



SPEC CPU®2026 Floating Point Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

Dell Inc.

SPECrate®2026_fp_base = 414

PowerEdge R7715 (AMD EPYC 9845 160-Core Processor)

SPECrate®2026_fp_peak = 414

CPU2026 License: 6573

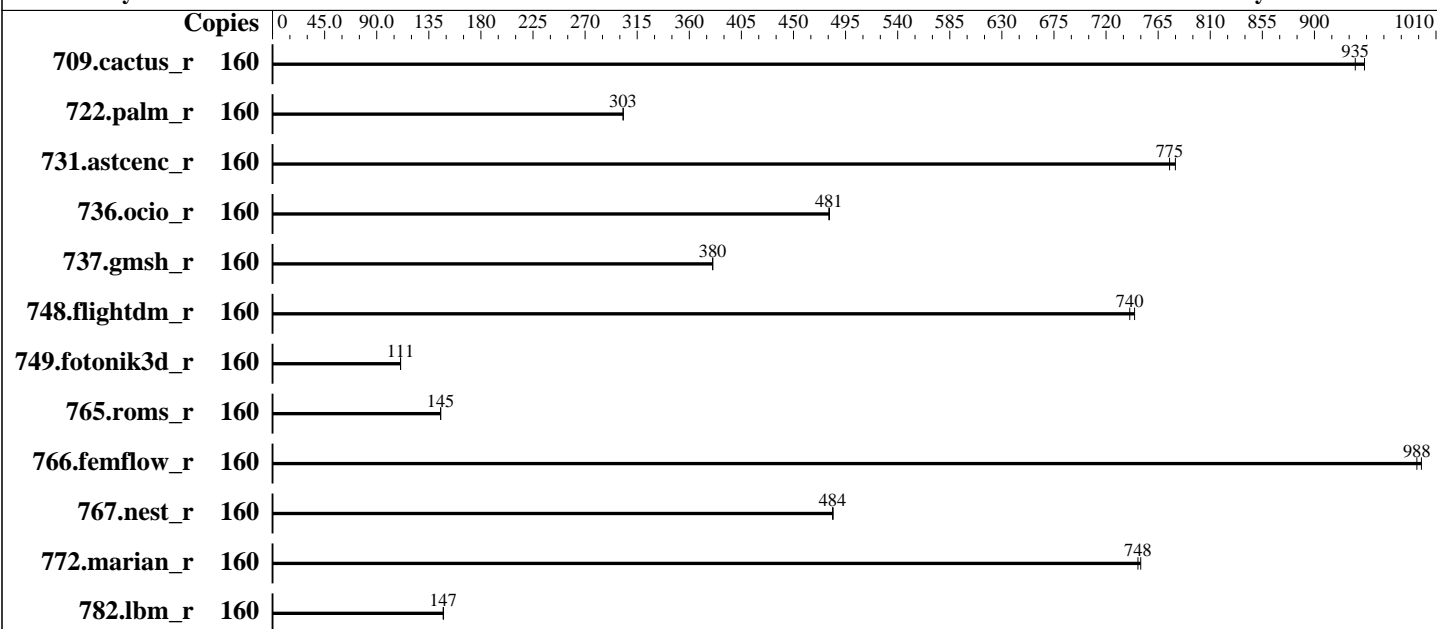
Test Date: Feb-2026

Test Sponsor: Dell Inc.

Hardware Availability: Mar-2025

Tested by: Dell Inc.

Software Availability: Jan-2026



Hardware

CPU Name: AMD EPYC 9845
 Max MHz: 3700
 Nominal: 2100
 Enabled: 160 cores, 1 chip
 Orderable: 1 chip
 Cache L1: 32 KB I + 48 KB D on chip per core
 L2: 1 MB I+D on chip per core
 L3: 320 MB I+D on chip per chip, 32 MB shared / 16 cores
 Other: None
 Memory: 768 GB (12 x 64 GB 2Rx4 PC5-6400B-R, running at 5200)
 Storage: 110 GB on tmpfs
 Cooling: Air
 Other: None

Software

OS: Ubuntu 24.04.2 LTS
 6.8.0-85-generic
 Compiler: C/C++/Fortran: Version 5.1.0 of AOCC
 Compiler Category: Vendor
 Firmware: Version 1.5.3 released Oct-2025
 File System: tmpfs
 System State: Run level 5 (graphical multi-user)
 Base Pointers: 64-bit
 Peak Pointers: 64-bit
 Other: None
 Power Management: BIOS set to prefer performance at the cost of additional power usage.



