



# SPEC CPU®2026 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

## Supermicro

CloudDC A+ Server AS -1116CS-TN  
(H14SHM , AMD EPYC 9965)

SPECspeed®2026\_fp\_base = 13.3

SPECspeed®2026\_fp\_peak = 13.3

CPU2026 License: 001176

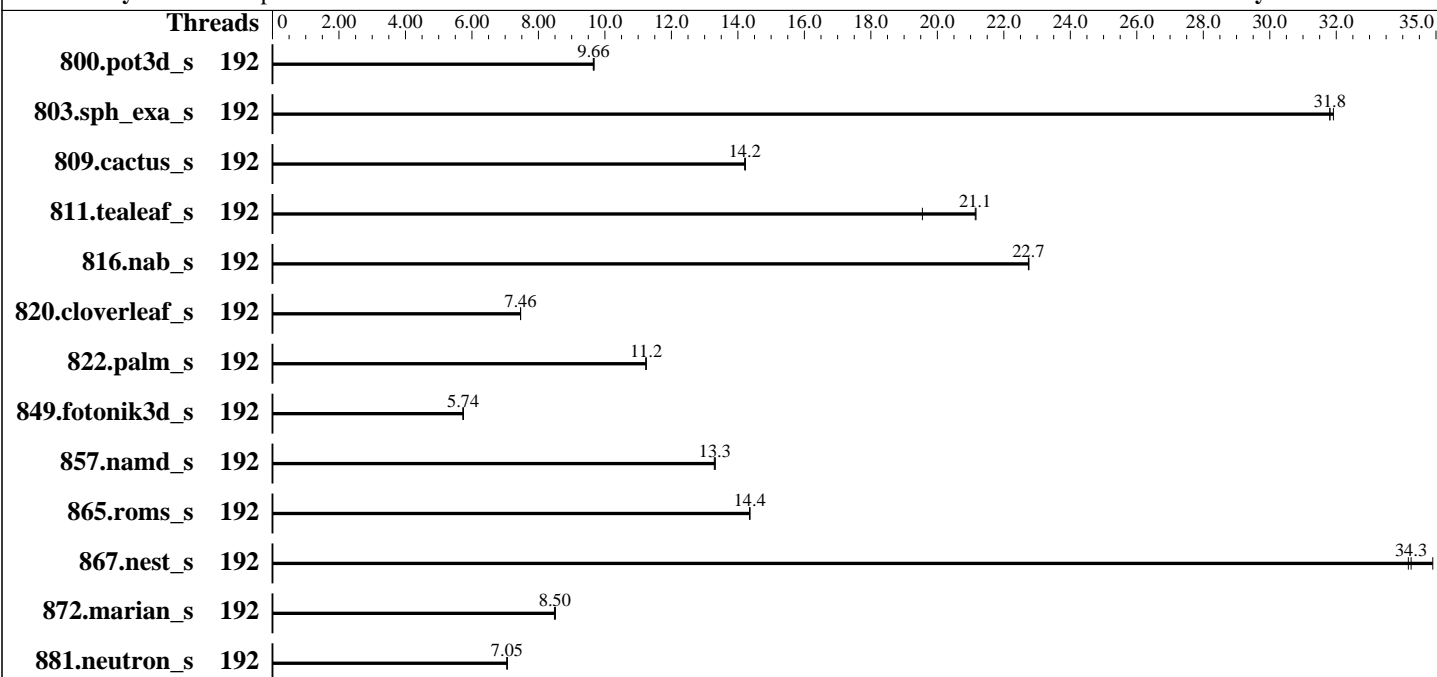
Test Sponsor: Supermicro

Tested by: Supermicro

Test Date: Feb-2026

Hardware Availability: Oct-2024

Software Availability: Jan-2026



### Hardware

CPU Name: AMD EPYC 9965  
 Max MHz: 3700  
 Nominal: 2250  
 Enabled: 192 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: 384 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)  
 Storage: 1 x 480 GB NVMe SSD  
 Cooling: Air  
 Other: None

### Software

OS: Ubuntu 24.04.3 LTS  
 6.8.0-94-generic  
 Compiler: C/C++: Version 5.1.0 of AOCC  
 Fortran: Flang v22  
 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.



