



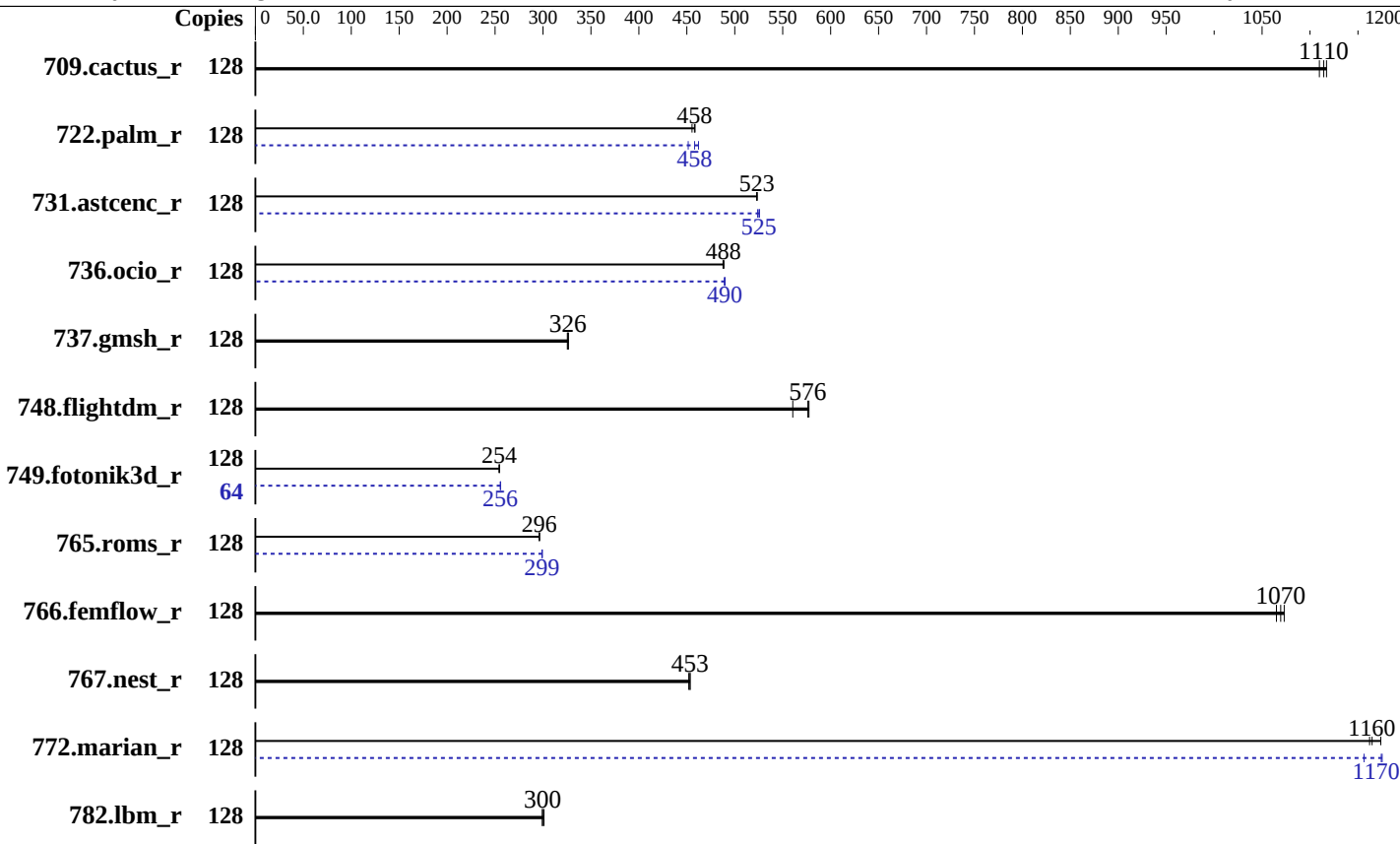
SPEC CPU®2026 Floating Point Rate Result

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Maginfra Co., Ltd.
QR8218-D3 (AMD EPYC 9335)

SPECrate®2026_fp_base = 510
SPECrate®2026_fp_peak = 512

CPU2026 License: 9087	Test Date: Jul-2026
Test Sponsor: Maginfra Co., Ltd.	Hardware Availability: Dec-2025
Tested by: Maginfra Co., Ltd.	Software Availability: Jan-2026