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Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
709.cactus_r	160	146	943	<u>147</u>	<u>935</u>			160	146	943	<u>147</u>	<u>935</u>		
722.palm_r	160	<u>698</u>	<u>303</u>	697	303			160	<u>698</u>	<u>303</u>	697	303		
731.ascenc_r	160	<u>173</u>	<u>775</u>	172	780			160	<u>173</u>	<u>775</u>	172	780		
736.ocio_r	160	291	481	<u>291</u>	<u>481</u>			160	291	481	<u>291</u>	<u>481</u>		
737.gmsh_r	160	193	380	<u>193</u>	<u>380</u>			160	193	380	<u>193</u>	<u>380</u>		
748.flightdm_r	160	154	745	<u>155</u>	<u>740</u>			160	154	745	<u>155</u>	<u>740</u>		
749.fotonik3d_r	160	1672	111	<u>1673</u>	<u>111</u>			160	1672	111	<u>1673</u>	<u>111</u>		
765.roms_r	160	1735	145	<u>1735</u>	<u>145</u>			160	1735	145	<u>1735</u>	<u>145</u>		
766.femflow_r	160	237	992	<u>237</u>	<u>988</u>			160	237	992	<u>237</u>	<u>988</u>		
767.nest_r	160	262	484	<u>262</u>	<u>484</u>			160	262	484	<u>262</u>	<u>484</u>		
772.marian_r	160	337	750	<u>338</u>	<u>748</u>			160	337	750	<u>338</u>	<u>748</u>		
782.lbm_r	160	621	148	<u>622</u>	<u>147</u>			160	621	148	<u>622</u>	<u>147</u>		

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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.

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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/cpu2026rc2/amd_rate_aocc510_znver5_A_lib/lib:/mnt/ramdisk/cpu2026rc2/amd_rate_aocc510_znver5_A_lib/lib32:"
MALLOC_CONF = "retain:true"

General Notes

Binaries were compiled on a system with 2x AMD EPYC Venice256 CPU + 2TiB Memory using Ubuntu 24.04
Benchmark run from a 110 GB ramdisk created with the cmd: "mount -t tmpfs -o size=110G tmpfs /mnt/ramdisk"

Platform Notes

BIOS Settings:
Logical Processor : Disabled
Virtualization Technology : Disabled
NUMA Nodes Per Socket : 2

System Profile : Custom
CPU Power Management : Maximum Performance
C-States : Disabled
Memory Patrol Scrub : Disabled
PCI ASPM L1 Link Power Management : Disabled
Periodic Directory Rinse Tuning : Blended
Determinism Control : Manual
Determinism Slider : Power Determinism
Optimizer Mode : Enabled
Algorithm Performance Boost Disable : Enabled
ApbDis Fixed DF P-State : P0
Adaptive Allocation : Enabled
Dram Refresh Delay : Performance

Sysinfo program /mnt/ramdisk/cpu2026rc2/bin/sysinfo

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Platform Notes (Continued)

Rev: 069f95da7e7f5d81b2ce48a82150e54f
running on SLR7719-R7715 Fri Feb 6 10:21:24 2026

SUT (System Under Test) info as seen by some common utilities.

