



SPEC® CPU2017 Floating Point Rate Result

Copyright 2017-2019 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant DL325 Gen10

(2.10 GHz, AMD EPYC 7281)

SPECrate2017_fp_base = 84.9

SPECrate2017_fp_peak = Not Run

CPU2017 License: 3

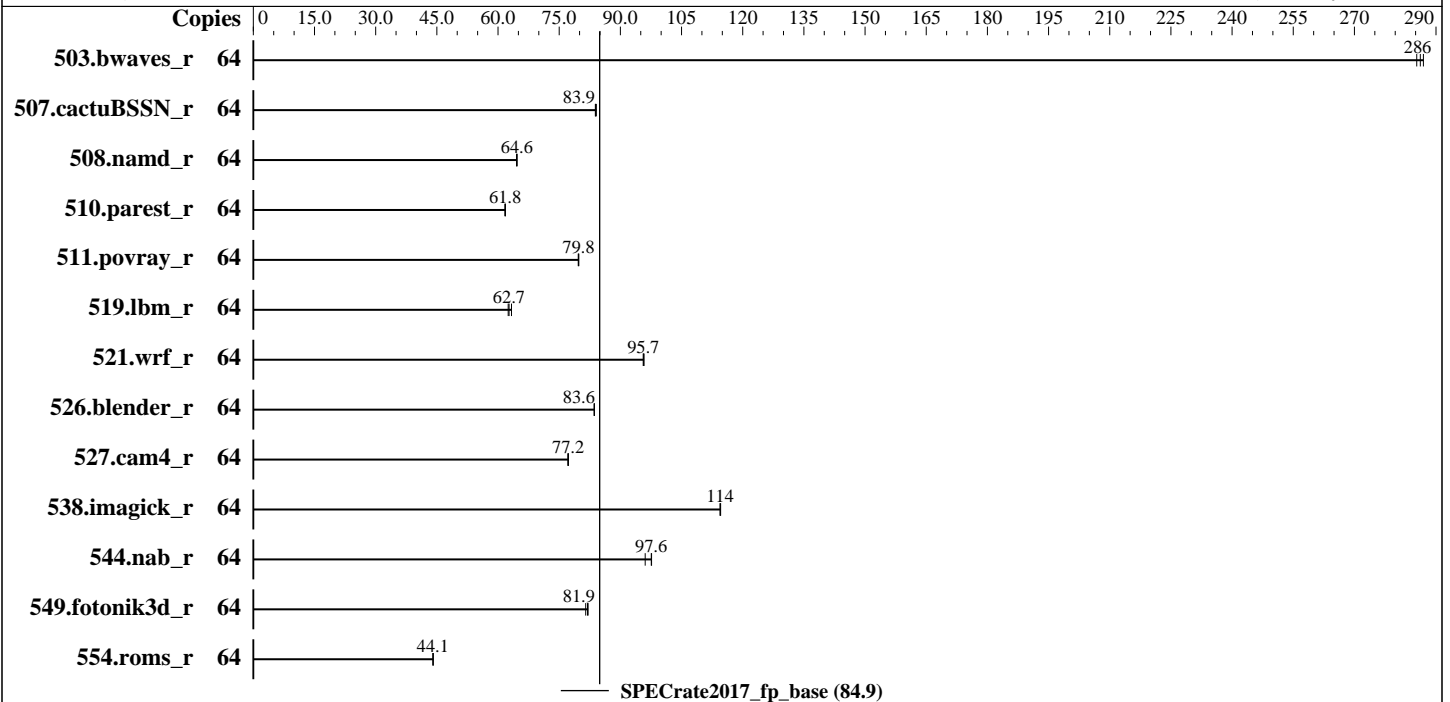
Test Sponsor: HPE

Tested by: HPE

Test Date: Jun-2018

Hardware Availability: Jul-2018

Software Availability: May-2018



Hardware

CPU Name: AMD EPYC 7281
 Max MHz.: 2700
 Nominal: 2100
 Enabled: 16 cores, 1 chip, 2 threads/core
 Orderable: 1 chip
 Cache L1: 64 KB I + 32 KB D on chip per core
 L2: 512 KB I+D on chip per core
 L3: 32 MB I+D on chip per chip, 4 MB shared / 2 cores
 Other: None
 Memory: 128 GB (8 x 16 GB 1Rx4 PC4-2666V-R, running at 2400)
 Storage: 1 x 480 GB SATA SSD, RAID 0
 Other: None

