### Dell Inc.

PowerEdge R7625 (AMD EPYC 9124 16-Core Processor)

<table>
<thead>
<tr>
<th>SPECrate®2017_fp_base</th>
<th>458</th>
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</thead>
</table>

**SPECrater®2017_fp_peak = Not Run**

<table>
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<tr>
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</tr>
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<tbody>
<tr>
<td>503.bwaves_r</td>
<td>64</td>
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<tr>
<td>507.cactuBSSN_r</td>
<td>64</td>
</tr>
<tr>
<td>508.namd_r</td>
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<tr>
<td>510.parest_r</td>
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<tr>
<td>511.povray_r</td>
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<td>519.lbm_r</td>
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<td>521.wrf_r</td>
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<tr>
<td>526.blender_r</td>
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<tr>
<td>527.cam4_r</td>
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<tr>
<td>538.imagick_r</td>
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<tr>
<td>544.nab_r</td>
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<tr>
<td>549.fotonik3d_r</td>
<td>64</td>
</tr>
<tr>
<td>554.roms_r</td>
<td>64</td>
</tr>
</tbody>
</table>

**Software**

- **OS:** Ubuntu 22.04.1 LTS
- **Compiler:** C/C++/Fortran: Version 4.0.0 of AOCC
- **Parallel:** No
- **Firmware:** Version 1.0.2 released Oct-2022
- **File System:** tmpfs
- **System State:** Run level 3 (multi-user)
- **Base Pointers:** 64-bit
- **Peak Pointers:** Not Applicable
- **Other:** None
- **Power Management:** BIOS and OS set to prefer performance at the cost of additional power usage.

**Hardware**

- **CPU Name:** AMD EPYC 9124
- **Max MHz:** 3700
- **Nominal:** 3000
- **Enabled:** 32 cores, 2 chips, 2 threads/core
- **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:** 64 MB I+D on chip per chip, 16 MB shared / 4 cores
- **Other:** None
- **Memory:** 1536 GB (24 x 64 GB 2Rx4 PC5-4800B-R)
- **Storage:** 125 GB on tmpfs
- **Other:** None

**Test Details**

- **CPU2017 License:** 6573
- **Test Sponsor:** Dell Inc.
- **Tested by:** Dell Inc.
- **Test Date:** Nov-2022
- **Hardware Availability:** Feb-2023
- **Software Availability:** Nov-2022

---

*Copies*
Dell Inc.
PowerEdge R7625 (AMD EPYC 9124 16-Core Processor)

CPU2017 License: 6573
Test Sponsor: Dell Inc.
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Results Table

<table>
<thead>
<tr>
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SPECrater^2017_fp_base = 458
SPECrater^2017_fp_peak = Not Run

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

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.

Operating System Notes

'ulimit -s unlimited' was used to set environment stack size limit
'ulimit -l 2097152' was used to set environment locked pages in 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 remote memory usage, 'sysctl -w vm.zone_reclaim_mode=1' run as root.

(Continued on next page)
## Dell Inc.

### SPEC CPU®2017 Floating Point Rate Result

**PowerEdge R7625 (AMD EPYC 9124 16-Core Processor)**

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### Operating System Notes (Continued)

To clear filesystem caches, 'sync; sysctl -w vm.drop_caches=3' run as root.  
To disable address space layout randomization (ASLR) to reduce run-to-run variability, '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 = |
| "/mnt/ramdisk/cpu2017-1.1.8-aocc400-B1b/amd_rate_aocc400_genoa_B_lib/lib |
| :/mnt/ramdisk/cpu2017-1.1.8-aocc400-B1b/amd_rate_aocc400_genoa_B_lib/lib |
| 32:"
| MALLOC_CONF = "retain:true"

### General Notes

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

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.

Benchmark run from a 125 GB ramdisk created with the cmd: "mount -t tmpfs -o size=125G tmpfs /mnt/ramdisk"

### Platform Notes

- **BIOS settings:**
  - DRAM Refresh Delay: Performance
  - DIMM Self Healing on
  - Uncorrectable Memory Error: Disabled
  - Logical Processor: Enabled
  - Virtualization Technology: Disabled
  - L1 Stride Prefetcher: Disabled
  - NUMA Nodes per Socket: 4
  - L3 Cache as NUMA Domain: Enabled

(Continued on next page)
Dell Inc. PowerEdge R7625 (AMD EPYC 9124 16-Core Processor)  

SPECrate®2017_fp_base = 458  
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Platform Notes (Continued)