Table of contents

1. uname -srvm
2. w
3. Username
4. ulimit -a
5. sysinfo process ancestry
6. /proc/cpuinfo
7. lscpu
8. numactl --hardware
9. /proc/meminfo
10. who -r
11. Systemd service manager version: systemd 255 (255.4-lubuntu8.8)
12. Failed units, from systemctl list-units --state=failed
13. Services, from systemctl list-unit-files
14. Linux kernel boot-time arguments, from /proc/cmdline
15. cpupower frequency-info
16. sysctl
17. /sys/kernel/mm/transparent_hugepage
18. /sys/kernel/mm/transparent_hugepage/khugepaged
19. OS release
20. Disk information
21. /sys/devices/virtual/dmi/id
22. dmidecode
23. BIOS

```

1. uname -srvm
Linux 6.8.0-85-generic #85-Ubuntu SMP PREEMPT_DYNAMIC Thu Sep 18 15:26:59 UTC 2025 x86_64

```

```

2. w
10:21:24 up 14 min, 1 user, load average: 0.13, 0.05, 0.01
USER      TTY      FROM          LOGIN@      IDLE        JCPU      PCPU      WHAT
root      tty1    -             10:18      28.00s    2.28s    1.05s    /bin/bash ./amd_rate_aocc510_znver5_A1.sh

```

```

3. Username
From environment variable $USER: root

```

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Platform Notes (Continued)

4. ulimit -a

```

time(seconds)          unlimited
file(blocks)           unlimited
data(kbytes)           unlimited
stack(kbytes)          unlimited
coredump(blocks)      0
memory(kbytes)         unlimited
locked memory(kbytes) 2097152
process                3092768
nofiles                1024
vmemory(kbytes)        unlimited
locks                  unlimited
rtprio                 0

```

5. sysinfo process ancestry

```

/sbin/init splash
/bin/login -p --
-bash
/bin/bash /home/DellFiles/bin/DELL_rate.sh
/bin/bash /home/DellFiles/bin/dell-run-main.sh rate
/bin/bash /home/DellFiles/bin/dell-run-main.sh rate
/bin/bash /home/DellFiles/bin/AMD/dell-run-speccpu.sh rate --define DL-VERS=7.0_T01 --output_format
html,pdf,txt
python3 ./run_amd_rate_aocc510_znver5_A1.py
/bin/bash ./amd_rate_aocc510_znver5_A1.sh
runcpu --config amd_rate_aocc510_znver5_A1.cfg --tune base --reportable --iterations 2 --define
DL-VERS=7.0_T01 --output_format html,pdf,txt fprate
runcpu --configfile amd_rate_aocc510_znver5_A1.cfg --tune base --reportable --iterations 2 --define
DL-VERS=7.0_T01 --output_format html,pdf,txt --nopower --runmode rate --tune base --size
test:train:refrate fprate --nopreenv --note-preenv --logfile
$SPEC/tmp/CPU2026.001/tempslogs/preenv.fprate.001.0.log --lognum 001.0 --from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /mnt/ramdisk/cpu2026rc2

```

6. /proc/cpuinfo

```

model name      : AMD EPYC 9845 160-Core Processor
vendor_id      : AuthenticAMD
cpu family     : 26
model          : 17
stepping       : 0
microcode      : 0xb101054
bugs           : sysret_ss_attrs spectre_v1 spectre_v2 spec_store_bypass
TLB size      : 192 4K pages
cpu cores     : 160

```

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Platform Notes (Continued)

```
siblings          : 160
1 physical ids (chips)
160 processors (hardware threads)
physical id 0: core ids 0-159
physical id 0: apicids 0-159
```

Caution: /proc/cpuinfo data regarding chips, cores, and threads is not necessarily reliable, especially for virtualized systems. Use the above data carefully.

