



SPEC CPU®2026 Floating Point Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

Supermicro

(Test Sponsor: Advanced Micro Devices (AMD))
CloudDC A+ Server AS -1116CS-TN
(H14SHM , AMD EPYC 9375F)

SPECrate®2026_fp_base = 273

SPECrate®2026_fp_peak = 273

CPU2026 License: 6570

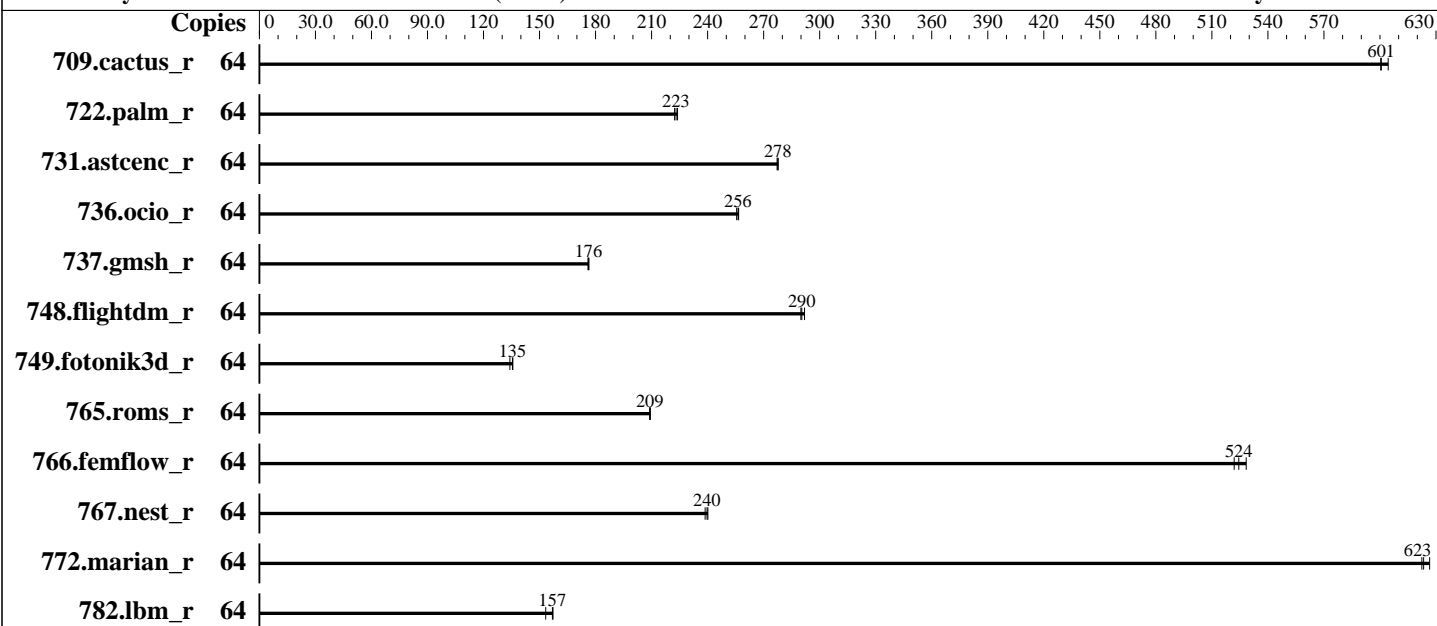
Test Sponsor: Advanced Micro Devices (AMD)

Tested by: Advanced Micro Devices (AMD)

Test Date: Jan-2026

Hardware Availability: Oct-2024

Software Availability: Jan-2026



Hardware

CPU Name: AMD EPYC 9375F
 Max MHz: 4800
 Nominal: 3800
 Enabled: 32 cores, 1 chip, 2 threads/core
 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: 256 MB I+D on chip per chip, 32 MB shared / 4 cores
 Other: None
 Memory: 768 GB (12 x 64 GB 2Rx4 PC5-6400B-R)
 Storage: 1 x 3.84 TB NVMe SSD
 Cooling: Air
 Other: None

Software

OS: Ubuntu 24.04.3 LTS
 Kernel 6.8.0-90-generic
 Compiler: C/C++/Fortran: Version 5.1.0 of AOCC
 Compiler Category: Vendor
 Firmware: Version 1.5a released Aug-2025
 File System: ext4
 System State: Run level 5 (multi-user)
 Base Pointers: 64-bit
 Peak Pointers: 64-bit
 Other: None
 Power Management: BIOS and OS set to prefer performance at the cost of additional power usage.



