# SPEC CPU®2017 Floating Point Speed Result

Hewlett Packard Enterprise  
(Test Sponsor: HPE)  
ProLiant DL360 Gen10 Plus  
(2.40 GHz, Intel Xeon Silver 4314)  

<table>
<thead>
<tr>
<th>SPECspeed®2017_fp_base = 148</th>
<th>SPECspeed®2017_fp_peak = 151</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU2017 License: 3</td>
<td>Test Date: Jun-2021</td>
</tr>
<tr>
<td>Test Sponsor: HPE</td>
<td>Hardware Availability: Dec-2020</td>
</tr>
<tr>
<td>Tested by: HPE</td>
<td>Software Availability: Jun-2021</td>
</tr>
</tbody>
</table>

## Hardware

<table>
<thead>
<tr>
<th></th>
<th>CPU Name: Intel Xeon Silver 4314</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max MHz:</td>
<td>3400</td>
</tr>
<tr>
<td>Nominal:</td>
<td>2400</td>
</tr>
<tr>
<td>Enabled:</td>
<td>32 cores, 2 chips</td>
</tr>
<tr>
<td>Orderable:</td>
<td>1, 2 chip(s)</td>
</tr>
<tr>
<td>Cache L1:</td>
<td>32 KB I + 48 KB D on chip per core</td>
</tr>
<tr>
<td>L2:</td>
<td>1.25 MB I+D on chip per core</td>
</tr>
<tr>
<td>L3:</td>
<td>24 MB I+D on chip per chip</td>
</tr>
<tr>
<td>Other:</td>
<td>None</td>
</tr>
<tr>
<td>Memory:</td>
<td>2 TB (32 x 64 GB 2Rx4 PC4-3200AA-R, running at 2666)</td>
</tr>
<tr>
<td>Storage:</td>
<td>1 x 800 GB SAS SSD, RAID 0</td>
</tr>
<tr>
<td>Other:</td>
<td>None</td>
</tr>
</tbody>
</table>

## Software

<table>
<thead>
<tr>
<th></th>
<th>OS: Red Hat Enterprise Linux 8.3 (Ootpa)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compiler:</td>
<td>C/C++: Version 2021.1 of Intel oneAPI DPC++/C++ Compiler Build 20201113 for Linux; Fortran: Version 2021.1 of Intel Fortran Compiler Classic Build 20201112 for Linux; C/C++: Version 2021.1 of Intel C/C++ Compiler Classic Build 20201112 for Linux</td>
</tr>
<tr>
<td>Parallel:</td>
<td>Yes</td>
</tr>
<tr>
<td>Firmware:</td>
<td>HPE BIOS Version U46 v1.42 05/26/2021 released May-2021</td>
</tr>
<tr>
<td>File System:</td>
<td>xfs</td>
</tr>
<tr>
<td>System State:</td>
<td>Run level 3 (multi-user)</td>
</tr>
<tr>
<td>Base Pointers:</td>
<td>64-bit</td>
</tr>
<tr>
<td>Peak Pointers:</td>
<td>64-bit</td>
</tr>
<tr>
<td>Other:</td>
<td>jemalloc memory allocator V5.0.1</td>
</tr>
<tr>
<td>Power Management:</td>
<td>BIOS set to prefer performance at the cost of additional power usage</td>
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</tbody>
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---

### SPECspeed®2017_fp_peak (151)

<table>
<thead>
<tr>
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<th>Threads</th>
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<tr>
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<td>30.0</td>
</tr>
<tr>
<td>603.bwaves_s</td>
<td>32</td>
</tr>
<tr>
<td>607.cactuBSSN_s</td>
<td>32</td>
</tr>
<tr>
<td>619.lbm_s</td>
<td>32</td>
</tr>
<tr>
<td>621.wrf_s</td>
<td>32</td>
</tr>
<tr>
<td>627.cam4_s</td>
<td>32</td>
</tr>
<tr>
<td>628.pop2_s</td>
<td>32</td>
</tr>
<tr>
<td>638.imagick_s</td>
<td>32</td>
</tr>
<tr>
<td>644.nab_s</td>
<td>32</td>
</tr>
<tr>
<td>649.fotonik3d_s</td>
<td>32</td>
</tr>
<tr>
<td>654.roms_s</td>
<td>32</td>
</tr>
</tbody>
</table>

---

**NOTE:** The results are based on the specific hardware and software configurations tested by HPE. For more information and testing procedures, please refer to the SPEC®2017 Floating Point Speed Benchmark Details. 