7. lscpu

From lscpu from util-linux 2.39.3:

```
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):                160
On-line CPU(s) list:   0-159
Vendor ID:             AuthenticAMD
BIOS Vendor ID:       AMD
Model name:            AMD EPYC 9845 160-Core Processor
BIOS Model name:      AMD EPYC 9845 160-Core Processor      CPU @ 2.1GHz
BIOS CPU family:      107
CPU family:           26
Model:                17
Thread(s) per core:   1
Core(s) per socket:   160
Socket(s):            1
Stepping:             0
Frequency boost:      enabled
CPU(s) scaling MHz:   177%
CPU max MHz:          2100.0000
CPU min MHz:          1500.0000
BogoMIPS:             4194.39
```

```
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 amd_lbr_v2 nopl nonstop_tsc cpuid
extd_apicid aperfmperf rapl pni pclmulqdq monitor ssse3 fma cx16 pcid
sse4_1 sse4_2 x2apic movbe popcnt aes xsave avx f16c rdrand lahf_lm
cmp_legacy extapic cr8_legacy abm sse4a misalignsse 3dnowprefetch
osvw ibs skinit wdt tce topoext perfctr_core perfctr_nb bpext
perfctr_llc mwaitx cpb cat_l3 cdp_l3 hw_pstate ssbd mba perfmon_v2
ibrs ibpb stibp ibrs_enhanced vmmcall fsgsbase tsc_adjust bmi1 avx2
smep bmi2 invpcid cqm rdt_a avx512f avx512dq rdseed adx smap
avx512ifma clflushopt clwb avx512cd sha_ni avx512bw avx512vl xsaveopt
xsaves xgetbv1 xsaves cqm_llc cqm_occup_llc cqm_mbm_total
cqm_mbm_local user_shstk avx_vnni avx512_bf16 clzero irperf
```

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Platform Notes (Continued)

```
xsaveerptr rdpru wbnoinvd amd_ppin cpcp amd_ibpb_ret arat npt lbrv
svm_lock nrrip_save tsc_scale vmcb_clean flushbyasid decodeassists
pausefilter pfthreshold avic v_vmsave_vmload vgif x2avic v_spec_ctrl
vnmi avx512vbmi umip pku ospke avx512_vbmi2 gfni vaes vpclmulqdq
avx512_vnni avx512_bitalg avx512_vpopcntdq la57 rdpid bus_lock_detect
movdiri movdir64b overflow_recov succor smca avx512_vp2intersect
```

```
flush_llid debug_swap
Lld cache: 7.5 MiB (160 instances)
Lli cache: 5 MiB (160 instances)
L2 cache: 160 MiB (160 instances)
L3 cache: 320 MiB (10 instances)
NUMA node(s): 2
NUMA node0 CPU(s): 0-79
NUMA node1 CPU(s): 80-159
Vulnerability Gather data sampling: Not affected
Vulnerability Itlb multihit: Not affected
Vulnerability L1tf: Not affected
Vulnerability Mds: Not affected
Vulnerability Meltdown: Not affected
Vulnerability Mmio stale data: Not affected
Vulnerability Reg file data sampling: Not affected
Vulnerability Retbleed: Not affected
Vulnerability Spec rstack overflow: Not affected
Vulnerability Spec store bypass: Mitigation; Speculative Store Bypass disabled via prctl
Vulnerability Spectre v1: Mitigation; usercopy/swapgs barriers and __user pointer sanitization
Vulnerability Spectre v2: Mitigation; Enhanced / Automatic IBRS; IBPB conditional; STIBP
disabled; RSB filling; PBSB-eIBRS Not affected; BHI Not affected
Vulnerability Srbds: Not affected
Vulnerability Tsx async abort: Not affected
```

From lscpu --cache:

NAME	ONE-SIZE	ALL-SIZE	WAYS	TYPE	LEVEL	SETS	PHY-LINE	COHERENCY-SIZE
Lld	48K	7.5M	12	Data	1	64	1	64
Lli	32K	5M	8	Instruction	1	64	1	64
L2	1M	160M	16	Unified	2	1024	1	64
L3	32M	320M	16	Unified	3	32768	1	64

8. numactl --hardware

NOTE: a numactl 'node' might or might not correspond to a physical chip.

```
available: 2 nodes (0-1)
node 0 cpus: 0-79
node 0 size: 386329 MB
node 0 free: 385058 MB
node 1 cpus: 80-159
node 1 size: 386940 MB
node 1 free: 371449 MB
```