Software

OS: SUSE Linux Enterprise Server 12 (x86_64) SP3
 Kernel 4.4.131-94.25-default
 Compiler: C/C++: Version 1.0.0 of AOCC
 Fortran: Version 4.8.2 of GCC
 Parallel: No
 Firmware: HPE BIOS Version A41 04/06/2018 released Jul-2018
 File System: xfs
 System State: Run level 3 (multi-user)
 Base Pointers: 64-bit
 Peak Pointers: Not Applicable
 Other: jemalloc: general purpose malloc implementation v4.5.0



SPEC CPU2017 Floating Point Rate Result

Copyright 2017-2019 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant DL325 Gen10

(2.10 GHz, AMD EPYC 7281)

SPECrate2017_fp_base = 84.9

SPECrate2017_fp_peak = Not Run

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

Test Date: Jun-2018
Hardware Availability: Jul-2018
Software Availability: May-2018

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
503.bwaves_r	64	<u>2243</u>	<u>286</u>	2250	285	2237	287							
507.cactuBSSN_r	64	963	84.1	966	83.9	<u>966</u>	<u>83.9</u>							
508.namd_r	64	942	64.5	940	64.7	<u>941</u>	<u>64.6</u>							
510.parest_r	64	2708	61.8	2714	61.7	<u>2709</u>	<u>61.8</u>							
511.povray_r	64	1873	79.8	1876	79.7	<u>1873</u>	<u>79.8</u>							
519.lbm_r	64	1079	62.5	<u>1076</u>	<u>62.7</u>	1066	63.3							
521.wrf_r	64	1496	95.8	1499	95.6	<u>1499</u>	<u>95.7</u>							
526.blender_r	64	1165	83.7	1167	83.5	<u>1165</u>	<u>83.6</u>							
527.cam4_r	64	1449	77.3	1452	77.1	<u>1449</u>	<u>77.2</u>							
538.imagick_r	64	1391	114	<u>1390</u>	<u>114</u>	1389	115							
544.nab_r	64	1121	96.1	1103	97.7	<u>1104</u>	<u>97.6</u>							
549.fotonik3d_r	64	3060	81.5	<u>3044</u>	<u>81.9</u>	3038	82.1							
554.roms_r	64	2305	44.1	2308	44.1	<u>2308</u>	<u>44.1</u>							

SPECrate2017_fp_base = 84.9

SPECrate2017_fp_peak = Not Run

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

Submit Notes

The config file option 'submit' was used.
'numactl' was used to bind copies to the cores.
See the configuration file for details.

Operating System Notes

'ulimit -s unlimited' was used to set environment stack size
'ulimit -l 2097152' was used to set environment locked pages in memory limit

runspec command invoked through numactl i.e.:
numactl --interleave=all runspec <etc>

Set dirty_ratio=8 to limit dirty cache to 8% of memory
Set swappiness=1 to swap only if necessary
Set zone_reclaim_mode=1 to free local node memory and avoid remote memory
sync then drop_caches=3 to reset caches before invoking runcpu
Linux governor set to performance with cpupower "cpupower frequency-set -r -g performance"
dirty_ratio, swappiness, zone_reclaim_mode and drop_caches were
all set using privileged echo (e.g. echo 1 > /proc/sys/vm/swappiness).
Transparent huge pages were enabled for this run (OS default)
Huge pages were not configured for this run.
IRQ balance service stopped using "systemctl stop irqbalance.service"
Tuned profile set with "tuned-adm profile throughput-performance"



SPEC CPU2017 Floating Point Rate Result

Copyright 2017-2019 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant DL325 Gen10

(2.10 GHz, AMD EPYC 7281)

SPECrate2017_fp_base = 84.9

SPECrate2017_fp_peak = Not Run

CPU2017 License: 3

Test Sponsor: HPE

Tested by: HPE

Test Date: Jun-2018

Hardware Availability: Jul-2018

Software Availability: May-2018

General Notes

Environment variables set by runcpu before the start of the run:

```
LD_LIBRARY_PATH = "/home/cpu2017/amd1704-rate-libs-revC/64;/home/cpu2017/amd1704-rate-libs-revC/32:"
MALLOCCONF = "lg_chunk:28"
```

The AMD64 AOCC Compiler Suite is available at
<http://developer.amd.com/amd-aocc/>

Binaries were compiled on a system with 2x AMD EPYC 7601 CPU + 512GB Memory using RHEL 7.4

The AOCC Gold Linker plugin was installed and used for the link stage.