SPEC CPU®2026 Floating Point Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

Supermicro

(Test Sponsor: Advanced Micro Devices (AMD))

CloudDC A+ Server AS -1116CS-TN
(H14SHM , AMD EPYC 9375F)

SPECrate®2026_fp_base = 273

SPECrate®2026_fp_peak = 273

CPU2026 License: 6570

Test Sponsor: Advanced Micro Devices (AMD)

Tested by: Advanced Micro Devices (AMD)

Test Date: Jan-2026

Hardware Availability: Oct-2024

Software Availability: Jan-2026

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
709.cactus_r	64	90.9	604	91.5	600	<u>91.4</u>	<u>601</u>	64	90.9	604	91.5	600	<u>91.4</u>	<u>601</u>
722.palm_r	64	377	224	<u>379</u>	<u>223</u>	380	222	64	377	224	<u>379</u>	<u>223</u>	380	222
731.ascenc_r	64	<u>194</u>	<u>278</u>	194	277	194	278	64	<u>194</u>	<u>278</u>	194	277	194	278
736.ocio_r	64	<u>219</u>	<u>256</u>	218	257	219	256	64	<u>219</u>	<u>256</u>	218	257	219	256
737.gmsh_r	64	<u>167</u>	<u>176</u>	166	176	167	176	64	<u>167</u>	<u>176</u>	166	176	167	176
748.flightdm_r	64	<u>158</u>	<u>290</u>	158	290	157	292	64	<u>158</u>	<u>290</u>	158	290	157	292
749.fotonik3d_r	64	552	134	<u>546</u>	<u>135</u>	545	136	64	552	134	<u>546</u>	<u>135</u>	545	136
765.roms_r	64	482	209	<u>482</u>	<u>209</u>	482	209	64	482	209	<u>482</u>	<u>209</u>	482	209
766.femflow_r	64	<u>179</u>	<u>524</u>	178	528	180	522	64	<u>179</u>	<u>524</u>	178	528	180	522
767.nest_r	64	211	240	213	239	<u>212</u>	<u>240</u>	64	211	240	213	239	<u>212</u>	<u>240</u>
772.marian_r	64	162	622	161	627	<u>162</u>	<u>623</u>	64	162	622	161	627	<u>162</u>	<u>623</u>
782.lbm_r	64	<u>234</u>	<u>157</u>	233	157	239	153	64	<u>234</u>	<u>157</u>	233	157	239	153

SPECrate®2026_fp_base = 273

SPECrate®2026_fp_peak = 273

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)



SPEC CPU®2026 Floating Point Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

Supermicro

(Test Sponsor: Advanced Micro Devices (AMD))
CloudDC A+ Server AS -1116CS-TN
(H14SHM , AMD EPYC 9375F)

SPECrate®2026_fp_base = 273

SPECrate®2026_fp_peak = 273

CPU2026 License: 6570
Test Sponsor: Advanced Micro Devices (AMD)
Tested by: Advanced Micro Devices (AMD)

Test Date: Jan-2026
Hardware Availability: Oct-2024
Software Availability: Jan-2026

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 =
"/spec/speccpu2026rc2bsub/amd_rate_aocc510_znver5_A_lib/lib:/spec/speccpu2026rc2bsub/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