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Platform Notes (Continued)

node distances:

```
node 0 1
0: 10 12
1: 12 10
```

9. /proc/meminfo
MemTotal: 791828616 kB

10. who -r
run-level 5 Feb 6 10:06

11. Systemd service manager version: systemd 255 (255.4-lubuntu8.8)
Default Target Status
graphical degraded

12. Failed units, from systemctl list-units --state=failed
UNIT LOAD ACTIVE SUB DESCRIPTION
* nvidia-persistenced.service loaded failed failed NVIDIA Persistence Daemon
Legend: LOAD -> Reflects whether the unit definition was properly loaded.
ACTIVE -> The high-level unit activation state, i.e. generalization of SUB.
SUB -> The low-level unit activation state, values depend on unit type.
1 loaded units listed.

13. Services, from systemctl list-unit-files
STATE UNIT FILES
enabled ModemManager apparmor appport blk-availability cloud-config cloud-final cloud-init cloud-init-local console-setup containerd cron dmesg docker e2scrub_reap finalrd getty@ gpu-manager grub-common grub-initrd-fallback keyboard-setup lm-sensors lvm2-monitor multipathd munge mysql networkd-dispatcher nvidia-persistenced nvme-fc-boot-connections nvmf-autoconnect open-iscsi open-vm-tools pollinate rsyslog secureboot-db setvtrgb ssh switcheroo-control sysstat systemd-networkd systemd-networkd-wait-online systemd-pstore systemd-resolved systemd-timesyncd thermald ua-reboot-cmds ubuntu-advantage udisks2 ufw vgauth
enabled-runtime netplan-ovs-cleanup systemd-fsck-root systemd-remount-fs
disabled console-getty debug-shell iscsid nftables nvidia-cdi-refresh nvidia-hibernate nvidia-powerd nvidia-resume nvidia-suspend nvidia-suspend-then-hibernate rsync serial-getty@ slurmd systemd-boot-check-no-failures systemd-confext systemd-network-generator systemd-networkd-wait-online@ systemd-pcrlock-file-system systemd-pcrlock-firmware-code systemd-pcrlock-firmware-config systemd-pcrlock-machine-id systemd-pcrlock-make-policy systemd-pcrlock-secureboot-authority systemd-pcrlock-secureboot-policy systemd-sysext systemd-time-wait-sync upower
generated gdrdrv

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Platform Notes (Continued)

```
indirect          systemd-sysupdate systemd-sysupdate-reboot uidd
masked           cryptdisks cryptdisks-early hwclock multipath-tools-boot screen-cleanup sudo x11-common
```

14. Linux kernel boot-time arguments, from /proc/cmdline

```
BOOT_IMAGE=/boot/vmlinuz-6.8.0-85-generic
root=UUID=fa6e327f-d7c6-4a1a-a00f-34f4bd279a0c
ro
quiet
splash
modprobe.blacklist=nouveau
iommu=pt
pci=realloc=off
pcie_aspm=off
nohz=off
vt.handoff=7
```

15. cpupower frequency-info

```
analyzing CPU 41:
  current policy: frequency should be within 1.50 GHz and 2.10 GHz.
                  The governor "schedutil" may decide which speed to use
                  within this range.

  boost state support:
    Supported: yes
    Active: yes
    Boost States: 0
    Total States: 3
    Pstate-P0: 2100MHz
```

16. sysctl

```
kernel.numa_balancing          1
kernel.randomize_va_space      0
vm.compaction_proactiveness    20
vm.dirty_background_bytes      0
vm.dirty_background_ratio      10
vm.dirty_bytes                  0
vm.dirty_expire_centisecs      3000
vm.dirty_ratio                  8
vm.dirty_writeback_centisecs   500
vm.dirtytime_expire_seconds    43200
vm.extfrag_threshold           500
vm.min_unmapped_ratio          1
vm.nr_hugepages                 0
vm.nr_hugepages_mempolicy      0
vm.nr_overcommit_hugepages     0
```

