



# SPEC CPU®2026 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

## Supermicro

CloudDC A+ Server AS -1116CS-TN  
(H14SHM , AMD EPYC 9755)

SPECspeed®2026\_fp\_base = 13.0

SPECspeed®2026\_fp\_peak = 13.0

CPU2026 License: 001176

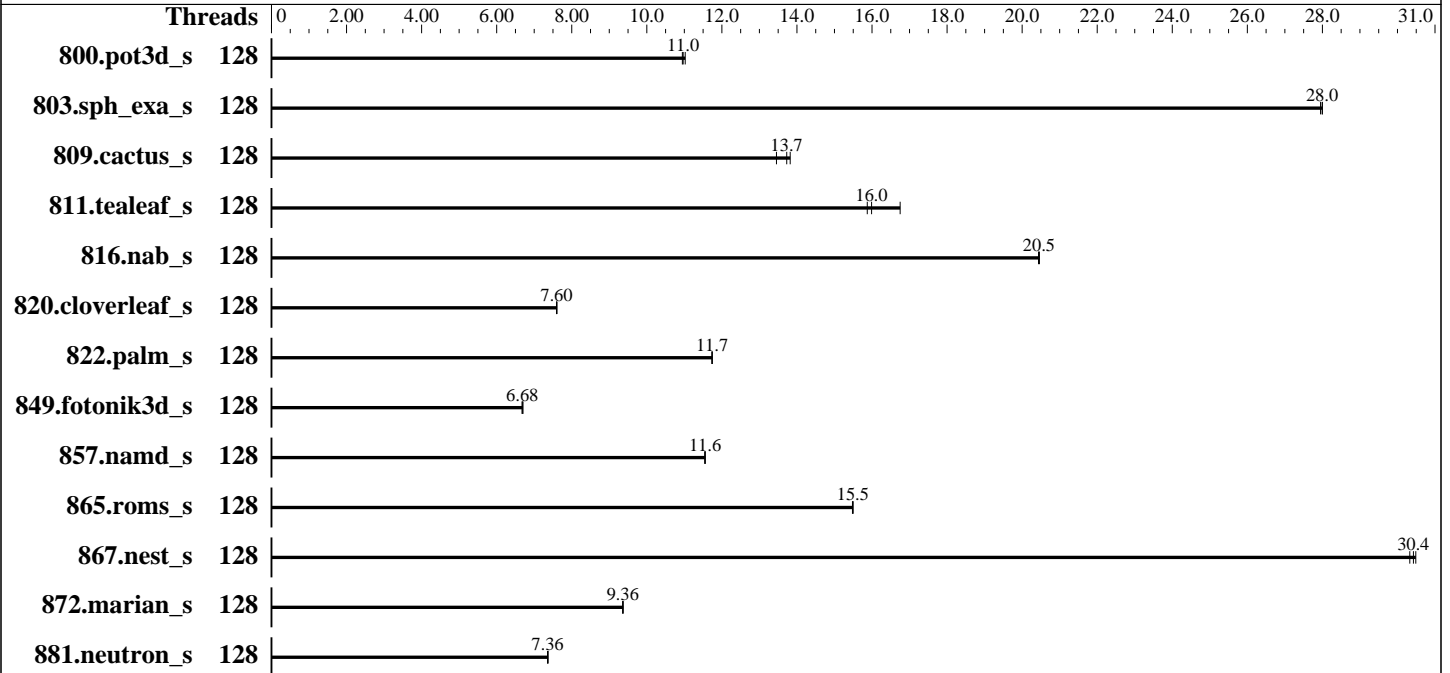
Test Sponsor: Supermicro

Tested by: Supermicro

Test Date: Feb-2026

Hardware Availability: Oct-2024

Software Availability: Jan-2026



### Hardware

CPU Name: AMD EPYC 9755  
 Max MHz: 4100  
 Nominal: 2700  
 Enabled: 128 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: 512 MB I+D on chip per chip, 32 MB shared / 8 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  
 6.8.0-90-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.