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**SPEC®2017 LICENSE NOTICE:** 

### Results Table

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Threads</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Threads</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>603.bwaves_s</td>
<td>32</td>
<td>107</td>
<td>552</td>
<td>107</td>
<td>552</td>
<td>108</td>
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<td>32</td>
<td>107</td>
<td>552</td>
<td>108</td>
<td>547</td>
<td></td>
<td></td>
</tr>
<tr>
<td>607.cactuBSSN_s</td>
<td>32</td>
<td>95.8</td>
<td>174</td>
<td>94.1</td>
<td>177</td>
<td>95.6</td>
<td>174</td>
<td>32</td>
<td>95.8</td>
<td>174</td>
<td>94.1</td>
<td>177</td>
<td>95.6</td>
<td>174</td>
</tr>
<tr>
<td>619.lbm_s</td>
<td>32</td>
<td>49.3</td>
<td>106</td>
<td>46.7</td>
<td>112</td>
<td>46.6</td>
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<td>32</td>
<td>49.3</td>
<td>106</td>
<td>46.7</td>
<td>112</td>
<td>46.6</td>
<td>112</td>
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<tr>
<td>621.wrf_s</td>
<td>32</td>
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<td>147</td>
<td>89.9</td>
<td>147</td>
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<td>627.cam4_s</td>
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<td>95.0</td>
<td>94.5</td>
<td>93.8</td>
<td>93.2</td>
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<td>95.0</td>
<td>94.5</td>
<td>93.8</td>
<td>93.2</td>
<td>95.1</td>
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<tr>
<td>628.pop2_s</td>
<td>32</td>
<td>152</td>
<td>78.1</td>
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<td>77.3</td>
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</tr>
<tr>
<td>644.nab_s</td>
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<td>649.fotonik3d_s</td>
<td>32</td>
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<td>97.0</td>
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<td>94.2</td>
<td>96.8</td>
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<td>654.roms_s</td>
<td>32</td>
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<td>180</td>
<td>86.8</td>
<td>181</td>
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<td>87.5</td>
<td>180</td>
<td>87.3</td>
<td>180</td>
<td>86.8</td>
<td>181</td>
</tr>
</tbody>
</table>