The AOCC Fortran Plugin version 1.0 was used to leverage AOCC optimizers with gfortran. It is available here:
<http://developer.amd.com/amd-aocc/>

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, was obtained at
<https://github.com/jemalloc/jemalloc/releases/download/4.5.0/jemalloc-4.5.0.tar.bz2>
jemalloc was built with GCC v4.8.5 in RHEL v7.2 under default conditions.

jemalloc uses environment variable MALLOCCONF with values narenas and lg_chunk:
narenas: sets the maximum number of arenas to use for automatic multiplexing of threads and arenas.

lg_chunk: set the virtual memory chunk size (log base 2). For example,
lg_chunk:21 sets the default chunk size to 2^21 = 2MiB.

Platform Notes

BIOS Configuration:

Thermal Configuration set to Maximum Cooling
Memory Patrol Scrubbing set to Disabled
Performance Determinism set to Power Deterministic
Processor Power and Utilization Monitoring set to Disabled
Workload Profile set to General Throughput Compute
Minimum Processor Idle Power Core C-State set to C6 State

Sysinfo program /home/cpu2017/bin/sysinfo
Rev: r5797 of 2017-06-14 96c45e4568ad54c135fd618bcc091c0f
running on dl325g10-7501 Thu Jun 21 23:25:31 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>

(Continued on next page)



SPEC CPU2017 Floating Point Rate Result

Copyright 2017-2019 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant DL325 Gen10

(2.10 GHz, AMD EPYC 7281)

SPECrate2017_fp_base = 84.9

SPECrate2017_fp_peak = Not Run

CPU2017 License: 3

Test Sponsor: HPE

Tested by: HPE

Test Date: Jun-2018

Hardware Availability: Jul-2018

Software Availability: May-2018

Platform Notes (Continued)

From /proc/cpuinfo

model name : AMD EPYC 7281 16-Core Processor

1 "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 : 32

physical 0: cores 0 1 4 5 8 9 12 13 16 17 20 21 24 25 28 29

From lscpu:

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: 2

Core(s) per socket: 16

Socket(s): 1

NUMA node(s): 4

Vendor ID: AuthenticAMD

CPU family: 23

Model: 1

Model name: AMD EPYC 7281 16-Core Processor

Stepping: 2

CPU MHz: 2100.000

CPU max MHz: 2100.0000

CPU min MHz: 1200.0000

BogoMIPS: 4191.79

Virtualization: AMD-V

L1d cache: 32K

L1i cache: 64K

L2 cache: 512K

L3 cache: 4096K

NUMA node0 CPU(s): 0-3,16-19

NUMA node1 CPU(s): 4-7,20-23

NUMA node2 CPU(s): 8-11,24-27

NUMA node3 CPU(s): 12-15,28-31

Flags: fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush mmx fxsr sse sse2 ht syscall nx mmxext fxsr_opt pdpe1gb rdtscp lm constant_tsc rep_good nopl nonstop_tsc extd_apicid amd_dcm aperfmperf eagerfpu pni pclmulqdq monitor ssse3 fma cx16 sse4_1 sse4_2 movbe popcnt aes xsave avx f16c rdrand lahf_lm cmp_legacy svm extapic cr8_legacy abm sse4a misalignsse 3dnowprefetch osvw skinit wdt tce topoext perfctr_core perfctr_nb bpext perfctr_l2 mwaitx arat cpb hw_pstate rds retpoline retpoline_amd npt lbrv svm_lock nrip_save tsc_scale vmcb_clean flushbyasid decodeassists pausefilter pfthreshold vmmcall avic fsgsbase

(Continued on next page)



SPEC CPU2017 Floating Point Rate Result

Copyright 2017-2019 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant DL325 Gen10

(2.10 GHz, AMD EPYC 7281)