Hardware	Software
CPU Name: AMD EPYC 9335	OS: SUSE Linux Enterprise Server 15 SP7
Max MHz: 4400	6.4.0-150700.51-default
Nominal: 3000	Compiler: C/C++/Fortran: Version 5.1.0 of AOCC
Enabled: 64 cores, 2 chips, 2 threads/core	Compiler Category: Vendor
Orderable: 1,2 chips	Firmware: Version 01.14.00 released Dec-2025
Cache L1: 32 KB I + 48 KB D on chip per core	File System: xfs
L2: 1 MB I+D on chip per core	System State: Run level 3 (multi-user)
L3: 128 MB I+D on chip per chip, 32 MB shared / 8 cores	Base Pointers: 64-bit
Other: None	Peak Pointers: 64-bit
Memory: 1536 GB (24 x 64 GB 2Rx4 PC5-6400B-R)	Other: None
Storage: 1 x 4 TB NVME SSD	Power Management: BIOS set to prefer performance at the cost of additional power usage.
Cooling: Air	
Other: None	



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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	128	98.6	1110	98.3	1120	99.0	1110	128	98.6	1110	98.3	1120	99.0	1110
722.palm_r	128	371	455	368	459	369	458	128	374	451	366	462	369	458
731.astcenc_r	128	205	523	206	523	206	523	128	204	526	205	524	205	525
736.ocio_r	128	229	489	229	488	230	488	128	229	490	229	489	229	490
737.gmsh_r	128	180	327	181	325	180	326	128	180	327	181	325	180	326
748.flightdm_r	128	164	561	159	576	159	577	128	164	561	159	576	159	577
749.fotonik3d_r	128	582	254	581	255	582	254	64	290	256	289	256	289	256
765.roms_r	128	681	296	680	296	680	296	128	675	299	674	299	674	299
766.femflow_r	128	176	1070	175	1070	176	1060	128	176	1070	175	1070	176	1060
767.nest_r	128	224	453	224	453	225	452	128	224	453	224	453	225	452
772.marian_r	128	172	1170	174	1160	174	1160	128	172	1170	175	1160	172	1180
782.lbm_r	128	244	301	245	300	245	299	128	244	301	245	300	245	299

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

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Operating System Notes (Continued)

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 =  
    "/home/CPU2026/amd_rate_aocc510_znver5_B_lib/lib:/home/CPU2026/amd_rate_  
    aocc510_znver5_B_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

Platform Notes

BIOS configuration:

NUMA nodes per socket = NPS4

Determinism Slider = Power

cTDP Control = Manual

cTDP = 500

Package Power Limit Control = Manual

Package Power Limit = 500

Sysinfo program /home/CPU2026/bin/sysinfo

Rev: 779ab21020787073335a329f3a45e2cd

running on localhost Sat Aug 1 17:35:33 2026

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

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-
1. uname -srvm
 2. w
 3. Username
 4. ulimit -a
 5. sysinfo process ancestry
 6. /proc/cpuinfo

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Platform Notes (Continued)

```
7. lscpu
8. numactl --hardware
9. /proc/meminfo
10. who -r
11. Systemd service manager version: systemd 254 (254.24+suse.148.g83b9060b6e)
12. Services, from systemctl list-unit-files
13. Linux kernel boot-time arguments, from /proc/cmdline
14. cpupower frequency-info
15. tuned-adm active
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 -srvn
Linux 6.4.0-150700.51-default #1 SMP PREEMPT_DYNAMIC Wed Apr 30 21:35:43 UTC 2025 (6930611) x86_64
```

```
-----
2. w
17:35:33 up 4:51, 1 user, load average: 64.74, 110.62, 119.94
USER      TTY      FROM          LOGIN@      IDLE        JCPU   PCPU WHAT
root      tty1      -              12:46       4:48m  6.75s  5.78s python3 ./run_amd_rate_aocc510_znver5_B1.py
```

```
-----
3. Username
From environment variable $USER: root
```

```
-----
4. ulimit -a
core file size          (blocks, -c) unlimited
data seg size           (kbytes, -d) unlimited
scheduling priority     (-e) 0
file size               (blocks, -f) unlimited
pending signals         (-i) 6190465
max locked memory       (kbytes, -l) 2048
max memory size         (kbytes, -m) unlimited
open files              (-n) 1024
pipe size               (512 bytes, -p) 8
POSIX message queues    (bytes, -q) 819200
real-time priority      (-r) 0
stack size              (kbytes, -s) unlimited
```