### Operating System Notes

- Stack size set to unlimited using "ulimit -s unlimited"
- 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
  ```

### Environment Variables Notes

- Environment variables set by runcpu before the start of the run:
  - KMP_AFFINITY = "granularity=fine,compact"
  - LD_LIBRARY_PATH = "/home/cpu2017/lib/intel64:/home/cpu2017/je5.0.1-64"
  - MALLOC_CONF = "retain:true"
  - OMP_STACKSIZE = "192M"

### General Notes

- Binaries compiled on a system with 1x Intel Core i9-7980XE CPU + 64GB RAM memory using Redhat Enterprise Linux 8.0
- 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.
- jemalloc, a general purpose malloc implementation built with the RedHat Enterprise 7.5, and the system compiler gcc 4.8.5

(Continued on next page)
Hewlett Packard Enterprise
(Test Sponsor: HPE)
ProLiant DL360 Gen10 Plus
(2.40 GHz, Intel Xeon Silver 4314)

SPECspeed®2017_fp_base = 148
SPECspeed®2017_fp_peak = 151

General Notes (Continued)


Submitted by: "Bhatnagar, Prateek" <prateek.bhatnagar@hpe.com>
Submitted: Mon Jul 5 08:13:22 EDT 2021
Submission: cpu2017-20210705-27781.sub

Platform Notes

The system ROM used for this result contains Intel microcode version 0xd0002a0 for the Intel Xeon Silver 4314 processor

BIOS Configuration:
- Workload Profile set to General Peak Frequency Compute
- Intel Hyper-Threading set to Disabled
- Thermal Configuration set to Maximum Cooling
- Memory Patrol Scrubbing set to Disabled
- Advanced Memory Protection set to Advanced ECC
- Last Level Cache (LLC) Prefetch set to Enabled
- Last Level Cache (LLC) Dead Line Allocation set to Disabled
- Enhanced Processor Performance set to Enabled

Workload Profile set to Custom
- Energy/Performance Bias set to Balanced Power
- DCU Stream Prefetcher set to Disabled
- Adjacent Sector Prefetch set to Disabled
- Minimum Processor Idle Power Package C-State set to No Package State
- Numa Group Size Optimization set to Flat

Sysinfo program /home/cpu2017/bin/sysinfo
Rev: r6622 of 2021-04-07 982a61ec0915b55891ef0e16acafc64d
running on localhost.localdomain Mon Jun 28 06:50:34 2021

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 4314 CPU @ 2.40GHz
  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 : 16
siblings : 16
physical 0: cores 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
physical 1: cores 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

From lscpu from util-linux 2.32.1:

(Continued on next page)
### Platform Notes (Continued)

- **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:** 1
- **Core(s) per socket:** 16
- **Socket(s):** 2
- **NUMA node(s):** 2
- **Vendor ID:** GenuineIntel
- **CPU family:** 6
- **Model:** 106
- **Model name:** Intel(R) Xeon(R) Silver 4314 CPU @ 2.40GHz
- **Stepping:** 6
- **CPU MHz:** 2748.846
- **BogoMIPS:** 4800.00
- **Virtualization:** VT-x
- **L1d cache:** 48K
- **L1i cache:** 32K
- **L2 cache:** 1280K
- **L3 cache:** 24576K
- **NUMA node0 CPU(s):** 0-15
- **NUMA node1 CPU(s):** 16-31
- **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 arch_perfmon pebs bts rep_good nopl xtopology nonstop_tsc cpuid aperfmperf pni pclmulqdq dtes64 monitor ds_cpl vmx smx est tm2 ssse3 sdbg fma cx16 xtrm pdcm pcid dca sse4_1 sse4_2 x2apic movbe popcnt tsc_deadline_timer aes xsave f16c rdrand lahf_lm abm 3dnowprefetch cpuid_fault epb cat_l3 invpcid_single ssbd mba ibrs stibp ibrs_enhanced tpr_shadow vmi flexpriority ept vpid ept_ad fsgsbase tsc_adjust bmi1 hle avx2 smep bmi2 erts invpcid cqm rdt_a avx512f avx512dq rdseed adx smap avx512ifma clflushopt clwb intel_pt avx512cd sha ni avx512bw avx512vl xsxaveopt xsave xsetbv1 xsaves cqm llc cqm_occup llc cqm_mbml_total cqm_mbml_local split_lock_detect wboinvd dtherm ida arat pin pta avx512vbmi umip pk uospke avx512_vbmi2 gfni vaes vpcmuiqd q avx512_vnni avx512 retalig tme avx512_vpopcntdq la57 rdpid md_clear pconfig flush_l1d arch_capabilities

```
/proc/cpuinfo cache data
cache size : 24576 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 10 11 12 13 14 15
  - **node 0 size:** 1005314 MB
  - **node 0 free:** 1025151 MB
  - **node 1 cpus:** 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

(Continued on next page)
SPEC CPU®2017 Floating Point Speed Result

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ProLiant DL360 Gen10 Plus
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SPECspeed®2017_fp_base = 148
SPECspeed®2017_fp_peak = 151

CPU2017 License: 3
Test Sponsor: HPE
Tested by: HPE

SF 2017 Floating Point Speed Result

Hewlett Packard Enterprise (Test Sponsor: HPE)
ProLiant DL360 Gen10 Plus
(2.40 GHz, Intel Xeon Silver 4314)

SPECspeed®2017_fp_base = 148
SPECspeed®2017_fp_peak = 151

CPU2017 License: 3
Test Sponsor: HPE
Tested by: HPE

Platform Notes (Continued)

node 1 size: 1005266 MB
node 1 free: 1030977 MB
node distances:
node 0 1
  0: 10 20
  1: 20 10

From /proc/meminfo
MemTotal: 2113495800 kB
HugePages_Total: 0
Hugepagesize: 2048 kB

/sbin/tuned-adm active
Current active profile: throughput-performance

From /etc/*release* /etc/*version*
NAME="Red Hat Enterprise Linux"
VERSION="8.3 (Ootpa)"
ID="rhel"
ID_LIKE="fedora"
VERSION_ID="8.3"
PLATFORM_ID="platform:el8"
PRETTY_NAME="Red Hat Enterprise Linux 8.3 (Ootpa)"
ANSI_COLOR="0;31"
redhat-release: Red Hat Enterprise Linux release 8.3 (Ootpa)
system-release: Red Hat Enterprise Linux release 8.3 (Ootpa)
system-release-cpe: cpe:/o:redhat:enterprise_linux:8.3:ga

uname -a:
Linux localhost.localdomain 4.18.0-240.el8.x86_64 #1 SMP Wed Sep 23 05:13:10 EDT 2020
x86_64 x86_64 x86_64 GNU/Linux