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Platform Notes (Continued)

```

vm.swappiness                1
vm.watermark_boost_factor    15000
vm.watermark_scale_factor    10
vm.zone_reclaim_mode         1

```

```

-----
17. /sys/kernel/mm/transparent_hugepage
defrag      [always] defer defer+madvise madvise never
enabled     [always] madvise never
hpage_pmd_size  2097152
shmem_enabled  always within_size advise [never] deny force

```

```

-----
18. /sys/kernel/mm/transparent_hugepage/khugepaged
alloc_sleep_millisecs  60000
defrag                  1
max_ptes_none          511
max_ptes_shared        256
max_ptes_swap          64
pages_to_scan          4096
scan_sleep_millisecs   10000

```

```

-----
19. OS release
From /etc/*-release /etc/*-version
os-release Ubuntu 24.04.2 LTS

```

```

-----
20. Disk information
SPEC is set to: /mnt/ramdisk/cpu2026rc2
Filesystem      Type      Size  Used Avail Use% Mounted on
tmpfs           tmpfs    110G   11G  100G  10% /mnt/ramdisk

```

```

-----
21. /sys/devices/virtual/dmi/id
Vendor:         Dell Inc.
Product:        PowerEdge R7715
Product Family: PowerEdge
Serial:         SLR7719

```

```

-----
22. dmidecode
Additional information from dmidecode 3.5 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:

```

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Platform Notes (Continued)

12x 80AD000080AD HMC94AHBRA283N 64 GB 2 rank 6400, configured at 5200

23. BIOS

(This section combines info from /sys/devices and dmidecode.)

BIOS Vendor: Dell Inc.
BIOS Version: 1.5.3
BIOS Date: 10/29/2025
BIOS Revision: 1.5

Compiler Version Notes

C | 782.lbm_r(base)

AMD clang version 17.0.6 (CLANG: AOCC_5.1.0-Build#1994 2025_12_23)
Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /opt/AMD/aocc/aocc-compiler-5.1.0/bin

C++ | 731.astcenc_r(base) 736.ocio_r(base) 748.flightdm_r(base)
| 766.femflow_r(base) 767.nest_r(base) 772.marian_r(base)

AMD clang version 17.0.6 (CLANG: AOCC_5.1.0-Build#1994 2025_12_23)
Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /opt/AMD/aocc/aocc-compiler-5.1.0/bin

C++, C | 709.cactus_r(base) 737.gmsh_r(base)

AMD clang version 17.0.6 (CLANG: AOCC_5.1.0-Build#1994 2025_12_23)
Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /opt/AMD/aocc/aocc-compiler-5.1.0/bin

Fortran | 722.palm_r(base) 749.fotonik3d_r(base) 765.roms_r(base)

AMD clang version 17.0.6 (CLANG: AOCC_5.1.0-Build#1994 2025_12_23)
Target: x86_64-unknown-linux-gnu

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SPEC CPU®2026 Floating Point Rate Result

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SPECrate®2026_fp_base = 414

PowerEdge R7715 (AMD EPYC 9845 160-Core Processor)

SPECrate®2026_fp_peak = 414

CPU2026 License: 6573

Test Date: Feb-2026

Test Sponsor: Dell Inc.

Hardware Availability: Mar-2025

Tested by: Dell Inc.

Software Availability: Jan-2026

Compiler Version Notes (Continued)

Thread model: posix
InstalledDir: /opt/AMD/aocc/aocc-compiler-5.1.0/bin

Base Compiler Invocation

C benchmarks:

clang

C++ benchmarks:

clang++

Fortran benchmarks:

flang

Benchmarks using both C and C++:

clang++ clang

Base Portability Flags

709.cactus_r: -DSPEC_LP64
722.palm_r: -DSPEC_LP64
731.ascenc_r: -DSPEC_LP64
736.ocio_r: -fno-finite-math-only -DSPEC_LP64
737.gmsh_r: -fno-fast-math -DSPEC_LP64
748.flightdm_r: -fno-reciprocal-math -DSPEC_LP64
749.fotonik3d_r: -DSPEC_LP64
765.roms_r: -DSPEC_LP64
766.femflow_r: -DSPEC_LP64
767.nest_r: -fno-finite-math-only -DSPEC_LP64
772.marian_r: -DSPEC_LP64
782.lbm_r: -DSPEC_LP64