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Platform Notes (Continued)

cpu time	(seconds, -t) unlimited
max user processes	(-u) 6190465
virtual memory	(kbytes, -v) unlimited
file locks	(-x) unlimited

5. sysinfo process ancestry

```
/usr/lib/systemd/systemd --switched-root --system --deserialize=42
login -- root
-bash
python3 ./run_amd_rate_aocc510_znver5_B1.py
runcpu --config amd_rate_aocc510_znver5_B1.cfg --tune all --reportable --iterations 3 fprate
runcpu --configfile amd_rate_aocc510_znver5_B1.cfg --tune all --reportable --iterations 3 --nopower
--runmode rate --tune base:peak --size test:train:refrate fprate --nopreenv --note-preenv --logfile
$SPEC/tmp/CPU2026.045/templogs/preenv.fprate.045.0.log --lognum 045.0 --from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /home/CPU2026
```

6. /proc/cpuinfo

```
model name      : AMD EPYC 9335 32-Core Processor
vendor_id       : AuthenticAMD
cpu family      : 26
model           : 2
stepping        : 1
microcode       : 0xb00215a
bugs            : sysret_ss_attrs spectre_v1 spectre_v2 spec_store_bypass srs0
TLB size        : 192 4K pages
cpu cores       : 32
siblings        : 64
2 physical ids  (chips)
128 processors  (hardware threads)
physical id 0:   core ids 0-31
physical id 1:   core ids 0-31
physical id 0:   apicids 0-63
physical id 1:   apicids 64-127
```

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 2.40.4:

Architecture:	x86_64
CPU op-mode(s):	32-bit, 64-bit
Address sizes:	52 bits physical, 57 bits virtual
Byte Order:	Little Endian

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Platform Notes (Continued)

CPU(s): 128
On-line CPU(s) list: 0-127
Vendor ID: AuthenticAMD
Model name: AMD EPYC 9335 32-Core Processor
CPU family: 26
Model: 2
Thread(s) per core: 2
Core(s) per socket: 32
Socket(s): 2
Stepping: 1
Frequency boost: enabled
CPU(s) scaling MHz: 61%
CPU max MHz: 3000.0000
CPU min MHz: 1500.0000
BogoMIPS: 5990.55

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 svm 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 erms invpcid cqm rdt_a avx512f avx512dq rdseed adx smap
avx512ifma clflushopt clwb avx512cd sha_ni avx512bw avx512vl xsaveopt
xsavec xgetbv1 xsaves cqm_llc cqm_occup_llc cqm_mbm_total
cqm_mbm_local user_shstk avx_vnni avx512_bf16 clzero irperf
xsaveerptr rdpru wbnoinvd amd_ppin cppc 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
vnm1 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 fsrm avx512_vp2intersect
flush_l1d debug_swap hv_inuse wr_allowed srso_user_kernel_no
amd_lbr_pmc_freeze

Virtualization: AMD-V
L1d cache: 3 MiB (64 instances)
L1i cache: 2 MiB (64 instances)
L2 cache: 64 MiB (64 instances)
L3 cache: 256 MiB (8 instances)
NUMA node(s): 8
NUMA node0 CPU(s): 0-7, 64-71
NUMA node1 CPU(s): 8-15, 72-79
NUMA node2 CPU(s): 16-23, 80-87
NUMA node3 CPU(s): 24-31, 88-95
NUMA node4 CPU(s): 32-39, 96-103

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Platform Notes (Continued)