Platform Notes

BIOS settings:
Memory Target Speed = DDR6400
TDP: 400
PPT: 400
Determinism Control = Manual
Determinism Enable = Power
TSME = Disabled
SMEE = Disabled
SEV Control = Disabled
Fan Speed: Maximum
NPS: 4

Sysinfo program /spec/speccpu2026rc2bsub/bin/sysinfo
Rev: 069f95da7e7f5d81b2ce48a82150e54f
running on smc2351turin-os Sat Jan 31 18:10:17 2026

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

Table of contents

1. uname -srvm

(Continued on next page)



SPEC CPU®2026 Floating Point Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

Supermicro

(Test Sponsor: Advanced Micro Devices (AMD))

CloudDC A+ Server AS -1116CS-TN
(H14SHM , AMD EPYC 9375F)

SPECrate®2026_fp_base = 273

SPECrate®2026_fp_peak = 273

CPU2026 License: 6570

Test Sponsor: Advanced Micro Devices (AMD)

Tested by: Advanced Micro Devices (AMD)

Test Date: Jan-2026

Hardware Availability: Oct-2024

Software Availability: Jan-2026

Platform Notes (Continued)

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 (255.4-1ubuntu8.10)
12. Services, from systemctl list-unit-files
13. Linux kernel boot-time arguments, from /proc/cmdline
14. cpupower frequency-info
15. sysctl
16. /sys/kernel/mm/transparent_hugepage
17. /sys/kernel/mm/transparent_hugepage/khugepaged
18. OS release
19. Disk information
20. /sys/devices/virtual/dmi/id
21. dmidecode
22. BIOS

```
-----
1. uname -srvm
Linux 6.8.0-90-generic #91-Ubuntu SMP PREEMPT_DYNAMIC Tue Nov 18 14:14:30 UTC 2025 x86_64
-----
```

```
-----
2. w
18:10:17 up 22:49,  4 users,  load average: 0.00, 0.00, 0.00
USER      TTY      FROM          LOGIN@      IDLE        JCPU       PCPU       WHAT
amd       -        172.31.137.186 17:53      18:36m     0.00s     ?         sshd: amd [priv]
amd       -        172.31.137.186 17:53      18:36m     0.00s     ?         sshd: amd [priv]
amd       tty1     -              Fri19      22:17m     0.07s     0.01s     -bash
-----
```

```
-----
3. Username
From environment variable $USER:  root
From the command 'logname':      amd
-----
```

```
-----
4. ulimit -a
time(seconds)      unlimited
file(blocks)       unlimited
data(kbytes)       unlimited
stack(kbytes)      unlimited
coredump(blocks)   0
-----
```

(Continued on next page)



SPEC CPU®2026 Floating Point Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

Supermicro

(Test Sponsor: Advanced Micro Devices (AMD))

CloudDC A+ Server AS -1116CS-TN
(H14SHM , AMD EPYC 9375F)

SPECrate®2026_fp_base = 273

SPECrate®2026_fp_peak = 273

CPU2026 License: 6570

Test Sponsor: Advanced Micro Devices (AMD)

Tested by: Advanced Micro Devices (AMD)

Test Date: Jan-2026

Hardware Availability: Oct-2024

Software Availability: Jan-2026

Platform Notes (Continued)

```

memory(kbytes)          unlimited
locked memory(kbytes)  2097152
process                 3094023
nofiles                 1024
vmemory(kbytes)        unlimited
locks                   unlimited
rtprio                  0

```

5. sysinfo process ancestry

```

/sbin/init
SCREEN -S cpu
/bin/bash
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 3 fprate
runcpu --configfile amd_rate_aocc510_znver5_A1.cfg --tune base --reportable --iterations 3 --nopower
--runmode rate --tune base --size test:train:refrate fprate --nopreenv --note-preenv --logfile
$SPEC/tmp/CPU2026.004/templogs/preenv.fprate.004.0.log --lognum 004.0 --from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /spec/speccpu2026rc2bsub

