**SPEC CPU®2017 Floating Point Rate Result**

**Hewlett Packard Enterprise**

(Test Sponsor: HPE)

ProLiant DL325 Gen11

(2.40 GHz, AMD EPYC 9654P)

---

**SPECrates**

SPECrates®2017 fp_base =

SPECrates®2017 fp_peak =

---

**SPEC has determined that this result does not comply with the SPEC CPU 2017 run and reporting rules. Specifically, the test sponsor notified SPEC that the results were measured on an unsupported configuration.**

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### Copies

<table>
<thead>
<tr>
<th>503.bwaves_r</th>
<th>507.cactuBSSN_r</th>
<th>508.namd_r</th>
<th>510.parest_r</th>
<th>511.povray_r</th>
<th>519.lbm_r</th>
<th>521.wrf_r</th>
<th>526.blender_r</th>
<th>527.cam4_r</th>
<th>538.imagick_r</th>
<th>541.nab_r</th>
<th>549.fotonik3d_r</th>
<th>554.roms_r</th>
</tr>
</thead>
</table>

### Hardware

| CPU Name: AMD EPYC 9654P | OS: Red Hat Enterprise Linux 9.0 (Plow) |
| Max MHz: 3700 | Kernel 5.14.0-70.13.1.el9_0.x86_64 |
| Nominal: 2400 | | |
| Enabled: 96 cores, 1 chip | Compiler: C/C++/Fortran: Version 4.0.0 of AOCC |
| Orderable: 1 chip | Parallel: No |
| Cache L1: 32 KB I + 32 KB D on chip per core | Firmware: HPE BIOS Version v1.10 10/06/2022 released |
| L2: 1 MB I+D on chip per core | File System: xfs |
| L3: 384 MB I+D on chip per chip, 32 MB shared / 8 cores | System State: Run level 3 (multi-user) |
| | Base Pointers: 64-bit |

(Continued on next page)
Hewlett Packard Enterprise
(Test Sponsor: HPE)
ProLiant DL325 Gen11
(2.40 GHz, AMD EPYC 9654P)

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

Test Date: Oct-2022
Hardware Availability: Dec-2022
Software Availability: Nov-2022

Other: None
Memory: 384 GB (12 x 32 GB 2Rx8 PC5-4800B-R)
Storage: 1 x 960 GB SATA SSD
Other: None

Results Table

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Copies</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
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<tbody>
<tr>
<td>503.bwaves_r</td>
<td>NC</td>
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<td>NC</td>
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<td>507.cactuBSSN_r</td>
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<td>508.namd_r</td>
<td>NC</td>
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<td>511.povray_r</td>
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<td>526.blender_r</td>
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<td>NC</td>
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<td>NC</td>
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<tr>
<td>527.cam4_r</td>
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<td>NC</td>
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<td>NC</td>
<td>NC</td>
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<tr>
<td>538.imagick_r</td>
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<td>NC</td>
<td>NC</td>
<td>NC</td>
<td>NC</td>
<td>NC</td>
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<tr>
<td>544.nab_r</td>
<td>NC</td>
<td>NC</td>
<td>NC</td>
<td>NC</td>
<td>NC</td>
<td>NC</td>
<td>NC</td>
</tr>
<tr>
<td>549.fotonik3d_r</td>
<td>NC</td>
<td>NC</td>
<td>NC</td>
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<td>NC</td>
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<td>554.rocks_r</td>
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<td>NC</td>
</tr>
</tbody>
</table>

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Compiler Notes

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

Submit Notes

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

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

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

To limit dirty cache to 8% of memory, 'sysctl -w vm.dirty_ratio=8' run as root.
To limit swap usage to minimum necessary, 'sysctl -w vm.swappiness=1' run as root.
To free node-local memory and avoid node-local memory usage
'sysctl -w vm.zone_reclaim_mode=1' run as root

To clear filesystem caches, 'sync; sysctl -w vm.drop_caches=3' run as root.
To set 'sysctl -w kernel.randomize_va_space=0' run as root.