SPECrate2017_fp_base = 84.9

SPECrate2017_fp_peak = Not Run

CPU2017 License: 3

Test Sponsor: HPE

Tested by: HPE

Test Date: Jun-2018

Hardware Availability: Jul-2018

Software Availability: May-2018

Platform Notes (Continued)

```
bm11 avx2 smep bmi2 rdseed adx smap clflushopt sha_ni xsaveopt xsavec xgetbv1 clzero
irperf ibpb overflow_recov succor smca
```

```
/proc/cpuinfo cache data
cache size : 512 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 3 16 17 18 19
node 0 size: 32002 MB
node 0 free: 31836 MB
node 1 cpus: 4 5 6 7 20 21 22 23
node 1 size: 32254 MB
node 1 free: 32110 MB
node 2 cpus: 8 9 10 11 24 25 26 27
node 2 size: 32254 MB
node 2 free: 32109 MB
node 3 cpus: 12 13 14 15 28 29 30 31
node 3 size: 32133 MB
node 3 free: 31990 MB
node distances:
node  0  1  2  3
  0:  10  16  16  16
  1:  16  10  16  16
  2:  16  16  10  16
  3:  16  16  16  10
```

```
From /proc/meminfo
MemTotal:      131731036 kB
HugePages_Total:      0
Hugepagesize:    2048 kB
```

```
/usr/bin/lsb_release -d
SUSE Linux Enterprise Server 12 SP3
```

```
From /etc/*release* /etc/*version*
SuSE-release:
SUSE Linux Enterprise Server 12 (x86_64)
VERSION = 12
PATCHLEVEL = 3
# 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-SP3"
VERSION_ID="12.3"
```

(Continued on next page)



SPEC CPU2017 Floating Point Rate Result

Copyright 2017-2019 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant DL325 Gen10

(2.10 GHz, AMD EPYC 7281)

SPECrate2017_fp_base = 84.9

SPECrate2017_fp_peak = Not Run

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

Test Date: Jun-2018
Hardware Availability: Jul-2018
Software Availability: May-2018

Platform Notes (Continued)

```
PRETTY_NAME="SUSE Linux Enterprise Server 12 SP3"
ID="sles"
ANSI_COLOR="0;32"
CPE_NAME="cpe:/o:suse:sles:12:sp3"
```

```
uname -a:
Linux dl325g10-7501 4.4.131-94.25-default #1 SMP Mon May 7 11:22:19 UTC 2018 (9700bac)
x86_64 x86_64 x86_64 GNU/Linux
```

```
run-level 3 Jun 21 11:58
```

```
SPEC is set to: /home/cpu2017
Filesystem      Type  Size  Used Avail Use% Mounted on
/dev/sdc3       xfs   407G  6.0G  401G   2% /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 HPE A41 04/06/2018
Memory:
8x UNKNOWN NOT AVAILABLE
8x UNKNOWN NOT AVAILABLE 16 GB 2 rank 2666, configured at 2400
```

(End of data from sysinfo program)

Compiler Version Notes

```
=====
CC 519.lbm_r(base) 538.imagick_r(base) 544.nab_r(base)
-----
```

```
AOCC.LLVM.4.0.0.B35.2017_04_26 clang version 4.0.0 (CLANG:) (based on LLVM
AOCC.LLVM.4.0.0.B35.2017_04_26)
Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /root/work/compilers/AOCC-1.0-Compiler/bin
-----
```

```
=====
CXXC 508.namd_r(base) 510.parest_r(base)
-----
```

```
AOCC.LLVM.4.0.0.B35.2017_04_26 clang version 4.0.0 (CLANG:) (based on LLVM
AOCC.LLVM.4.0.0.B35.2017_04_26)
Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /root/work/compilers/AOCC-1.0-Compiler/bin
```

(Continued on next page)



SPEC CPU2017 Floating Point Rate Result

Copyright 2017-2019 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant DL325 Gen10

(2.10 GHz, AMD EPYC 7281)

SPECrate2017_fp_base = 84.9

SPECrate2017_fp_peak = Not Run

CPU2017 License: 3

Test Sponsor: HPE

Tested by: HPE

Test Date: Jun-2018

Hardware Availability: Jul-2018

Software Availability: May-2018

Compiler Version Notes (Continued)

=====
CC 511.povray_r(base) 526.blender_r(base)
=====

AOCC.LLVM.4.0.0.B35.2017_04_26 clang version 4.0.0 (CLANG:) (based on LLVM
AOCC.LLVM.4.0.0.B35.2017_04_26)