```

6. /proc/cpuinfo

```

model name      : AMD EPYC 9375F 32-Core Processor
vendor_id      : AuthenticAMD
cpu family     : 26
model          : 2
stepping       : 1
microcode      : 0xb002147
bugs           : sysret_ss_attrs spectre_v1 spectre_v2 spec_store_bypass
TLB size       : 192 4K pages
cpu cores      : 32
siblings       : 64

```

1 physical ids (chips)

64 processors (hardware threads)

physical id 0: core ids 0-3,8-11,16-19,24-27,32-35,40-43,48-51,56-59

physical id 0: apicids 0-7,16-23,32-39,48-55,64-71,80-87,96-103,112-119

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

```

(Continued on next page)



SPEC CPU®2026 Floating Point Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

Supermicro

(Test Sponsor: Advanced Micro Devices (AMD))
CloudDC A+ Server AS -1116CS-TN
(H14SHM , AMD EPYC 9375F)

SPECrate®2026_fp_base = 273

SPECrate®2026_fp_peak = 273

CPU2026 License: 6570
Test Sponsor: Advanced Micro Devices (AMD)
Tested by: Advanced Micro Devices (AMD)

Test Date: Jan-2026
Hardware Availability: Oct-2024
Software Availability: Jan-2026

Platform Notes (Continued)

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
 BIOS Vendor ID: Advanced Micro Devices, Inc.
 Model name: AMD EPYC 9375F 32-Core Processor
 BIOS Model name: AMD EPYC 9375F 32-Core Processor Unknown CPU @ 3.8GHz
 BIOS CPU family: 107
 CPU family: 26
 Model: 2
 Thread(s) per core: 2
 Core(s) per socket: 32
 Socket(s): 1
 Stepping: 1
 Frequency boost: enabled
 CPU(s) scaling MHz: 100%
 CPU max MHz: 3800.0000
 CPU min MHz: 1500.0000
 BogomIPS: 7600.30
 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 aperfmpperf 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
 oswb 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 irperfc
 xsaveerptr rdpru wbnoinvd amd_ppin cppc amd_ibpb_ret arat npt lbrv
 svm_lock nrip_save tsc_scale vmcb_clean flushbyasid decodeassists
 pausefilter pfthreshold avic v_vmsave_vmload vgif x2avic v_spec_ctrl
 vnni 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_lld debug_swap
 L1d cache: 1.5 MiB (32 instances)
 L1i cache: 1 MiB (32 instances)
 L2 cache: 32 MiB (32 instances)
 L3 cache: 256 MiB (8 instances)
 NUMA node(s): 4
 NUMA node0 CPU(s): 0-7,32-39
 NUMA node1 CPU(s): 8-15,40-47

(Continued on next page)



SPEC CPU®2026 Floating Point Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

Supermicro

(Test Sponsor: Advanced Micro Devices (AMD))
CloudDC A+ Server AS -1116CS-TN
(H14SHM , AMD EPYC 9375F)

SPECrate®2026_fp_base = 273

SPECrate®2026_fp_peak = 273

CPU2026 License: 6570

Test Sponsor: Advanced Micro Devices (AMD)

Tested by: Advanced Micro Devices (AMD)

Test Date: Jan-2026

Hardware Availability: Oct-2024

Software Availability: Jan-2026

Platform Notes (Continued)

```

NUMA node2 CPU(s):          16-23,48-55
NUMA node3 CPU(s):          24-31,56-63
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
                              always-on; RSB filling; PBRSE-eIBRS Not affected; BHI Not affected
Vulnerability Srbds:        Not affected
Vulnerability Tsx async abort: Not affected
Vulnerability Vmscape:      Not affected

```

From lscpu --cache:

NAME	ONE-SIZE	ALL-SIZE	WAYS	TYPE	LEVEL	SETS	PHY-LINE	COHERENCY-SIZE
L1d	48K	1.5M	12	Data	1	64	1	64
L1i	32K	1M	8	Instruction	1	64	1	64
L2	1M	32M	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: 4 nodes (0-3)
node 0 cpus: 0-7,32-39
node 0 size: 193090 MB
node 0 free: 192417 MB
node 1 cpus: 8-15,40-47
node 1 size: 193530 MB
node 1 free: 192673 MB
node 2 cpus: 16-23,48-55
node 2 size: 193487 MB
node 2 free: 192989 MB
node 3 cpus: 24-31,56-63
node 3 size: 193475 MB
node 3 free: 192887 MB
node distances:
node  0  1  2  3
0:  10 12 12 12
1:  12 10 12 12
2:  12 12 10 12