To enable Transparent Hugepages (THP) for all allocations,
'echo always > /sys/kernel/mm/transparent_hugepage/enabled' and
'echo always > /sys/kernel/mm/transparent_hugepage/defrag' run as root.

Environment Variables Notes

Environment variables set by runcpu before the start of the run:
LD_LIBRARY_PATH = 
"/home/cpu2017_rate/amd_rate_aocc400_genoa_B_lib/lib:/home/cpu2017_rate/amd_rate_aocc400_genoa_B_lib/lib32:" 
MALLOC_CONF = "retain:true"

General Notes

Compiled on a system with 2x AMD EPYC 9174F CPU + 1.5TiB Memory using RHEL 8.6

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
Workload Profile set to General Throughput Compute
AMD SMT Option set to Disabled
Determinism Control set to Manual
Performance Determinism set to Power Deterministic

(Continued on next page)
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ProLiant DL325 Gen11
(2.40 GHz, AMD EPYC 9654P)

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### Platform Notes (Continued)

<table>
<thead>
<tr>
<th>Cache Level</th>
<th>Size</th>
<th>Cache Lines</th>
<th>Instruction</th>
<th>Data Size</th>
<th>Data Lines</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1</td>
<td>32K</td>
<td>3M</td>
<td>8</td>
<td>1</td>
<td>64</td>
</tr>
<tr>
<td>L2</td>
<td>1M</td>
<td>96M</td>
<td>8</td>
<td>2</td>
<td>2048</td>
</tr>
<tr>
<td>L3</td>
<td>32M</td>
<td>384M</td>
<td>16</td>
<td>3</td>
<td>32768</td>
</tr>
</tbody>
</table>