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## Results Table

Benchmark	Base							Peak						
	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
800.pot3d_s	192	69.6	9.67	<b>69.7</b>	<b>9.66</b>	69.7	9.65	192	69.6	9.67	<b>69.7</b>	<b>9.66</b>	69.7	9.65
803.sph_exa_s	192	<b>38.9</b>	<b>31.8</b>	38.8	31.9	38.9	31.8	192	<b>38.9</b>	<b>31.8</b>	38.8	31.9	38.9	31.8
809.cactus_s	192	79.0	14.2	<b>79.0</b>	<b>14.2</b>	78.9	14.2	192	79.0	14.2	<b>79.0</b>	<b>14.2</b>	78.9	14.2
811.tealeaf_s	192	26.3	21.2	<b>26.3</b>	<b>21.1</b>	28.5	19.6	192	26.3	21.2	<b>26.3</b>	<b>21.1</b>	28.5	19.6
816.nab_s	192	<b>49.5</b>	<b>22.7</b>	49.5	22.7	49.5	22.8	192	<b>49.5</b>	<b>22.7</b>	49.5	22.7	49.5	22.8
820.cloverleaf_s	192	115	7.46	<b>115</b>	<b>7.46</b>	115	7.46	192	115	7.46	<b>115</b>	<b>7.46</b>	115	7.46
822.palm_s	192	109	11.2	<b>109</b>	<b>11.2</b>	109	11.2	192	109	11.2	<b>109</b>	<b>11.2</b>	109	11.2
849.fotonik3d_s	192	115	5.74	<b>115</b>	<b>5.74</b>	115	5.73	192	115	5.74	<b>115</b>	<b>5.74</b>	115	5.73
857.namd_s	192	109	13.3	109	13.3	<b>109</b>	<b>13.3</b>	192	109	13.3	109	13.3	<b>109</b>	<b>13.3</b>
865.roms_s	192	<b>75.9</b>	<b>14.4</b>	75.9	14.4	76.0	14.4	192	<b>75.9</b>	<b>14.4</b>	75.9	14.4	76.0	14.4
867.nest_s	192	61.9	34.9	63.2	34.2	<b>63.1</b>	<b>34.3</b>	192	61.9	34.9	63.2	34.2	<b>63.1</b>	<b>34.3</b>
872.marian_s	192	127	8.51	128	8.48	<b>127</b>	<b>8.50</b>	192	127	8.51	128	8.48	<b>127</b>	<b>8.50</b>
881.neutron_s	192	115	7.06	<b>116</b>	<b>7.05</b>	116	7.05	192	115	7.06	<b>116</b>	<b>7.05</b>	116	7.05

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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/>  
Flang v22 is available at  
<https://flang.llvm.org/>

## 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,

(Continued on next page)



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### Operating System Notes (Continued)

```
'sysctl -w vm.zone_reclaim_mode=1' run as root.
To clear filesystem caches, 'sync; sysctl -w vm.drop_caches=3' run as root.
To 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:
GOMP_CPU_AFFINITY = "0-191"
LD_LIBRARY_PATH =
"/spec/speccpu2026rc2speed/amd_speed_aocc510_flang22_znver5_A_lib/lib:/s
pec/speccpu2026rc2speed/amd_speed_aocc510_flang22_znver5_A_lib/lib32:"
MALLOC_CONF = "retain:true"
```

### General Notes

Binaries were compiled on a system with an AMD EPYC 9754 CPU + 768 GiB Memory using Ubuntu 24.04

### Platform Notes

```
BIOS settings:
SEV Control = Disabled
SMEE = Disabled
Memory Target Speed = DDR6400
Determinism Control = Manual
Determinism Enable = Power
TDP control = Manual
TDP = 500
Package Power Limit Control = Manual
Package Power Limit = 500
TSME = Disabled

Sysinfo program /spec/speccpu2026rc2speed/bin/sysinfo
Rev: 069f95da7e7f5d81b2ce48a82150e54f
running on smc2347turin-os Thu Feb 5 20:46:52 2026
```

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

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### Platform Notes (Continued)

- 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-lubuntu8.10)`
- 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 6.8.0-94-generic #96-Ubuntu SMP PREEMPT_DYNAMIC Fri Jan 9 20:36:55 UTC 2026 x86_64
```

```
2. w
20:46:52 up 2:58, 1 user, load average: 140.51, 72.41, 53.08
USER      TTY      FROM          LOGIN@      IDLE        JCPU      PCPU      WHAT
root                10.252.48.220  18:17       2:58m      0.00s      0.18s    sshd: root@pts/0
```

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

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

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### Platform Notes (Continued)

```
locked memory(kbytes) 2097152
process                3091684
nofiles                1024
vmemory(kbytes)       unlimited
locks                  unlimited
rtprio                 0
```

#### 5. sysinfo process ancestry