- System Profile: Custom
- Memory Patrol Scrub: Disabled
- PCI ASPM L1 Link
  - Power Management: Disabled
- Determinism Slider: Power Determinism

Sysinfo program /mnt/ramdisk/cpu2017-1.1.8-aoccc400-B1b/bin/sysinfo
Rev: r6622 of 2021-04-07 982a61ec0915b55891ef0e16acaf64d
running on amd-sut Thu Nov 10 17:23:33 2022

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: AMD EPYC 9124 16-Core Processor
- 2 "physical id"s (chips)
- 64 "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 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 2.37.2:

- Architecture: x86_64
- CPU op-mode(s): 32-bit, 64-bit
- Address sizes: 52 bits physical, 57 bits virtual
- Byte Order: Little Endian
- CPU(s): 64
- On-line CPU(s) list: 0-63
- Vendor ID: AuthenticAMD
- Model name: AMD EPYC 9124 16-Core Processor
- CPU family: 25
- Model: 17
- Thread(s) per core: 2
- Core(s) per socket: 16
- Socket(s): 2
- Stepping: 1
- Frequency boost: enabled
- CPU max MHz: 3713.0000
- CPU min MHz: 400.0000
- BogoMIPS: 6001.87
- 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

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

**Dell Inc.**

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**Platform Notes (Continued)**

pdpe1gb rdtscp lm constant_tsc rep_good nopl nonstop_tsc 
cpuid extd_apicid aperfmperf rpl rapl pmlmulqdq monitor ssse3 fma cx16 pcid sse4_1 sse4_2 
x2apic movbe 
 popcnt aes xsave avx fl6c rdrand lahf_lm cmp_legacy svm extapic cr8_legacy abm sse4a 
misalignsse 3donwprefetch osvw ibs skinit wdt tce topoext perfctr_core perfctr_nb 
bpext perfctr_llc mwaitx cpb cat_l3 cdp_l3 invpcid_single hw_pstate ssbd mba ibrs ibpb stibp 
vmcall fsqsbse bml avx2 smep bmi2 erms invpcid cgq rdt_a avx512f 
avx512dq rdseed adx smap avx512ifma clflushopt clwb avx512cd sha ni avx512bw 
avx512vl xsaveopt xsavec xgetbv1 xsaves cgq_llc cgq_occup_llc cgq_mbb_total 
cgq_mbb_local avx512_bf16 clzero irperf xsaverpr txdpru wbnoinvd amd_ppin cppc arat 
npt lbrv svmp folder tsc scale vmpco_clean flushbyasid decodeassists 
pausefilter pfthreshold avic v_vmsave_vmload vgif v_spec_ctrl avx512vbmi umip pku 
ospke avx512_vmbi2 gfin vaes vpcmulqdq avx512_vnni avx512_bitalg avx512_vpopcntdq 
lav57 rdpid overflow_recov succor smca fasm flush_lld

Virtualization: AMD-V

L1d cache: 1 MiB (32 instances)  
L1i cache: 1 MiB (32 instances)  
L2 cache: 32 MiB (32 instances)  
L3 cache: 128 MiB (8 instances)  
NUMA node(s): 8

NUMA node0 CPU(s): 0-3,32-35  
NUMA node1 CPU(s): 8-11,40-43  
NUMA node2 CPU(s): 12-15,44-47  
NUMA node3 CPU(s): 4-7,36-39  
NUMA node4 CPU(s): 16-19,48-51  
NUMA node5 CPU(s): 24-27,56-59  
NUMA node6 CPU(s): 28-31,60-63  
NUMA node7 CPU(s): 20-23,52-55

Vulnerability Itlb multihit: Not affected  
Vulnerability L1itf: Not affected  
Vulnerability Mds: Not affected  
Vulnerability Meltdown: Not affected  
Vulnerability Mmio stale data: Not affected  
Vulnerability Retbleed: Not affected  
Vulnerability Spec store bypass: Mitigation; Speculative Store Bypass disabled via 
prctl and seccomp  
Vulnerability Spectre v1: Mitigation; usercopy/swapgs barriers and __user 
pointer sanitation  
Vulnerability Spectre v2: Mitigation; Retpolines, IBPB conditional, IBRS_FW, 
STIBP always-on, RSB filling  
Vulnerability Srbd: Not affected  
Vulnerability Txs async abort: Not affected

From lscpu --cache:

<table>
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<tr>
<th>NAME</th>
<th>ONE-SIZE</th>
<th>ALL-SIZE</th>
<th>WAYS</th>
<th>TYPE</th>
<th>LEVEL</th>
<th>SETS</th>
<th>PHY-LINE</th>
<th>COHERENCY-SIZE</th>
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<td>8</td>
<td>Data</td>
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<tr>
<td>L1i</td>
<td>32K</td>
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**Platform Notes (Continued)**

- **/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: 8 nodes (0-7)
  - node 0 cpus: 0 1 2 3 32 33 34 35
  - node 0 size: 193079 MB
  - node 0 free: 192542 MB
  - node 1 cpus: 8 9 10 11 40 41 42 43
  - node 1 size: 193497 MB
  - node 1 free: 192979 MB
  - node 2 cpus: 12 13 14 15 44 45 46 47
  - node 2 size: 193533 MB
  - node 2 free: 193031 MB
  - node 3 cpus: 4 5 6 7 36 37 38 39
  - node 3 size: 193517 MB
  - node 3 free: 193025 MB
  - node 4 cpus: 16 17 18 19 48 49 50 51
  - node 4 size: 193533 MB
  - node 4 free: 189528 MB
  - node 5 cpus: 24 25 26 27 56 57 58 59
  - node 5 size: 193533 MB
  - node 5 free: 193052 MB
  - node 6 cpus: 28 29 30 31 60 61 62 63
  - node 6 size: 193533 MB
  - node 6 free: 193053 MB
  - node 7 cpus: 20 21 22 23 52 53 54 55
  - node 7 size: 193510 MB
  - node 7 free: 193012 MB

From /proc/meminfo
- MemTotal: 15848884184 kB
- HugePages_Total: 0
- Hugepagesize: 2048 kB

(Continued on next page)
Platform Notes (Continued)

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

/sys/devices/system/cpu/cpu*/cpufreq/scaling_governor has performance

/usr/bin/lsb_release -d
    Ubuntu 22.04.1 LTS

From /etc/*release* /etc/*version*
    debian_version: bookworm/sid
    os-release:
        PRETTY_NAME="Ubuntu 22.04.1 LTS"
        NAME="Ubuntu"
        VERSION_ID="22.04"
        VERSION="22.04.1 LTS (Jammy Jellyfish)"
        VERSION_CODENAME=jammy
        ID=ubuntu
        ID_LIKE=debian
        HOME_URL="https://www.ubuntu.com/"

uname -a:
    Linux amd-sut 5.15.0-46-generic #49-Ubuntu SMP Thu Aug 4 18:03:25 UTC 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

mmio_stale_data:
    Not affected

retbleed:
    Mitigation: Speculative Store Bypass disabled via prctl and seccomp

CVE-2018-3639 (Speculative Store Bypass):
    Mitigation: usercopy/swapgs barriers and __user pointer sanitization

CVE-2017-5753 (Spectre variant 1):
    Mitigation: Retpolines, IBPB: conditional, IBRS_FW, STIBP: always-on, RSB filling

CVE-2017-5715 (Spectre variant 2):

CVE-2020-0543 (Special Register Buffer Data Sampling):
    Not affected

CVE-2019-11135 (TSX Asynchronous Abort):
    Not affected

run-level 3 Nov 10 15:41
**SPEC CPU®2017 Floating Point Rate Result**

**Dell Inc.**

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**Platform Notes (Continued)**

SPEC is set to: /mnt/ramdisk/cpu2017-1.1.8-aocc400-B1b

Filesystem | Type | Size | Used | Avail | Use% | Mounted on |
---|---|---|---|---|---|---|
tmpfs | tmpfs | 125G | 3.4G | 122G | 3% | /mnt/ramdisk |

From /sys/devices/virtual/dmi/id

Vendor: Dell Inc.  
Product: PowerEdge R7625  
Product Family: PowerEdge  
Serial: BRZ5015

Additional information from dmidecode 3.3 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:
- 1x 802C0000802C MTC40F2046S1RC48BA1 64 GB 2 rank 4800
- 23x 80AD000080AD HMCG94MEBRA109N 64 GB 2 rank 4800

BIOS:
- BIOS Vendor: Dell Inc.  
- BIOS Version: 1.0.2  
- BIOS Date: 10/17/2022  
- BIOS Revision: 1.0

(End of data from sysinfo program)

**Compiler Version Notes**

---

| C | 519.libm_r(base) 538.imagick_r(base) 544.nab_r(base) |
|---|---|---|

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

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<thead>
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<th>C++</th>
<th>508.namd_r(base) 510.parest_r(base)</th>
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</table>

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

(Continued on next page)
### Compiler Version Notes (Continued)

