      L2 cache:            1024K
      L3 cache:            19712K
      NUMA node0 CPU(s):   0-5
      NUMA node1 CPU(s):   6-11
      Flags:               fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov
```

**(Continued on next page)**

## Lenovo Global Technology

ThinkSystem SN550
(3.40 GHz, Intel Xeon Gold 6128)

SPECspeed2017_fp_base =   72.1

SPECspeed2017_fp_peak =   73.3

**CPU2017 License:** 9017

**Test Sponsor:**     Lenovo Global Technology

**Tested by:**        Lenovo Global Technology

**Test Date:**            Mar-2018

**Hardware Availability:** Aug-2017

**Software Availability:** Sep-2017

### Platform Notes (Continued)

```
     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
     aperfmperf 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_ctxsw spec_ctrl retpoline kaiser tpr_shadow vnmi flexpriority
     ept vpid fsgsbase tsc_adjust bmi1 hle avx2 smep bmi2 erms invpcid rtm cqm mpx
     avx512f avx512dq rdseed adx smap clflushopt clwb avx512cd avx512bw avx512vl xsaveopt
     xsavec xgetbv1 cqm_llc cqm_occup_llc

 /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: 2 nodes (0-1)
   node 0 cpus: 0 1 2 3 4 5
   node 0 size: 386637 MB
   node 0 free: 385650 MB
   node 1 cpus: 6 7 8 9 10 11
   node 1 size: 387040 MB
   node 1 free: 386090 MB
   node distances:
   node   0   1
     0:  10  21
     1:  21  10

 From /proc/meminfo
   MemTotal:       792245468 kB
   HugePages_Total:        0
   Hugepagesize:       2048 kB

 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"
```

**(Continued on next page)**

## Lenovo Global Technology

ThinkSystem SN550
(3.40 GHz, Intel Xeon Gold 6128)

SPECspeed2017_fp_base =  72.1

SPECspeed2017_fp_peak =  73.3

**CPU2017 License:** 9017　　　　　　　　　　　　　　　　　**Test Date:**　　　　　Mar-2018
**Test Sponsor:**　　Lenovo Global Technology　　　　　**Hardware Availability:** Aug-2017
**Tested by:**　　　　Lenovo Global Technology　　　　　**Software Availability:** Sep-2017

## Platform Notes (Continued)

```
  uname -a:
     Linux SN550 4.4.114-92.64-default #1 SMP Thu Feb 1 19:18:19 UTC 2018 (c6ce5db) x86_64
     x86_64 x86_64 GNU/Linux

  run-level 3 Mar 27 10:48

  SPEC is set to: /home/cpu2017.1.0.2.ic18.0
     Filesystem      Type  Size  Used Avail Use% Mounted on
     /dev/sda4       xfs   687G  187G  501G  28% /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 Lenovo -[IVE113W-1.12]- 02/06/2018
    Memory:
     24x Samsung M393A4K40BB2-CTD 32 GB 2 rank 2666

  (End of data from sysinfo program)
```

## Compiler Version Notes

```
==============================================================================
  CC  619.lbm_s(base) 638.imagick_s(base, peak) 644.nab_s(base, peak)
------------------------------------------------------------------------------
icc (ICC) 18.0.0 20170811
Copyright (C) 1985-2017 Intel Corporation.  All rights reserved.
------------------------------------------------------------------------------


==============================================================================
  CC  619.lbm_s(peak)
------------------------------------------------------------------------------
icc (ICC) 18.0.0 20170811
Copyright (C) 1985-2017 Intel Corporation.  All rights reserved.
------------------------------------------------------------------------------


==============================================================================
  FC  607.cactuBSSN_s(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.
```

**(Continued on next page)**

## Lenovo Global Technology

ThinkSystem SN550
(3.40 GHz, Intel Xeon Gold 6128)

SPECspeed2017_fp_base =  72.1

SPECspeed2017_fp_peak =  73.3

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

**Test Date:** Mar-2018
**Hardware Availability:** Aug-2017
**Software Availability:** Sep-2017

## Compiler Version Notes (Continued)

```
--------------------------------------------------------------------------------

================================================================================
FC   607.cactuBSSN_s(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   603.bwaves_s(base) 649.fotonik3d_s(base) 654.roms_s(base)
--------------------------------------------------------------------------------
ifort (IFORT) 18.0.0 20170811
Copyright (C) 1985-2017 Intel Corporation.  All rights reserved.
--------------------------------------------------------------------------------

================================================================================
FC   603.bwaves_s(peak) 649.fotonik3d_s(peak) 654.roms_s(peak)
--------------------------------------------------------------------------------
ifort (IFORT) 18.0.0 20170811
Copyright (C) 1985-2017 Intel Corporation.  All rights reserved.
--------------------------------------------------------------------------------