Target: x86_64-unknown-linux-gnu

Thread model: posix

InstalledDir: /root/work/compilers/AOCC-1.0-Compiler/bin

AOCC.LLVM.4.0.0.B35.2017_04_26 clang version 4.0.0 (CLANG:) (based on LLVM
AOCC.LLVM.4.0.0.B35.2017_04_26)

Target: x86_64-unknown-linux-gnu

Thread model: posix

InstalledDir: /root/work/compilers/AOCC-1.0-Compiler/bin
=====

=====
FC 507.cactuBSSN_r(base)
=====

AOCC.LLVM.4.0.0.B35.2017_04_26 clang version 4.0.0 (CLANG:) (based on LLVM
AOCC.LLVM.4.0.0.B35.2017_04_26)

Target: x86_64-unknown-linux-gnu

Thread model: posix

InstalledDir: /root/work/compilers/AOCC-1.0-Compiler/bin

AOCC.LLVM.4.0.0.B35.2017_04_26 clang version 4.0.0 (CLANG:) (based on LLVM
AOCC.LLVM.4.0.0.B35.2017_04_26)

Target: x86_64-unknown-linux-gnu

Thread model: posix

InstalledDir: /root/work/compilers/AOCC-1.0-Compiler/bin

GNU Fortran (GCC) 4.8.2

Copyright (C) 2013 Free Software Foundation, Inc.

GNU Fortran comes with NO WARRANTY, to the extent permitted by law.

You may redistribute copies of GNU Fortran

under the terms of the GNU General Public License.

For more information about these matters, see the file named COPYING
=====

=====
FC 503.bwaves_r(base) 549.fotonik3d_r(base) 554.roms_r(base)
=====

GNU Fortran (GCC) 4.8.2

Copyright (C) 2013 Free Software Foundation, Inc.

GNU Fortran comes with NO WARRANTY, to the extent permitted by law.

You may redistribute copies of GNU Fortran

under the terms of the GNU General Public License.

For more information about these matters, see the file named COPYING

(Continued on next page)



SPEC CPU2017 Floating Point Rate Result

Copyright 2017-2019 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant DL325 Gen10

(2.10 GHz, AMD EPYC 7281)

SPECrate2017_fp_base = 84.9

SPECrate2017_fp_peak = Not Run

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

Test Date: Jun-2018
Hardware Availability: Jul-2018
Software Availability: May-2018

Compiler Version Notes (Continued)

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

GNU Fortran (GCC) 4.8.2
Copyright (C) 2013 Free Software Foundation, Inc.
GNU Fortran comes with NO WARRANTY, to the extent permitted by law.
You may redistribute copies of GNU Fortran
under the terms of the GNU General Public License.
For more information about these matters, see the file named COPYING
AOCC.LLVM.4.0.0.B35.2017_04_26 clang version 4.0.0 (CLANG:) (based on LLVM
AOCC.LLVM.4.0.0.B35.2017_04_26)
Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /root/work/compilers/AOCC-1.0-Compiler/bin
=====

Base Compiler Invocation

C benchmarks:
clang

C++ benchmarks:
clang++

Fortran benchmarks:
clang gfortran

Benchmarks using both Fortran and C:
clang gfortran

Benchmarks using both C and C++:
clang++ clang

Benchmarks using Fortran, C, and C++:
clang++ clang gfortran

Base Portability Flags

503.bwaves_r: -DSPEC_LP64
507.cactuBSSN_r: -DSPEC_LP64
508.namd_r: -DSPEC_LP64

(Continued on next page)



SPEC CPU2017 Floating Point Rate Result

Copyright 2017-2019 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant DL325 Gen10

(2.10 GHz, AMD EPYC 7281)

SPECrate2017_fp_base = 84.9

SPECrate2017_fp_peak = Not Run

CPU2017 License: 3

Test Sponsor: HPE

Tested by: HPE

Test Date: Jun-2018

Hardware Availability: Jul-2018

Software Availability: May-2018

Base Portability Flags (Continued)

```

510.parest_r: -DSPEC_LP64
511.povray_r: -DSPEC_LP64
519.lbm_r: -DSPEC_LP64
521.wrf_r: -DSPEC_CASE_FLAG -fconvert=big-endian -DSPEC_LP64
526.blender_r: -funsigned-char -D__BOOL_DEFINED -DSPEC_LP64
527.cam4_r: -DSPEC_CASE_FLAG -DSPEC_LP64
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:

```

-flto -Wl, -plugin-opt= -merge-constant -lsr-in-nested-loop
-disable-vect-cmp -O3 -ffast-math -march=znver1 -fstruct-layout=2
-mlvm -unroll-threshold=100 -fremap-arrays -mno-avx2
-inline-threshold=1000 -z muldefs -ljemalloc

```

C++ benchmarks:

```

-flto -Wl, -plugin-opt= -merge-constant -lsr-in-nested-loop
-disable-vect-cmp -O3 -march=znver1 -mlvm -unroll-threshold=100
-finline-aggressive -fremap-arrays -inline-threshold=1000 -z muldefs
-ljemalloc

```

Fortran benchmarks:

```

-flto -Wl, -plugin-opt= -merge-constant -lsr-in-nested-loop
-disable-vect-cmp -O3 -mavx -madx -funroll-loops -ffast-math
-z muldefs -fplugin=dragonegg.so -fplugin-arg-dragonegg-llvm-option="
-disable-vect-cmp" -ljemalloc -lgfortran -lamdlibm

```

Benchmarks using both Fortran and C:

```

-flto -Wl, -plugin-opt= -merge-constant -lsr-in-nested-loop
-disable-vect-cmp -O3 -ffast-math -march=znver1 -fstruct-layout=2
-mlvm -unroll-threshold=100 -fremap-arrays -mno-avx2
-inline-threshold=1000 -mavx -madx -funroll-loops -z muldefs
-fplugin=dragonegg.so -fplugin-arg-dragonegg-llvm-option="
-disable-vect-cmp" -ljemalloc -lgfortran -lamdlibm

```

Benchmarks using both C and C++:

```

-flto -Wl, -plugin-opt= -merge-constant -lsr-in-nested-loop
-disable-vect-cmp -O3 -ffast-math -march=znver1 -fstruct-layout=2
-mlvm -unroll-threshold=100 -fremap-arrays -mno-avx2
-inline-threshold=1000 -finline-aggressive -z muldefs -ljemalloc

```

(Continued on next page)



SPEC CPU2017 Floating Point Rate Result

Copyright 2017-2019 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise

(Test Sponsor: HPE)

ProLiant DL325 Gen10

(2.10 GHz, AMD EPYC 7281)

SPECrate2017_fp_base = 84.9

SPECrate2017_fp_peak = Not Run

CPU2017 License: 3

Test Sponsor: HPE

Tested by: HPE

Test Date: Jun-2018

Hardware Availability: Jul-2018

Software Availability: May-2018

Base Optimization Flags (Continued)

Benchmarks using Fortran, C, and C++:

```
-flto -Wl, -plugin-opt= -merge-constant -lsr-in-nested-loop
-disable-vect-cmp -O3 -ffast-math -march=znver1 -fstruct-layout=2
-mllvm -unroll-threshold=100 -fremap-arrays -mno-avx2
-inline-threshold=1000 -finline-aggressive -mavx -madox -funroll-loops
-z muldefs -fplugin=dragonegg.so -fplugin-arg-dragonegg-llvm-option="
-disable-vect-cmp" -ljemalloc
```

The flags files that were used to format this result can be browsed at

<http://www.spec.org/cpu2017/flags/HPE-Platform-Flags-AMD-V1.2-EPYC-revD.html>

<http://www.spec.org/cpu2017/flags/aocc100-flags-revC-I.2018-02-16.html>

<http://www.spec.org/cpu2017/flags/gcc.2018-02-16.html>

You can also download the XML flags sources by saving the following links:

<http://www.spec.org/cpu2017/flags/HPE-Platform-Flags-AMD-V1.2-EPYC-revD.xml>

<http://www.spec.org/cpu2017/flags/aocc100-flags-revC-I.2018-02-16.xml>

<http://www.spec.org/cpu2017/flags/gcc.2018-02-16.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 2018-06-22 01:25:30-0400.

Report generated on 2019-02-21 17:18:36 by CPU2017 PDF formatter v6067.

Originally published on 2018-07-10.