# SPEC CPU®2026 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

## Supermicro

CloudDC A+ Server AS -1116CS-TN  
(H14SHM , AMD EPYC 9755)

SPECspeed®2026\_fp\_base = 13.0

SPECspeed®2026\_fp\_peak = 13.0

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

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

## Results Table

Benchmark	Base						Peak							
	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
800.pot3d_s	128	61.1	11.0	<b>61.4</b>	<b>11.0</b>	61.5	10.9	128	61.1	11.0	<b>61.4</b>	<b>11.0</b>	61.5	10.9
803.sph_exa_s	128	44.3	28.0	44.2	28.0	<b>44.2</b>	<b>28.0</b>	128	44.3	28.0	44.2	28.0	<b>44.2</b>	<b>28.0</b>
809.cactus_s	128	<b>81.7</b>	<b>13.7</b>	83.4	13.5	81.2	13.8	128	<b>81.7</b>	<b>13.7</b>	83.4	13.5	81.2	13.8
811.tealeaf_s	128	<b>34.8</b>	<b>16.0</b>	35.1	15.9	33.3	16.7	128	<b>34.8</b>	<b>16.0</b>	35.1	15.9	33.3	16.7
816.nab_s	128	55.0	20.5	<b>55.1</b>	<b>20.5</b>	55.1	20.4	128	55.0	20.5	<b>55.1</b>	<b>20.5</b>	55.1	20.4
820.cloverleaf_s	128	<b>113</b>	<b>7.60</b>	113	7.59	113	7.61	128	<b>113</b>	<b>7.60</b>	113	7.59	113	7.61
822.palm_s	128	105	11.7	<b>105</b>	<b>11.7</b>	105	11.7	128	105	11.7	<b>105</b>	<b>11.7</b>	105	11.7
849.fotonik3d_s	128	<b>98.8</b>	<b>6.68</b>	98.8	6.68	98.5	6.70	128	<b>98.8</b>	<b>6.68</b>	98.8	6.68	98.5	6.70
857.namd_s	128	126	11.5	126	11.6	<b>126</b>	<b>11.6</b>	128	126	11.5	126	11.6	<b>126</b>	<b>11.6</b>
865.roms_s	128	70.4	15.5	70.4	15.5	<b>70.4</b>	<b>15.5</b>	128	70.4	15.5	70.4	15.5	<b>70.4</b>	<b>15.5</b>
867.nest_s	128	70.8	30.5	<b>71.0</b>	<b>30.4</b>	71.2	30.3	128	70.8	30.5	<b>71.0</b>	<b>30.4</b>	71.2	30.3
872.marian_s	128	116	9.36	115	9.37	<b>116</b>	<b>9.36</b>	128	116	9.36	115	9.37	<b>116</b>	<b>9.36</b>
881.neutron_s	128	111	7.37	<b>111</b>	<b>7.36</b>	111	7.36	128	111	7.37	<b>111</b>	<b>7.36</b>	111	7.36

SPECspeed®2026\_fp\_base = **13.0**

SPECspeed®2026\_fp\_peak = **13.0**

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)



# SPEC CPU®2026 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

## Supermicro

CloudDC A+ Server AS -1116CS-TN  
(H14SHM , AMD EPYC 9755)

SPECspeed®2026\_fp\_base = 13.0

SPECspeed®2026\_fp\_peak = 13.0

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

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

### 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 = "0-127"  
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 smc2348turin-os Thu Feb 5 20:38:18 2026
```

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

-----  
Table of contents

(Continued on next page)



# SPEC CPU®2026 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

## Supermicro

CloudDC A+ Server AS -1116CS-TN  
(H14SHM , AMD EPYC 9755)

SPECspeed®2026\_fp\_base = 13.0

SPECspeed®2026\_fp\_peak = 13.0

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

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

### 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 6.8.0-90-generic #91-Ubuntu SMP PREEMPT_DYNAMIC Tue Nov 18 14:14:30 UTC 2025 x86_64
```

---



---

```
2. w
20:38:18 up 2:49, 1 user, load average: 98.30, 53.17, 44.76
USER      TTY      FROM          LOGIN@      IDLE        JCPU      PCPU      WHAT
root                10.252.48.220  18:17       2:49m      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
```

---

(Continued on next page)



# SPEC CPU®2026 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

## Supermicro

CloudDC A+ Server AS -1116CS-TN  
(H14SHM, AMD EPYC 9755)

SPECspeed®2026\_fp\_base = 13.0

SPECspeed®2026\_fp\_peak = 13.0

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

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

### Platform Notes (Continued)

```
locked memory(kbytes) 2097152
process                3092159
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 9755 128-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     : 128
siblings      : 256
1 physical ids (chips)
256 processors (hardware threads)
physical id 0: core ids 0-127
physical id 0: apicids 0-255
```

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

-----  
7. lscpu

(Continued on next page)



# SPEC CPU®2026 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

## Supermicro

CloudDC A+ Server AS -1116CS-TN  
(H14SHM , AMD EPYC 9755)