NUMA node5 CPU(s): 40-47,104-111
NUMA node6 CPU(s): 48-55,112-119
NUMA node7 CPU(s): 56-63,120-127
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 Rng file data sampling: Not affected
Vulnerability Retbleed: Not affected
Vulnerability Spec rstack overflow: Mitigation; IBPB on VMEXIT only
Vulnerability Spec store bypass: Mitigation; Speculative Store Bypass disabled via prctl
Vulnerability Spectre v1: Mitigation; usercopy/swaps barriers and __user pointer sanitization
Vulnerability Spectre v2: Mitigation; Enhanced / Automatic IBRS; IBPB conditional; STIBP
always-on; RSB filling; PBRsB-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
L1d	48K	3M	12	Data	1	64	1	64
L1i	32K	2M	8	Instruction	1	64	1	64
L2	1M	64M	16	Unified	2	1024	1	64
L3	32M	256M	16	Unified	3	32768	1	64

8. numactl --hardware

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

available: 8 nodes (0-7)
node 0 cpus: 0-7,64-71
node 0 size: 193054 MB
node 0 free: 192218 MB
node 1 cpus: 8-15,72-79
node 1 size: 193531 MB
node 1 free: 192766 MB
node 2 cpus: 16-23,80-87
node 2 size: 193531 MB
node 2 free: 192765 MB
node 3 cpus: 24-31,88-95
node 3 size: 193531 MB
node 3 free: 192714 MB
node 4 cpus: 32-39,96-103
node 4 size: 193492 MB
node 4 free: 192709 MB
node 5 cpus: 40-47,104-111
node 5 size: 193531 MB

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Platform Notes (Continued)

```
node 5 free: 192789 MB
node 6 cpus: 48-55,112-119
node 6 size: 193531 MB
node 6 free: 192783 MB
node 7 cpus: 56-63,120-127
node 7 size: 193438 MB
node 7 free: 192630 MB
node distances:
node  0    1    2    3    4    5    6    7
 0:   10   12   12   12   32   32   32   32
 1:   12   10   12   12   32   32   32   32
 2:   12   12   10   12   32   32   32   32
 3:   12   12   12   10   32   32   32   32
 4:   32   32   32   32   10   12   12   12
 5:   32   32   32   32   12   10   12   12
 6:   32   32   32   32   12   12   10   12
 7:   32   32   32   32   12   12   12   10
```

9. /proc/meminfo

MemTotal: 1584786988 kB

10. who -r

run-level 3 Aug 1 12:43

11. Systemd service manager version: systemd 254 (254.24+suse.148.g83b9060b6e)

Default Target Status

multi-user running

12. Services, from systemctl list-unit-files

STATE

UNIT FILES

```
enabled      YaST2-Firstboot YaST2-Second-Stage apparmor auditd cron display-manager getty@ irqbalance
              issue-generator kbdsettings klog lvm2-monitor nsd nvme-fc-boot-connections
              nvme-fc-autoconnect postfix purge-kernels rollback rsyslog smartd systemd-pstore
enabled-runtime systemd-remount-fs
disabled     autofs autoyast-initscripts blk-availability boot-sysctl ca-certificates chrony-wait
              chronyd console-getty cups cups-browsed debug-shell ebttables exchange-bmc-os-info
              firewalld fsidd gpm grub2-once haveged hwloc-dump-hwdata ipmi ipmievdev issue-add-ssh-keys
              kexec-load lunmask man-db-create multipathd nfs nfs-blkmap rpcbind rpmconfigcheck rsyncd
              serial-getty@ smartd-generate-opts snmpd snmptrapd sshd systemd-boot-check-no-failures
              systemd-confext systemd-network-generator systemd-sysext systemd-time-wait-sync
              systemd-timesyncd tuned udisks2 vncserver@ wicked wickedd-auto4 wickedd-dhcp4
              wickedd-dhcp6 wickedd-nanny
indirect     systemd-userdbd wickedd
```

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Platform Notes (Continued)

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

```
BOOT_IMAGE=/boot/vmlinuz-6.4.0-150700.51-default
root=UUID=b599d87c-474e-4c72-b781-36d0bcedf18d
splash=silent
mitigations=auto
quiet
security=apparmor
```

14. cpupower frequency-info

analyzing CPU 119:

current policy: frequency should be within 1.50 GHz and 3.00 GHz.
The governor "ondemand" may decide which speed to use
within this range.

boost state support:

Supported: yes

Active: yes

15. tuned-adm active

It seems that tuned daemon is not running, preset profile is not activated.
Preset profile: throughput-performance

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

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Platform Notes (Continued)

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 SUSE Linux Enterprise Server 15 SP7