Kernel self-reported vulnerability status:

CVE-2018-12207 (iTLB Multihit):
Not affected
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: usercopy/swaps barriers and __user pointer sanitization
CVE-2017-5715 (Spectre variant 2):
Mitigation: Enhanced IBRS, IBPB: conditional, RSB filling

(Continued on next page)
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SPECspeed®2017_fp_base = 148
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<tr>
<th>CPU2017 License: 3</th>
<th>Test Date: Jun-2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Sponsor:</td>
<td>HPE</td>
</tr>
<tr>
<td>Tested by:</td>
<td>HPE</td>
</tr>
</tbody>
</table>

Platform Notes (Continued)

CVE-2020-0543 (Special Register Buffer Data Sampling): Not affected
CVE-2019-11135 (TSX Asynchronous Abort): Not affected

run-level 3 Jun 28 02:44

SPEC is set to: /home/cpu2017
Filesystem           Type  Size  Used  Avail  Use%  Mounted on
/dev/mapper/rhel-home  xfs   670G  107G  563G  16%  /home

From /sys/devices/virtual/dmi/id
Vendor:         HPE
Product:        ProLiant DL360 Gen10 Plus
Product Family: ProLiant
Serial:         CN7013030H

Additional information from dmidecode 3.2 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:
32x Micron 36ASF8G72PZ-3G2B2 64 GB 2 rank 3200, configured at 2666

BIOS:
BIOS Vendor:       HPE
BIOS Version:      U46
BIOS Date:         05/26/2021
BIOS Revision:     1.42
Firmware Revision: 2.42

(End of data from sysinfo program)

Compiler Version Notes

==============================================================================
C | 619.lbm_s(base, peak) 638.imagick_s(base, peak)
   644.nab_s(base)
==============================================================================

Intel(R) C Intel(R) 64 Compiler Classic for applications running on Intel(R) 64, Version 2021.1 Build 20201112_000000
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.

==============================================================================
C | 644.nab_s(peak)
==============================================================================

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64,

(Continued on next page)
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SPECspeed®2017_fp_base = 148
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Compiler Version Notes (Continued)

Version 2021.1 Build 20201113
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.

==============================================================================
C                | 619.lbm_s(base, peak) 638.imagick_s(base, peak) 644.nab_s(base)
==============================================================================
Intel(R) C Intel(R) 64 Compiler Classic for applications running on Intel(R) 64, Version 2021.1 Build 20201112_000000
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==============================================================================
C                | 644.nab_s(peak)
==============================================================================
Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2021.1 Build 20201113
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.

==============================================================================
C++, C, Fortran  | 607.cactuBSSN_s(base, peak)
==============================================================================
Intel(R) C++ Intel(R) 64 Compiler Classic for applications running on Intel(R) 64, Version 2021.1 Build 20201112_000000
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.
Intel(R) C Intel(R) 64 Compiler Classic for applications running on Intel(R) 64, Version 2021.1 Build 20201112_000000
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.
Intel(R) Fortran Intel(R) 64 Compiler Classic for applications running on Intel(R) 64, Version 2021.1 Build 20201112_000000
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.

==============================================================================
Fortran          | 603.bwaves_s(base, peak) 649.fotonik3d_s(base, peak) 654.roms_s(base, peak)
==============================================================================
Intel(R) Fortran Intel(R) 64 Compiler Classic for applications running on Intel(R) 64, Version 2021.1 Build 20201112_000000
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==============================================================================
Fortran, C       | 621.wrf_s(base, peak) 627.cam4_s(base, peak) 628.pop2_s(base, peak)
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Test Sponsor: HPE
Hardware Availability: Jun-2021
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Software Availability: Dec-2020

Compiler Version Notes (Continued)

Intel(R) Fortran Intel(R) 64 Compiler Classic for applications running on
Intel(R) 64, Version 2021.1 Build 20201112_000000
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.
Intel(R) C Intel(R) 64 Compiler Classic for applications running on Intel(R)
64, Version 2021.1 Build 20201112_000000
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.