SPECspeed®2026\_fp\_base = 13.0

SPECspeed®2026\_fp\_peak = 13.0

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

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

### 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):                       256
On-line CPU(s) list:         0-255
Vendor ID:                    AuthenticAMD
BIOS Vendor ID:              Advanced Micro Devices, Inc.
Model name:                   AMD EPYC 9755 128-Core Processor
BIOS Model name:             AMD EPYC 9755 128-Core Processor           Unknown CPU @ 2.7GHz
BIOS CPU family:             107
CPU family:                   26
Model:                        2
Thread(s) per core:          2
Core(s) per socket:          128
Socket(s):                    1
Stepping:                     1
Frequency boost:              enabled
CPU(s) scaling MHz:          100%
CPU max MHz:                  2700.0000
CPU min MHz:                  1500.0000
BogoMIPS:                     5399.71

```

```

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
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:                   6 MiB (128 instances)
L1i cache:                   4 MiB (128 instances)
L2 cache:                     128 MiB (128 instances)
L3 cache:                     512 MiB (16 instances)

```

(Continued on next page)



# SPEC CPU®2026 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

## Supermicro

CloudDC A+ Server AS -1116CS-TN  
(H14SHM , AMD EPYC 9755)

SPECspeed®2026\_fp\_base = 13.0

SPECspeed®2026\_fp\_peak = 13.0

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

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

### Platform Notes (Continued)

```

NUMA node(s): 1
NUMA node0 CPU(s): 0-255
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	6M	12	Data	1	64	1	64
L1i	32K	4M	8	Instruction	1	64	1	64
L2	1M	128M	16	Unified	2	1024	1	64
L3	32M	512M	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: 0-255
node 0 size: 773117 MB
node 0 free: 769129 MB
node distances:
node 0
0: 10

```

9. /proc/meminfo

MemTotal: 791672476 kB

10. who -r

run-level 5 Feb 5 17:49

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

(Continued on next page)



# SPEC CPU®2026 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

## Supermicro

CloudDC A+ Server AS -1116CS-TN  
(H14SHM , AMD EPYC 9755)

SPECspeed®2026\_fp\_base = 13.0

SPECspeed®2026\_fp\_peak = 13.0

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

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

### 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-6.8.0-90-generic
root=/dev/mapper/ubuntu--vg-ubuntu--lv
ro
```

-----  
14. cpupower frequency-info

```
analyzing CPU 72:
  current policy: frequency should be within 1.50 GHz and 2.70 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: 2700MHz
```

-----  
15. sysctl

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

(Continued on next page)



# SPEC CPU®2026 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

## Supermicro

CloudDC A+ Server AS -1116CS-TN  
(H14SHM , AMD EPYC 9755)

SPECspeed®2026\_fp\_base = 13.0

SPECspeed®2026\_fp\_peak = 13.0

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

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

### 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   38G  381G   9% /

```

(Continued on next page)



# SPEC CPU®2026 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

## Supermicro

CloudDC A+ Server AS -1116CS-TN  
(H14SHM , AMD EPYC 9755)

SPECspeed®2026\_fp\_base = 13.0

SPECspeed®2026\_fp\_peak = 13.0

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

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

### Platform Notes (Continued)

20. /sys/devices/virtual/dmi/id  
Vendor: Supermicro  
Product: AS -1116CS-TN  
Product Family: SMC H14  
Serial: S931316X4B12348

-----  
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  
-----  
=====

(Continued on next page)



# SPEC CPU®2026 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

## Supermicro

CloudDC A+ Server AS -1116CS-TN  
(H14SHM , AMD EPYC 9755)

SPECspeed®2026\_fp\_base = 13.0

SPECspeed®2026\_fp\_peak = 13.0

**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)



# SPEC CPU®2026 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

## Supermicro

CloudDC A+ Server AS -1116CS-TN  
(H14SHM , AMD EPYC 9755)

SPECspeed®2026\_fp\_base = 13.0

SPECspeed®2026\_fp\_peak = 13.0

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

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

## 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
```



# SPEC CPU®2026 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

## Supermicro

CloudDC A+ Server AS -1116CS-TN  
(H14SHM , AMD EPYC 9755)

SPECspeed®2026\_fp\_base = 13.0

SPECspeed®2026\_fp\_peak = 13.0

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

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

## 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



# SPEC CPU®2026 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

## Supermicro

CloudDC A+ Server AS -1116CS-TN  
(H14SHM , AMD EPYC 9755)

SPECspeed®2026\_fp\_base = 13.0

SPECspeed®2026\_fp\_peak = 13.0

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

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

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>

SPEC CPU and SPECspeed 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](mailto:info@spec.org).

Tested with SPEC CPU®2026 v0.902.0 on 2026-02-05 15:38:17-0500.

Report generated on 2026-05-04 23:34:14 by CPU2026 PDF formatter (unknown).

Originally published on 2026-05-05.