```
/sbin/init
sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups
sshd: root@pts/0
-bash
screen -S cpu
SCREEN -S cpu
/bin/bash
python3 ./run_amd_speed_aocc510_flang22_znver5_A1.py
/bin/bash ./amd_speed_aocc510_flang22_znver5_A1.sh
runcpu --config amd_speed_aocc510_flang22_znver5_A1.cfg --tune base --reportable --iterations 3 fpspeed
runcpu --configfile amd_speed_aocc510_flang22_znver5_A1.cfg --tune base --reportable --iterations 3
--nopower --runmode speed --tune base --size test:train:refspeed fpspeed --nopreenv --note-preenv
--logfile $SPEC/tmp/CPU2026.002/templogs/preenv.fpspeed.002.0.log --lognum 002.0 --from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /spec/speccpu2026rc2speed
```

#### 6. /proc/cpuinfo

```
model name      : AMD EPYC 9965 192-Core Processor
vendor_id      : AuthenticAMD
cpu family     : 26
model         : 17
stepping      : 0
microcode     : 0xb101047
bugs          : sysret_ss_attrs spectre_v1 spectre_v2 spec_store_bypass
TLB size     : 192 4K pages
cpu cores     : 192
siblings      : 384
1 physical ids (chips)
384 processors (hardware threads)
physical id 0: core ids 0-191
physical id 0: apicids 0-383
```

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

#### 7. lscpu

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### Platform Notes (Continued)

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):                      384
On-line CPU(s) list:         0-383
Vendor ID:                   AuthenticAMD
BIOS Vendor ID:              Advanced Micro Devices, Inc.
Model name:                   AMD EPYC 9965 192-Core Processor
BIOS Model name:             AMD EPYC 9965 192-Core Processor           Unknown CPU @ 2.2GHz
BIOS CPU family:             107
CPU family:                   26
Model:                        17
Thread(s) per core:          2
Core(s) per socket:          192
Socket(s):                    1
Stepping:                     0
Frequency boost:              enabled
CPU(s) scaling MHz:          100%
CPU max MHz:                  2250.0000
CPU min MHz:                  1500.0000
BogoMIPS:                     4500.07

```

```

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 aperfperf 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 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 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:                    9 MiB (192 instances)
L1i cache:                    6 MiB (192 instances)
L2 cache:                     192 MiB (192 instances)
L3 cache:                     384 MiB (12 instances)

```

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### Platform Notes (Continued)

```

NUMA node(s): 1
NUMA node0 CPU(s): 0-383
Vulnerability Gather data sampling: Not affected
Vulnerability Itlb multihit: Not affected
Vulnerability Lltf: 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/swappgs 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	9M	12	Data	1	64	1	64
L1i	32K	6M	8	Instruction	1	64	1	64
L2	1M	192M	16	Unified	2	1024	1	64
L3	32M	384M	16	Unified	3	32768	1	64

8. numactl --hardware

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

```

available: 1 nodes (0)
node 0 cpus: 0-383
node 0 size: 772998 MB
node 0 free: 768604 MB
node distances:
node 0
0: 10

```

9. /proc/meminfo

MemTotal: 791550848 kB

10. who -r

run-level 5 Feb 5 17:48

11. Systemd service manager version: systemd 255 (255.4-1ubuntu8.10)

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### Platform Notes (Continued)

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 nvme-fc-boot-connections nvme-autoconnect 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-6.8.0-94-generic
root=/dev/mapper/ubuntu--vg-ubuntu--lv
ro
```

-----  
14. cpupower frequency-info

```
analyzing CPU 176:
  current policy: frequency should be within 1.50 GHz and 2.25 GHz.
                   The governor "performance" may decide which speed to use
                   within this range.

boost state support:
  Supported: yes
  Active: yes
  Boost States: 0
  Total States: 3
  Pstate-P0: 2250MHz
```

-----  
15. sysctl

```
kernel.numa_balancing                    0
kernel.randomize_va_space                0
```

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### Platform Notes (Continued)

```

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

```

```

-----
18. OS release
From /etc/*-release /etc/*-version
os-release Ubuntu 24.04.3 LTS

```

```

-----
19. Disk information
SPEC is set to: /spec/speccpu2026rc2speed
Filesystem                Type      Size  Used Avail Use% Mounted on
/dev/mapper/ubuntu--vg-ubuntu--lv ext4    437G   39G  380G  10% /

```

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### Platform Notes (Continued)

20. /sys/devices/virtual/dmi/id  
Vendor: Supermicro  
Product: AS -1116CS-TN  
Product Family: SMC H14  
Serial: S931316X4B12347

-----  
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 | 811.tealeaf\_s(base) 816.nab\_s(base) 881.neutron\_s(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++ | 803.sph\_exa\_s(base) 857.namd\_s(base) 867.nest\_s(base)  
872.marian\_s(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  
-----  
=====

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# SPEC CPU<sup>®</sup>2026 Floating Point Speed Result

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## Supermicro

CloudDC A+ Server AS -1116CS-TN  
(H14SHM , AMD EPYC 9965)