Base Optimization Flags

C benchmarks:

-m64 -std=c18 -Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
-Wl,-mllvm -Wl,-reduce-array-computations=3
-Wl,-mllvm -Wl,-ldist-scalar-expand -fenable-aggressive-gather
-ffast-math -O3 -march=znver5 -fveclib=AMDLIBM -fno-PIE -no-pie
-flto -fstruct-layout=7 -mllvm -unroll-threshold=50

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Base Optimization Flags (Continued)

C benchmarks (continued):

```
-mllvm -inline-threshold=1000 -fremap-arrays -fstrip-mining
-mllvm -reduce-array-computations=3 -zopt -lamdlibm -lamdalloc
-lflang
```

C++ benchmarks:

```
-m64 -std=c++17 -Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
-Wl,-mllvm -Wl,-reduce-array-computations=3
-Wl,-mllvm -Wl,-x86-use-vzeroupper=false -Wl,-mllvm -Wl,-extra-inliner
-ffast-math -O3 -march=znver5 -fveclib=AMDLIBM -flto
-mllvm -unroll-threshold=100 -mllvm -loop-unswitch-threshold=200000
-mllvm -reduce-array-computations=3 -zopt -lamdlibm -lamdalloc
-lflang
```

Fortran benchmarks:

```
-m64 -Mstandard -Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
-Wl,-mllvm -Wl,-reduce-array-computations=3
-Wl,-mllvm -Wl,-enable-X86-prefetching
-Wl,-mllvm -Wl,-enable-aggressive-gather=true
-Wl,-mllvm -Wl,-enable-masked-gather-sequence=false -ffast-math -O3
-march=znver5 -fveclib=AMDLIBM -flto -Mrecursive -funroll-loops
-mllvm -lsr-in-nested-loop -mllvm -reduce-array-computations=3
-fepilog-vectorization-of-inductions -zopt -lamdlibm -lamdalloc
-lflang
```

Benchmarks using both C and C++:

```
-m64 -std=c++17 -std=c18 -Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
-Wl,-mllvm -Wl,-reduce-array-computations=3
-Wl,-mllvm -Wl,-x86-use-vzeroupper=false -Wl,-mllvm -Wl,-extra-inliner
-ffast-math -O3 -march=znver5 -fveclib=AMDLIBM -fno-PIE -no-pie
-flto -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
-mllvm -loop-unswitch-threshold=200000 -lamdlibm -lamdalloc -lflang
```

Peak Optimization Flags

C benchmarks:

```
782.lbm_r: basepeak = yes
```

C++ benchmarks:

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Peak Optimization Flags (Continued)

731.astcenc_r: basepeak = yes

736.ocio_r: basepeak = yes

748.flightdm_r: basepeak = yes

766.femflow_r: basepeak = yes

767.nest_r: basepeak = yes

772.marian_r: basepeak = yes

Fortran benchmarks:

722.palm_r: basepeak = yes

749.fotonik3d_r: basepeak = yes

765.roms_r: basepeak = yes

Benchmarks using both C and C++:

709.cactus_r: basepeak = yes

737.gmsh_r: basepeak = yes

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

<http://www.spec.org/cpu2026/results/flags/aocc-flags.2026-05-04.html>

<http://www.spec.org/cpu2026/results/flags/Dell-Platform-Flags-PowerEdge-AMD-EPYC-v1.8.html>

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

<http://www.spec.org/cpu2026/results/flags/aocc-flags.2026-05-04.xml>

<http://www.spec.org/cpu2026/results/flags/Dell-Platform-Flags-PowerEdge-AMD-EPYC-v1.8.xml>

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