20. Disk information
SPEC is set to: /home/CPU2026
Filesystem Type Size Used Avail Use% Mounted on
/dev/nvme0n1p2 xfs 929G 74G 855G 8% /

21. /sys/devices/virtual/dmi/id
Vendor: Maginfra
Product: QR8218-D3
Product Family: Not specified
Serial: 00000000

22. dmidecode
Additional information from dmidecode 3.6 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:
12x Samsung M321R8GA0PB2-CCPEC 64 GB 2 rank 6400
11x Samsung M321R8GA0PB2-CCPPC 64 GB 2 rank 6400
1x Samsung M321R8GA0PB2-CCPWC 64 GB 2 rank 6400

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Platform Notes (Continued)

23. BIOS

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

BIOS Vendor: American Megatrends International, LLC.

BIOS Version: 01.14.00

BIOS Date: 12/25/2025

Compiler Version Notes

C | 782.lbm_r(base, peak)

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, peak) 736.ocio_r(base, peak)

| 748.flightdm_r(base, peak) 766.femflow_r(base, peak)

| 767.nest_r(base, peak) 772.marian_r(base, peak)

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, peak) 737.gmsh_r(base, peak)

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, peak) 749.fotonik3d_r(base, peak) 765.roms_r(base, peak)

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

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SPEC CPU®2026 Floating Point Rate Result

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SPECrate®2026_fp_base = 510

QR8218-D3 (AMD EPYC 9335)

SPECrate®2026_fp_peak = 512

CPU2026 License: 9087

Test Date: Jul-2026

Test Sponsor: Maginfra Co., Ltd.

Hardware Availability: Dec-2025

Tested by: Maginfra Co., Ltd.

Software Availability: Jan-2026

Compiler Version Notes (Continued)

Base Compiler Invocation

C benchmarks:

clang

C++ benchmarks:

clang++

Fortran benchmarks:

flang

Benchmarks using both C and C++:

clang++ clang

Base Portability Flags

736.ocio_r: -fno-finite-math-only

737.gmsh_r: -fno-fast-math

748.flightdm_r: -fno-reciprocal-math

767.nest_r: -fno-finite-math-only

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

-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

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Base Optimization Flags (Continued)

C++ benchmarks (continued):

-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 Compiler Invocation

C benchmarks:

clang

C++ benchmarks:

clang++

Fortran benchmarks:

flang

Benchmarks using both C and C++:

clang++ clang



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Software Availability: Jan-2026

Peak Portability Flags

736.ocio_r: -fno-finite-math-only
737.gmsh_r: -fno-fast-math
748.flightdm_r: -fno-reciprocal-math
767.nest_r: -fno-finite-math-only

Peak Optimization Flags

C benchmarks:

782.lbm_r: basepeak = yes

C++ benchmarks:

731.ascenc_r: -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

736.ocio_r: Same as 731.ascenc_r

748.flightdm_r: basepeak = yes

766.femflow_r: basepeak = yes

767.nest_r: basepeak = yes

772.marian_r: Same as 731.ascenc_r

Fortran benchmarks:

722.palm_r: -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

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Peak Optimization Flags (Continued)

722.palm_r (continued):

-mllvm -reduce-array-computations=3
-fepilog-vectorization-of-inductions -zopt -lamdlibm
-lamdalloc -lflang

749.fotonik3d_r: -m64 -Mstandard

-Wl, -mllvm -Wl, -align-all-nofallthru-blocks=6
-Wl, -mllvm -Wl, -reduce-array-computations=3 -ffast-math
-Ofast -march=znver5 -fveclib=AMDLIBM -flto -Mrecursive
-mllvm -reduce-array-computations=3
-fepilog-vectorization-of-inductions -zopt -lamdlibm
-lamdalloc -lflang

765.roms_r: Same as 749.fotonik3d_r

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.2026-05-04.00.html>

<http://www.spec.org/cpu2026/results/flags/Maginfra-Platform-Settings-amd-V1.1.html>

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

<http://www.spec.org/cpu2026/results/flags/aocc-flags.2026-05-04.00.xml>

<http://www.spec.org/cpu2026/results/flags/Maginfra-Platform-Settings-amd-V1.1.xml>

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For questions about this result, please contact the tester. For other inquiries, please contact info@spec.org.

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