/proc/cpuinfo cache data

```
cache size : 1024 KB
```

From `numactl --hardware`

```
WARNING: a numactl 'node' might or might not correspond to a physical chip.
available: 12 nodes (0-11)
node 0 cpus: 0 1 2 3 4 5 6 7
node 0 size: 32007 MB
node 0 free: 31832 MB
node 1 cpus: 8 9 10 11 12 13 14 15
node 1 size: 32254 MB
node 1 free: 32101 MB
node 2 cpus: 16 17 18 19 20 21 22 23
node 2 size: 32254 MB
node 2 free: 32080 MB
node 3 cpus: 24 25 26 27 28 29 30 31
node 3 size: 32254 MB
node 3 free: 32071 MB
node 4 cpus: 32 33 34 35 36 37 38 39
node 4 size: 32254 MB
node 4 free: 32106 MB
node 5 cpus: 40 41 42 43 44 45 46 47
node 5 size: 32254 MB
node 5 free: 32117 MB
node 6 cpus: 48 49 50 51 52 53 54 55
node 6 size: 32254 MB
node 6 free: 32121 MB
node 7 cpus: 56 57 58 59 60 61 62 63
node 7 size: 32254 MB
node 7 free: 32055 MB
node 8 cpus: 64 65 66 67 68 69 70 71
node 8 size: 32254 MB
node 8 free: 32093 MB
node 9 cpus: 72 73 74 75 76 77 78 79
node 9 size: 32203 MB
node 9 free: 32074 MB
node 10 cpus: 80 81 82 83 84 85 86 87
node 10 size: 32254 MB
node 10 free: 32104 MB
node 11 cpus: 88 89 90 91 92 93 94 95
node 11 size: 32254 MB
node 11 free: 31750 MB
node distances:
node 0: 0 1 1 2 3 4 5 6 7 8 9 10 11
node 1: 10 12 12 12 11 12 12 11 12 12 11 12
node 2: 12 10 12 12 11 12 12 11 12 12 11 12

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Platform Notes (Continued)

3: 12 12 12 10 12 12 12 11 12 12 12 11
4: 11 12 12 12 10 12 12 11 12 12 12 11
5: 12 11 12 12 10 12 12 11 12 12 12 11
6: 12 12 11 12 12 10 12 12 11 12 12 11
7: 12 12 12 11 12 12 10 12 12 12 11 12
8: 11 12 12 12 11 12 12 10 12 12 12 12
9: 12 11 12 12 11 12 12 10 12 12 12 12
10: 12 12 11 12 12 11 12 12 12 12 12 12
11: 12 12 12 11 12 12 11 12 12 12 12 12

From /proc/meminfo
MemTotal: 395998020 kB
HugePages_Total: 0
Hugepagesize: 2048 kB

/sbin/tuned-adm active
    Current active profile: throughput-performance
/sys/devices/system/cpu/cpu*/cpufreq/scaling_governor has performance

From /etc/*release*/etc/*version*
NAME="Red Hat Enterprise Linux"
VERSION="9.0 (Plow)"
ID="rhel"
ID_LIKE="fedora"
VERSION_ID="9.0"
PLATFORM_ID="platform:el9"
PRETTY_NAME="Red Hat Enterprise Linux 9.0 (Plow)"
ANSI_COLOR="0;31"
redhat-release: Red Hat Enterprise Linux release 9.0 (Plow)
system-release: Red Hat Enterprise Linux release 9.0 (Plow)
system-release-cpe: cpe:/o:redhat:enterprise_linux:9::baseos

uname -a:
Linux localhost.localdomain 5.14.0-70.13.1.el9_0.x86_64 #1 SMP PREEMPT Thu Apr 14 12:08:17 EDT 2022 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
CVE-2017-5753 (Spectre variant 1): Mitigation: usercopy/swapgs barriers and __user pointer sanitization
CVE-2017-5715 (Spectre variant 2): Mitigation: Retpolines, IBFB

(Continued on next page)
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<table>
<thead>
<tr>
<th>Platform Notes (Continued)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVE-2020-0543 (Special Register Buffer Data Sampling): Not affected</td>
</tr>
<tr>
<td>CVE-2019-11135 (TSX Asynchronous Abort): Not affected</td>
</tr>
<tr>
<td>run-level 3 Apr 7 05:30</td>
</tr>
<tr>
<td>SPEC is set to: /home/cpu2017_rate</td>
</tr>
<tr>
<td>Filesystem Type Size Used Avail Use% Mounted on</td>
</tr>
<tr>
<td>/dev/mapper/rhel-home xfs 819G 51G 768G 7% /home</td>
</tr>
<tr>
<td>From /sys/devices/virtual/dmi/id</td>
</tr>
<tr>
<td>Vendor: HPE</td>
</tr>
<tr>
<td>Product: ProLiant DL325 Gen11</td>
</tr>
<tr>
<td>Product Family: ProLiant</td>
</tr>
<tr>
<td>Serial: DL325G11-010</td>
</tr>
<tr>