SPECspeed<sup>®</sup>2026\_fp\_base = 13.3

SPECspeed<sup>®</sup>2026\_fp\_peak = 13.3

**CPU2026 License:** 001176  
**Test Sponsor:** Supermicro  
**Tested by:** Supermicro

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

### Compiler Version Notes (Continued)

C++, C | 809.cactus\_s(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 | 800.pot3d\_s(base) 820.cloverleaf\_s(base) 822.palm\_s(base)  
849.fotonik3d\_s(base) 865.roms\_s(base)

flang version 22.1.0-rc2 (https://github.com/llvm/llvm-project  
a47b42eb9f9b302167b4fc413e6c92798d65dd0b)  
Target: x86\_64-unknown-linux-gnu  
Thread model: posix  
InstalledDir: /opt/llvm/llvm-22.1.0-rc2/install/bin  
-----

### Base Compiler Invocation

C benchmarks:  
clang

C++ benchmarks:  
clang++

Fortran benchmarks:  
flang-22

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

### Base Portability Flags

800.pot3d\_s: -DSPEC\_LP64  
803.sph\_exa\_s: -DSPEC\_LP64  
809.cactus\_s: -DSPEC\_LP64  
811.tealeaf\_s: -DSPEC\_LP64  
816.nab\_s: -DSPEC\_LP64  
820.cloverleaf\_s: -DSPEC\_LP64  
822.palm\_s: -DSPEC\_LP64  
849.fotonik3d\_s: -DSPEC\_LP64

(Continued on next page)



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## Base Portability Flags (Continued)

857.namd\_s: -DSPEC\_LP64  
865.roms\_s: -DSPEC\_LP64  
867.nest\_s: -fno-finite-math-only -DSPEC\_LP64  
872.marian\_s: -DSPEC\_LP64  
881.neutron\_s: -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 -O3 -flto -march=znver5  
-fveclib=AMDLIBM -ffast-math -fremap-arrays -fstrip-mining  
-fstruct-layout=7 -mllvm -inline-threshold=1000  
-mllvm -reduce-array-computations=3 -mllvm -unroll-threshold=50 -zopt  
-mrecip=none -fopenmp -DSPEC\_OPENMP -lamdalloc -lamdlibm  
-fopenmp=libomp -lomp

### C++ benchmarks:

-m64 -std=c++17 -Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6  
-Wl,-mllvm -Wl,-reduce-array-computations=3 -O3 -flto -march=znver5  
-fveclib=AMDLIBM -ffast-math -mllvm -unroll-threshold=100  
-mllvm -loop-unswitch-threshold=200000  
-mllvm -reduce-array-computations=3 -zopt -fopenmp -DSPEC\_OPENMP  
-pthread -lamdalloc -lamdlibm -fopenmp=libomp -lomp

### Fortran benchmarks:

-m64 -std=f2018 -O3 -flto -march=znver5 -fveclib=AMDLIBM  
-ffast-math -funroll-loops -DSPEC\_OPENMP -fopenmp  
-fdo-concurrent-to-openmp=host -lamdalloc -lamdlibm -fopenmp=libomp  
-lomp

### 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 -O3 -flto -march=znver5  
-fveclib=AMDLIBM -ffast-math -fremap-arrays -fstrip-mining  
-fstruct-layout=7 -mllvm -inline-threshold=1000  
-mllvm -reduce-array-computations=3 -mllvm -unroll-threshold=50 -zopt  
-mllvm -unroll-threshold=100 -mllvm -loop-unswitch-threshold=200000  
-mrecip=none -fopenmp -DSPEC\_OPENMP -pthread -lamdalloc -lamdlibm  
-fopenmp=libomp -lomp



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## Base Other Flags

C benchmarks:

-Wno-return-type -Wno-unused-command-line-argument

Benchmarks using both C and C++:

-Wno-return-type -Wno-unused-command-line-argument

## Peak Optimization Flags

C benchmarks:

811.tealeaf\_s: basepeak = yes

816.nab\_s: basepeak = yes

881.neutron\_s: basepeak = yes

C++ benchmarks:

803.sph\_exa\_s: basepeak = yes

857.namd\_s: basepeak = yes

867.nest\_s: basepeak = yes

872.marian\_s: basepeak = yes

Fortran benchmarks:

800.pot3d\_s: basepeak = yes

820.cloverleaf\_s: basepeak = yes

822.palm\_s: basepeak = yes

849.fotonik3d\_s: basepeak = yes

865.roms\_s: basepeak = yes

Benchmarks using both C and C++:

809.cactus\_s: basepeak = yes



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

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

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

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

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

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

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For questions about this result, please contact the tester. For other inquiries, please contact [info@spec.org](mailto:info@spec.org).

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