- C++, C
  - InstalledDir: /opt/AMD/aocc/aocc-compiler-rel-4.0-3206-389/bin

<table>
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<tr>
<th>511.povray_r(base) 526.blender_r(base)</th>
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  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

  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++, C, Fortran
  - InstalledDir: /opt/AMD/aocc/aocc-compiler-rel-4.0-3206-389/bin

<table>
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<tr>
<th>507.cactuBSSN_r(base)</th>
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  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

  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

- Fortran
  - InstalledDir: /opt/AMD/aocc/aocc-compiler-rel-4.0-3206-389/bin

<table>
<thead>
<tr>
<th>503.bwaves_r(base) 549.fotonik3d_r(base) 554.roms_r(base)</th>
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</table>

  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
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  Thread model: posix
  InstalledDir: /opt/AMD/aocc/aocc-compiler-rel-4.0-3206-389/bin

  (Continued on next page)
Dell Inc.

PowerEdge R7625 (AMD EPYC 9124 16-Core Processor)

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<tr>
<td>SPECrate®2017_fp_peak</td>
<td>Not Run</td>
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</tbody>
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CPU2017 License: 6573
Test Sponsor: Dell Inc.
Tested by: Dell Inc.

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**Compiler Version Notes (Continued)**

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**Base Compiler Invocation**

C benchmarks:
```sh
clang
```

C++ benchmarks:
```sh
clang++
```

Fortran benchmarks:
```sh
flang
```

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

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

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

**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

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

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
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 -W1,-mlllvm -W1,-align-all-nofallthru-blocks=6
- W1,-mlllvm -W1,-reduce-array-computations=3
- W1,-mlllvm -W1,-ldist-scalar-expand -fenable-aggressive-gather -O3
- march=znver4 -fveclib=AMDLIBM -ffast-math -fstruct-layout=7
- mlllvm -unroll-threshold=50 -mlllvm -inline-threshold=1000
- fremap-arrays -fstrip-mining -mlllvm -reduce-array-computations=3
- zopt -lamdlibm -ladmalloc -lflang

**C++ benchmarks:**
- m64 -flto -W1,-mlllvm -W1,-align-all-nofallthru-blocks=6
- W1,-mlllvm -W1,-reduce-array-computations=3
- W1,-mlllvm -W1,-x86-use-vzeroupper=false -O3 -march=znver4
- fveclib=AMDLIBM -ffast-math -mlllvm -unroll-threshold=100
- finline-aggressive -mlllvm -loop-unswitch-threshold=200000
- mlllvm -reduce-array-computations=3 -zopt -lamdlibm -ladmalloc
- lflang

**Fortran benchmarks:**
- m64 -flto -W1,-mlllvm -W1,-align-all-nofallthru-blocks=6
- W1,-mlllvm -W1,-reduce-array-computations=3
- W1,-mlllvm -W1,-enable-X86-prefetching -O3 -march=znver4
- fveclib=AMDLIBM -ffast-math -Kieee -Mrecursive -funroll-loops
- mlllvm -lsr-in-nested-loop -mlllvm -reduce-array-computations=3
- fepilog-vectorization-of-inductions -zopt -lamdlibm -ladmalloc
- lflang

**Benchmarks using both Fortran and C:**
- m64 -flto -W1,-mlllvm -W1,-align-all-nofallthru-blocks=6
- W1,-mlllvm -W1,-reduce-array-computations=3
- W1,-mlllvm -W1,-enable-X86-prefetching -O3 -march=znver4
- fveclib=AMDLIBM -ffast-math -fstruct-layout=7
- mlllvm -unroll-threshold=50 -mlllvm -inline-threshold=1000

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

### Benchmarks using both Fortran and C (continued):
- `-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-unschedule-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=100 -finline-aggressive`
- `-mllvm -loop-unschedule-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`

### 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`

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

**Dell Inc.**

PowerEdge R7625 (AMD EPYC 9124 16-Core Processor)

<table>
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<tr>
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</table>

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**CPU2017 License:** 6573

**Test Sponsor:** Dell Inc.

**Tested by:** Dell Inc.

**Test Date:** Nov-2022

**Hardware Availability:** Feb-2023

**Software Availability:** Nov-2022

### Base Other Flags (Continued)

Benchmarks using Fortran, C, and C++:

- `-Wno-unused-command-line-argument`

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

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/aocc400-flags.xml

http://www.spec.org/cpu2017/flags/Dell-Platform-Flags-PowerEdge-AMD-EPYC-v1.0.xml

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