<td>Additional information from dmidecode 3.3 follows. WARNING: Use caution when you interpret this section. The 'dmidecode' program reads system data which is &quot;intended to allow hardware to be accurately determined&quot;, but the intent may not be met, as there are frequent changes to hardware, firmware, and the &quot;DMTF SMBIOS&quot; standard.</td>
</tr>
<tr>
<td>Memory: 6x Hynix HMCGB88M8JAI113N 32 GB 2 rank 4800</td>
</tr>
<tr>
<td>6x Hynix HMCGB88M8JAI115N 32 GB 2 rank 4800</td>
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<tr>
<td>BIOS:</td>
</tr>
<tr>
<td>BIOS Vendor: HPE</td>
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<tr>
<td>BIOS Version: 1.10</td>
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<tr>
<td>BIOS Date: 10/06/2022</td>
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<td>BIOS Revision: 1.10</td>
</tr>
<tr>
<td>Firmware Revision: 1.10</td>
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(End of data from sysinfo program)

Compiler Version Notes

---
C
| 519.lbm_r(base, peak) 538.imagick_r(base, peak) 544.nab_r(base, peak) |
---
AMD clang version 14.0.6 (CLANG: AOCC_4.0.0-Build#389 2022_10_07) (based on LLVM Mirror.Version.14.0.6) |
Target: x86_64-unknown-linux-gnu |
Thread model: posix |
InstalledDir: /opt/AMD/aocc/aocc-compiler-rel-4.0-3206-389/bin |
---
C++
| 508.namd_r(base, peak) 510.parest_r(base, peak) |
---
AMD clang version 14.0.6 (CLANG: AOCC_4.0.0-Build#389 2022_10_07) (based on LLVM Mirror.Version.14.0.6) |
Target: x86_64-unknown-linux-gnu |
(Continued on next page)
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ProLiant DL325 Gen11
(2.40 GHz, AMD EPYC 9654P)

<table>
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<th>SPECrate®2017_fp_base =</th>
<th>SPECrate®2017_fp_peak =</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

Test Sponsor: HPE
Hardware Availability: Dec-2022
Software Availability: Nov-2022

SPEC has determined that this result does not comply with the SPEC CPU 2017 run and reporting rules. Specifically, the test sponsor notified SPEC that the results were measured on an unsupported configuration.

Compiler Version Notes (Continued)

Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /opt/AMD/aocc/aocc-compiler-rel-4.0-3206-389/bin

Base Compiler Invocation

C benchmarks:
clang

C++ benchmarks:
clang++

Fortran benchmarks:
flang

Benchmarks using both Fortran and C:
flang clang

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

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

Base Portability Flags

503.bwaves_r: -DSPEC_LP64
507.cactusSSN_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_CASE_FLAG -Mbyteswapio -DSPEC_LP64
526.blender_r: -funsigned-char -DSPEC_LP64
527.cam4_r: -DSPEC_CASE_FLAG -DSPEC_LP64

(Continued on next page)
SPEC has determined that this result does not comply with the SPEC CPU 2017 run and reporting rules. Specifically, the test sponsor notified SPEC that the results were measured on an unsupported configuration.

### Base Portability Flags (Continued)

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:**
- m64 -flto -Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
- Wl, -mllvm -Wl,-reduce-array-computations=3
- Wl, -mllvm -Wl,-ldis-t scalar-expand -fenable-aggressive-gather -O3
- march=znver4 -fveclib=AMDLIBM -ffast-math -fstruct-layout=7
- mllvm -unroll-threshold=1000
- freemap-arrays -fstrip-mining -mllvm -reduce-array-computations=3
- zopt -lamdlibm -llamdalloc -flang

**C++ benchmarks:**
- m64 -flto -Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
- Wl, -mllvm -Wl,-reduce-array-computations=3
- Wl, -mllvm -Wl,-x86-use-vzeroupper=false -O3 -march=znver4
- fveclib=AMDLIBM -ffast-math -mllvm -unroll-threshold=100