```

(Continued on next page)



SPEC CPU®2026 Floating Point Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

Supermicro

(Test Sponsor: Advanced Micro Devices (AMD))
CloudDC A+ Server AS -1116CS-TN
(H14SHM , AMD EPYC 9375F)

SPECrate®2026_fp_base = 273

SPECrate®2026_fp_peak = 273

CPU2026 License: 6570
Test Sponsor: Advanced Micro Devices (AMD)
Tested by: Advanced Micro Devices (AMD)

Test Date: Jan-2026
Hardware Availability: Oct-2024
Software Availability: Jan-2026

Platform Notes (Continued)

3: 12 12 12 10

9. /proc/meminfo
MemTotal: 792149584 kB

10. who -r
run-level 5 Jan 30 19:20

11. Systemd service manager version: systemd 255 (255.4-1ubuntu8.10)
Default Target Status
graphical running

12. 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 cron dmesg e2scrub_reap finalrd getty@ gpu-manager grub-common grub-initrd-fallback keyboard-setup lvm2-monitor multipathd networkd-dispatcher open-iscsi open-vm-tools pollinate rsyslog secureboot-db setvtrgb snapd sysstat systemd-networkd systemd-networkd-wait-online systemd-pstore systemd-resolved systemd-timesyncd thermald ua-reboot-cmds ubuntu-advantage udisks2 ufw unattended-upgrades vgauth
enabled-runtime	netplan-ovs-cleanup systemd-fsck-root systemd-remount-fs
disabled	console-getty debug-shell ipmievd iscsid nftables rsync serial-getty@ ssh 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	openipmi
indirect	systemd-sysupdate systemd-sysupdate-reboot uidd
masked	cryptdisks cryptdisks-early hwclock multipath-tools-boot screen-cleanup sudo x11-common

13. Linux kernel boot-time arguments, from /proc/cmdline
BOOT_IMAGE=/vmlinuz-6.8.0-90-generic
root=/dev/mapper/ubuntu--vg-ubuntu--lv
ro

14. cpupower frequency-info
analyzing CPU 56:
current policy: frequency should be within 1.50 GHz and 3.80 GHz.
The governor "performance" may decide which speed to use

(Continued on next page)



SPEC CPU®2026 Floating Point Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

Supermicro

(Test Sponsor: Advanced Micro Devices (AMD))
CloudDC A+ Server AS -1116CS-TN
(H14SHM , AMD EPYC 9375F)

SPECrate®2026_fp_base = 273

SPECrate®2026_fp_peak = 273

CPU2026 License: 6570
Test Sponsor: Advanced Micro Devices (AMD)
Tested by: Advanced Micro Devices (AMD)

Test Date: Jan-2026
Hardware Availability: Oct-2024
Software Availability: Jan-2026

Platform Notes (Continued)

within this range.

boost state support:

Supported: yes
Active: yes
Boost States: 0
Total States: 3
Pstate-P0: 3800MHz

15. 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
```

16. /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
```