================================================================================
 CC   621.wrf_s(base) 627.cam4_s(base, peak) 628.pop2_s(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   621.wrf_s(peak) 628.pop2_s(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.
--------------------------------------------------------------------------------
```

# SPEC CPU2017 Floating Point Speed Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

## Lenovo Global Technology

ThinkSystem SN550
(3.40 GHz, Intel Xeon Gold 6128)

SPECspeed2017_fp_base =   72.1

SPECspeed2017_fp_peak =   73.3

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

**Test Date:** Mar-2018
**Hardware Availability:** Aug-2017
**Software Availability:** Sep-2017

## Base Compiler Invocation

C benchmarks:
`icc`

Fortran benchmarks:
`ifort`

Benchmarks using both Fortran and C:
`ifort icc`

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

## Base Portability Flags

603.bwaves_s: `-DSPEC_LP64`
607.cactuBSSN_s: `-DSPEC_LP64`
619.lbm_s: `-DSPEC_LP64`
621.wrf_s: `-DSPEC_LP64 -DSPEC_CASE_FLAG -convert big_endian`
627.cam4_s: `-DSPEC_LP64 -DSPEC_CASE_FLAG`
628.pop2_s: `-DSPEC_LP64 -DSPEC_CASE_FLAG -convert big_endian`
`-assume byterecl`
638.imagick_s: `-DSPEC_LP64`
644.nab_s: `-DSPEC_LP64`
649.fotonik3d_s: `-DSPEC_LP64`
654.roms_s: `-DSPEC_LP64`

## Base Optimization Flags

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

Fortran benchmarks:
`-DSPEC_OPENMP -xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch`
`-ffinite-math-only -qopt-mem-layout-trans=3 -qopenmp`
`-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 -qopenmp -DSPEC_OPENMP`
`-nostandard-realloc-lhs -align array32byte`

**(Continued on next page)**

# SPEC CPU2017 Floating Point Speed Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

## Lenovo Global Technology

ThinkSystem SN550
(3.40 GHz, Intel Xeon Gold 6128)

SPECspeed2017_fp_base =  72.1

SPECspeed2017_fp_peak =  73.3

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

**Test Date:** Mar-2018
**Hardware Availability:** Aug-2017
**Software Availability:** Sep-2017

# Base Optimization Flags (Continued)

Benchmarks using Fortran, C, and C++:

```
-xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch -ffinite-math-only
-qopt-mem-layout-trans=3 -qopenmp -DSPEC_OPENMP
-nostandard-realloc-lhs -align array32byte
```

# Base Other Flags

C benchmarks:
```
-m64 -std=c11
```

Fortran benchmarks:
```
-m64
```

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

Benchmarks using Fortran, C, and C++:
```
-m64 -std=c11
```

# Peak Compiler Invocation

C benchmarks:
```
icc
```

Fortran benchmarks:
```
ifort
```

Benchmarks using both Fortran and C:
```
ifort icc
```

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

# Peak Portability Flags

```
Same as Base Portability Flags
```

Standard Performance Evaluation Corporation (info@spec.org)          https://www.spec.org/

## Lenovo Global Technology

ThinkSystem SN550
(3.40 GHz, Intel Xeon Gold 6128)

SPECspeed2017_fp_base =   72.1

SPECspeed2017_fp_peak =   73.3

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

**Test Date:** Mar-2018  
**Hardware Availability:** Aug-2017  
**Software Availability:** Sep-2017

# Peak Optimization Flags

C benchmarks:

619.lbm_s: -prof-gen(pass 1) -prof-use(pass 2) -O2 -xCORE-AVX2
-qopt-prefetch -ipo -O3 -ffinite-math-only -no-prec-div
-qopt-mem-layout-trans=3 -DSPEC_SUPPRESS_OPENMP -qopenmp
-DSPEC_OPENMP

638.imagick_s: -xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch
-ffinite-math-only -qopt-mem-layout-trans=3 -qopenmp
-DSPEC_OPENMP

644.nab_s: Same as 638.imagick_s

Fortran benchmarks:
-prof-gen(pass 1) -prof-use(pass 2) -DSPEC_SUPPRESS_OPENMP
-DSPEC_OPENMP -O2 -xCORE-AVX2 -qopt-prefetch -ipo -O3
-ffinite-math-only -no-prec-div -qopt-mem-layout-trans=3 -qopenmp
-nostandard-realloc-lhs -align array32byte

Benchmarks using both Fortran and C:

621.wrf_s: -prof-gen(pass 1) -prof-use(pass 2) -O2 -xCORE-AVX2
-qopt-prefetch -ipo -O3 -ffinite-math-only -no-prec-div
-qopt-mem-layout-trans=3 -DSPEC_SUPPRESS_OPENMP -qopenmp
-DSPEC_OPENMP -nostandard-realloc-lhs -align array32byte

627.cam4_s: -xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch
-ffinite-math-only -qopt-mem-layout-trans=3 -qopenmp
-DSPEC_OPENMP -nostandard-realloc-lhs -align array32byte

628.pop2_s: Same as 621.wrf_s

Benchmarks using Fortran, C, and C++:
-prof-gen(pass 1) -prof-use(pass 2) -O2 -xCORE-AVX2 -qopt-prefetch
-ipo -O3 -ffinite-math-only -no-prec-div -qopt-mem-layout-trans=3
-DSPEC_SUPPRESS_OPENMP -qopenmp -DSPEC_OPENMP -nostandard-realloc-lhs
-align array32byte

# Peak Other Flags

C benchmarks:
-m64 -std=c11

**(Continued on next page)**

Standard Performance Evaluation Corporation (info@spec.org)          https://www.spec.org/

# SPEC CPU2017 Floating Point Speed Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

## Lenovo Global Technology

ThinkSystem SN550
(3.40 GHz, Intel Xeon Gold 6128)

SPECspeed2017_fp_base =  72.1

SPECspeed2017_fp_peak =  73.3

**CPU2017 License:** 9017

**Test Sponsor:** Lenovo Global Technology

**Tested by:** Lenovo Global Technology

**Test Date:** Mar-2018

**Hardware Availability:** Aug-2017

**Software Availability:** Sep-2017

# Peak Other Flags (Continued)

Fortran benchmarks:
```
-m64
```

Benchmarks using both Fortran 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/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
```

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 2018-03-27 04:13:57-0400.
Report generated on 2018-10-31 17:27:13 by CPU2017 PDF formatter v6067.
Originally published on 2018-06-26.