- finline-aggressive -mllvm -loop-unswitch-threshold=200000
- mllvm -reduce-array-computations=3 -zopt -lamdlibm -lamdalloc

**Fortran benchmarks:**
- m64 -flto -Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
- Wl, -mllvm -Wl,-reduce-array-computations=3
- Wl, -mllvm -Wl,-enable-X86-prefetching -O3 -march=znver4
- fveclib=AMDLIBM -ffast-math -Kieee -Mrecursive -funroll-loops
- mllvm -lsr-in-nested-loop -mllvm -reduce-array-computations=3
- fepilog-vectorization-of-inductions -zopt -lamdlibm -lamdalloc
- flang

**Benchmarks using both Fortran and C:**
- m64 -flto -Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
- Wl, -mllvm -Wl,-reduce-array-computations=3

(Continued on next page)
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### Base Optimization Flags (Continued)

Benchmarks using both Fortran and C (continued):
- `-Wl,-mllvm -Wl,enable-X86-prefetching -O3,march=znver4`
- `-fveclib=AMDLIBM -ffast-math -fstruct-layout=7`
- `-mllvm -unroll-threshold=50 -mllvm -inline-threshold=1000`
- `-fremap-arrays -fstrip-mining -mllvm -reduce-array-computations=3`
- `-zopt -Kieee -Mrecursive -funroll-loops -mllvm -lsr-in-nested-loop`
- `-fepilog-vectorization-of-inductions -lamdlibm -lamdalloc -lflang`

Benchmarks using both C and C++:
- `-m64 -flto -Wl,-mllvm -Wl,align-all-nofallthru-blocks=6`
- `-Wl,-mllvm -Wl,reduce-array-computations=3`
- `-Wl,-mllvm -Wl,-x86-use-vzeroupper=false -O3,march=znver4`
- `-fveclib=AMDLIBM -ffast-math -fstruct-layout=7`
- `-mllvm -unroll-threshold=50 -mllvm -inline-threshold=1000`
- `-fremap-arrays -fstrip-mining -mllvm -reduce-array-computations=3`
- `-zopt -mllvm -unroll-threshold=100 -finline-aggressive`
- `-mllvm -loop-unswitch-threshold=200000 -lamdlibm -lamdalloc -lflang`

Benchmarks using Fortran, C and C++:
- `-m64 -flto -Wl,-mllvm -Wl,align-all-nofallthru-blocks=6`
- `-Wl,-mllvm -Wl,reduce-array-computations=3`
- `-Wl,-mllvm -Wl,-x86-use-vzeroupper=false -O3,march=znver4`
- `-fveclib=AMDLIBM -ffast-math -fstruct-layout=7`
- `-mllvm -unroll-threshold=50 -mllvm -inline-threshold=1000`
- `-fremap-arrays -fstrip-mining -mllvm -reduce-array-computations=3`
- `-zopt -mllvm -unroll-threshold=100000 -finline-aggressive`
- `-mllvm -loop-unswitch-threshold=200000 -Kieee -Mrecursive`
- `-funroll-loops -mllvm -lsr-in-nested-loop`
- `-fepilog-vectorization-of-inductions -lamdlibm -lamdalloc -lflang`

### Base Other Flags

C benchmarks:
- `-Wno-unused-command-line-argument`

C++ benchmarks:
- `-Wno-unused-command-line-argument`
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### Base Other Flags (Continued)

Fortran benchmarks:
- `-Wno-unused-command-line-argument`

Benchmarks using both Fortran and C:
- `-Wno-unused-command-line-argument`

Benchmarks using both C and C++:
- `-Wno-unused-command-line-argument`

Benchmarks using Fortran, C, and C++:
- `-Wno-unused-command-line-argument`

### Peak Compiler Invocation

C benchmarks:
- `clang`

C++ benchmarks:
- `clang++`

Fortran benchmarks:
- `flang`

Benchmarks using both Fortran and C:
- `flang clang`

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

Benchmarks using Fortran, C, and C++:
- `clang++ clang flang`
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Peak Portability Flags

Same as Base Portability Flags

Peak Optimization Flags

C benchmarks:

519.lbm_r: basepeak = yes


544.nab_r: basepeak = yes

C++ benchmarks:

508.namd_r: basepeak = yes

Fortran benchmarks:

503.bwaves_r: basepeak = yes

549.fotonik3d_r: basepeak = yes

(Continued on next page)
SPEC has determined that this result does not comply with the SPEC CPU 2017 run and reporting rules. Specifically, the test sponsor notified SPEC that the results were measured on an unsupported configuration.