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.rome_s: -DSPEC_LP64

Base Optimization Flags

C benchmarks:
  -m64 -std=c11 -xCORE-AVX512 -ipo -O3 -no-prec-div -qopt-prefetch

(Continued on next page)
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(2.40 GHz, Intel Xeon Silver 4314)

SPECspeed®2017_fp_base = 148
SPECspeed®2017_fp_peak = 151

CPU2017 License: 3
Test Sponsor: HPE
Tested by: HPE

Base Optimization Flags (Continued)

C benchmarks (continued):
-ffinite-math-only -gopt-mem-layout-trans=4 -gopenmp -DSPEC_OPENMP
-mbranches-within-32B-boundaries

Fortran benchmarks:
-m64 -Wl,-z,muldefs -DSPEC_OPENMP -xCORE-AVX512 -ipo -O3
-no-prec-div -gopt-prefetch -ffinite-math-only
-gopt-mem-layout-trans=4 -gopenmp -nostandard-realloc-lhs
-mbranches-within-32B-boundaries -L/usr/local/jemalloc64-5.0.1/lib
-ljemalloc

Benchmarks using both Fortran and C:
-m64 -std=c11 -Wl,-z,muldefs -xCORE-AVX512 -ipo -O3 -no-prec-div
-gopt-prefetch -ffinite-math-only -gopt-mem-layout-trans=4 -gopenmp
-DSPEC_OPENMP -mbranches-within-32B-boundaries -nostandard-realloc-lhs
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc

Benchmarks using Fortran, C, and C++:
-m64 -std=c11 -Wl,-z,muldefs -xCORE-AVX512 -ipo -O3 -no-prec-div
-gopt-prefetch -ffinite-math-only -gopt-mem-layout-trans=4 -gopenmp
-DSPEC_OPENMP -mbranches-within-32B-boundaries -nostandard-realloc-lhs
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc

Peak Compiler Invocation

C benchmarks (except as noted below):
icc

644.nab_s: icx

Fortran benchmarks:
ifort

Benchmarks using both Fortran and C:
ifort icc

Benchmarks using Fortran, C, and C++:
icpc icc ifort
Hewlett Packard Enterprise
(Test Sponsor: HPE)
ProLiant DL360 Gen10 Plus
(2.40 GHz, Intel Xeon Silver 4314)

SPECspeed®2017_fp_base = 148
SPECspeed®2017_fp_peak = 151

CPU2017 License: 3
Test Sponsor: HPE
Tested by: HPE
Test Date: Jun-2021
Hardware Availability: Jun-2021
Software Availability: Dec-2020

Peak Portability Flags
Same as Base Portability Flags

Peak Optimization Flags

C benchmarks:
619.lbm_s: basepeak = yes
638.imagick_s: basepeak = yes
644.nab_s: -m64 -Wl,-z,muldefs -xCORE-AVX512 -Ofast -ffast-math
-flto -mpmath=sse -funroll-loops -fiopenmp
-DSPEC_OPENMP -qopt-mem-layout-trans=4
-fimf-accuracy-bits=14:sqrt
-mbranches-within-32B-boundaries
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc

Fortran benchmarks:
603.bwaves_s: basepeak = yes
649.fotonik3d_s: basepeak = yes
654.roms_s: basepeak = yes

Benchmarks using both Fortran and C:
621.wrf_s: -m64 -std=c11 -Wl,-z,muldefs -prof-gen(pass 1)
-prof-use(pass 2) -ipo -xCORE-AVX512 -O3 -no-prec-div
-qopt-prefetch -ffinite-math-only -qopt-mem-layout-trans=4
-DSPEC_SUPPRESS_OPENMP -qopenmp -DSPEC_OPENMP
-mbranches-within-32B-boundaries -nostandard-realloc-lhs
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc

627.cam4_s: basepeak = yes
628.pop2_s: basepeak = yes

Benchmarks using Fortran, C, and C++:
607.cactuBSSN_s: basepeak = yes
Hewlett Packard Enterprise
(Test Sponsor: HPE)
ProLiant DL360 Gen10 Plus
(2.40 GHz, Intel Xeon Silver 4314)

SPECspeed®2017_fp_base = 148
SPECspeed®2017_fp_peak = 151

The flags files that were used to format this result can be browsed at
http://www.spec.org/cpu2017/flags/HPE-Platform-Flags-Intel-V1.0-ICX-revE.html

You can also download the XML flags sources by saving the following links:
http://www.spec.org/cpu2017/flags/HPE-Platform-Flags-Intel-V1.0-ICX-revE.xml
http://www.spec.org/cpu2017/flags/Intel-ic2021-official-linux64_revA.xml