17. /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
```

(Continued on next page)



SPEC CPU®2026 Floating Point Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

Supermicro

(Test Sponsor: Advanced Micro Devices (AMD))

CloudDC A+ Server AS -1116CS-TN
(H14SHM , AMD EPYC 9375F)

SPECrate®2026_fp_base = 273

SPECrate®2026_fp_peak = 273

CPU2026 License: 6570

Test Sponsor: Advanced Micro Devices (AMD)

Tested by: Advanced Micro Devices (AMD)

Test Date: Jan-2026

Hardware Availability: Oct-2024

Software Availability: Jan-2026

Platform Notes (Continued)

18. OS release

From /etc/*-release /etc/*-version
os-release Ubuntu 24.04.3 LTS

19. Disk information

SPEC is set to: /spec/speccpu2026rc2bsub

Filesystem	Type	Size	Used	Avail	Use%	Mounted on
/dev/mapper/ubuntu--vg-ubuntu--lv	ext4	3.5T	25G	3.3T	1%	/

20. /sys/devices/virtual/dmi/id

Vendor: Supermicro
Product: AS -1116CS-TN
Product Family: SMC H14
Serial: S931316X4B12351

21. 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:
12x SK Hynix HMC94AHBRA277N 64 GB 2 rank 6400

22. BIOS

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

BIOS Vendor: American Megatrends International, LLC.
BIOS Version: 1.5a
BIOS Date: 08/11/2025
BIOS Revision: 5.35

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

(Continued on next page)



SPEC CPU®2026 Floating Point Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

Supermicro

(Test Sponsor: Advanced Micro Devices (AMD))
CloudDC A+ Server AS -1116CS-TN
(H14SHM , AMD EPYC 9375F)

SPECrate®2026_fp_base = 273

SPECrate®2026_fp_peak = 273

CPU2026 License: 6570
Test Sponsor: Advanced Micro Devices (AMD)
Tested by: Advanced Micro Devices (AMD)

Test Date: Jan-2026
Hardware Availability: Oct-2024
Software Availability: Jan-2026

Compiler Version Notes (Continued)

=====
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
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



SPEC CPU®2026 Floating Point Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

Supermicro

(Test Sponsor: Advanced Micro Devices (AMD))

CloudDC A+ Server AS -1116CS-TN
(H14SHM , AMD EPYC 9375F)

SPECrate®2026_fp_base = 273

SPECrate®2026_fp_peak = 273

CPU2026 License: 6570

Test Sponsor: Advanced Micro Devices (AMD)

Tested by: Advanced Micro Devices (AMD)

Test Date: Jan-2026

Hardware Availability: Oct-2024

Software Availability: Jan-2026

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
-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

```

(Continued on next page)



SPEC CPU®2026 Floating Point Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

Supermicro

(Test Sponsor: Advanced Micro Devices (AMD))
CloudDC A+ Server AS -1116CS-TN
(H14SHM , AMD EPYC 9375F)

SPECrate®2026_fp_base = 273

SPECrate®2026_fp_peak = 273

CPU2026 License: 6570

Test Sponsor: Advanced Micro Devices (AMD)

Tested by: Advanced Micro Devices (AMD)

Test Date: Jan-2026

Hardware Availability: Oct-2024

Software Availability: Jan-2026

Base Optimization Flags (Continued)

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:

731.ascenc_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

(Continued on next page)



SPEC CPU®2026 Floating Point Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

Supermicro

(Test Sponsor: Advanced Micro Devices (AMD))

CloudDC A+ Server AS -1116CS-TN
(H14SHM , AMD EPYC 9375F)

SPECrate®2026_fp_base = 273

SPECrate®2026_fp_peak = 273

CPU2026 License: 6570

Test Sponsor: Advanced Micro Devices (AMD)

Tested by: Advanced Micro Devices (AMD)

Test Date: Jan-2026

Hardware Availability: Oct-2024

Software Availability: Jan-2026

Peak Optimization Flags (Continued)

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/Supermicro-Platform-Settings-V1.2-Turin-revG.html>

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

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

<http://www.spec.org/cpu2026/results/flags/Supermicro-Platform-Settings-V1.2-Turin-revG.xml>

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

SPEC CPU and SPECrate are registered trademarks 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 CPU®2026 v0.902.0 on 2026-01-31 13:10:16-0500.

Report generated on 2026-05-11 16:38:04 by CPU2026 PDF formatter (unknown).

Originally published on 2026-05-05.