Peak Optimization Flags (Continued)

554.roms_r: -m64 -flto -W1, -mlvm -W1 -align-all-nofallthru-blocks=6
  -W1, -mlvm -W1 -reduce-array-computations=3
  -W1, -mlvm -W1 -enable-X86-prefetching -Ofast
  -march=znver4 -fveclib=AMDLIBM -ffast-math -Mrecursive
  -mlvm -reduce-array-computations=3
  -fepilog-vectorization-of-inductions -zopt -lamdlibm
  -lamdalloc -llflang

Benchmarks using both Fortran and C:

521.wrf_r: basepeak = yes

527.cam4_r: -m64 -flto -W1, -mlvm -W1 -align-all-nofallthru-blocks=6
  -W1, -mlvm -W1 -reduce-array-computations=3
  -W1, -mlvm -W1 -enable-X86-prefetching -Ofast
  -march=znver4 -fveclib=AMDLIBM -ffast-math -fstruct-layout=7
  -mlvm -unroll-threshold=50 -mlvm -inline-threshold=1000
  -fremap-arrays -fscalar -fstruct-math -align-all-nofallthru-blocks=6
  -fstruct-layout=7
  -Ktheme -Mrecursive -funroll-loops
  -mlvm -lsr-in-nested-loop
  -fepilog-vectorization-of-inductions -lamdlibm -lamdalloc
  -llflang

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

526.blender_r: basepeak = yes

520.blender_r: basepeak = yes

Benchmarks using Fortran, C, and C++:

- -m64 -flto -W1, -mlvm -W1 -align-all-nofallthru-blocks=6
  -W1, -mlvm -W1 -reduce-array-computations=3
  -W1, -mlvm -W1 -x86-use-vzeroupper=false -Ofast
  -march=znver4 -fveclib=AMDLIBM -ffast-math
  -fstruct-layout=7
  -mlvm -unroll-threshold=50 -fremap-arrays -fstrip-mining
  -mlvm -inline-threshold=1000
  -mlvm -reduce-array-computations=3
  -mlvm -unroll-threshold=100
  -mlvm -loop-unschedule-threshold=200000
  -finline-aggressive -faggressive-loop-transform -fvector-transform
  -fscalar-transform
  -Mrecursive
  -fepilog-vectorization-of-inductions

(Continued on next page)
Hewlett Packard Enterprise
(Test Sponsor: HPE)
ProLiant DL325 Gen11
(2.40 GHz, AMD EPYC 9654P)

SPEC has determined that this result does not comply with the SPEC CPU 2017 run and reporting rules. Specifically, the test sponsor notified SPEC that the results were measured on an unsupported configuration.

Peak Optimization Flags (Continued)
Benchmarks using Fortran, C, and C++ (continued):
- lamdlibm - lamdalloc - lflang

Peak Other Flags
C benchmarks:
- W-no-unused-command-line-argument
C++ benchmarks:
- W-no-unused-command-line-argument
Fortran benchmarks:
- W-no-unused-command-line-argument
Benchmarks using both Fortran and C:
- W-no-unused-command-line-argument
Benchmarks using both C and C++:
- W-no-unused-command-line-argument

The flags files that were used to format this result can be browsed at
http://www.spec.org/cpu2017/flags/HPE-Platform-Flags-AMD-Genoa-rev2.0.html
http://www.spec.org/cpu2017/flags/aocc400-flags.html

You can also download the XML flags sources by saving the following links:
http://www.spec.org/cpu2017/flags/HPE-Platform-Flags-AMD-Genoa-rev2.0.xml
http://www.spec.org/cpu2017/flags/aocc400-flags.xml
### SPEC CPU®2017 Floating Point Rate Result

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Hewlett Packard Enterprise  
(Test Sponsor: HPE)  
ProLiant DL325 Gen11  
(2.40 GHz, AMD EPYC 9654P)  

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**CPU2017 License:** 3  
**Test Sponsor:** HPE  
**Tested by:** HPE  
**Test Date:** Oct-2022  
**Hardware Availability:** Dec-2022  
**Software Availability:** Nov-2022

**Non-Compliant**  
SPEC has determined that this result does not comply with the SPEC CPU 2017 run and reporting rules. Specifically, the test sponsor notified SPEC that the results were measured on an unsupported configuration.

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