



SPEC CPU®2026 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Supermicro

Hyper A+ Server AS -2126HS-TN
(H14DSH , AMD EPYC 9575F)

SPECspeed®2026_fp_base = 17.0

SPECspeed®2026_fp_peak = 17.0

CPU2026 License: 001176

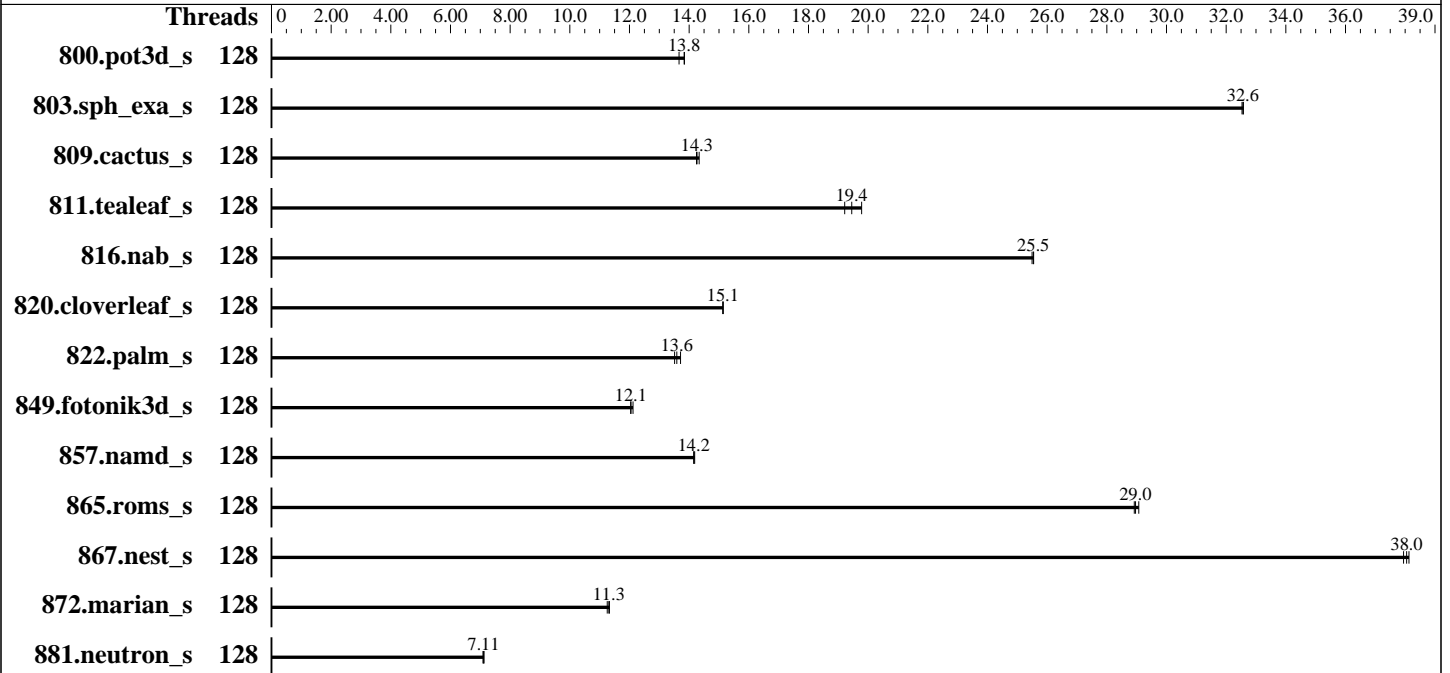
Test Sponsor: Supermicro

Tested by: Supermicro

Test Date: Feb-2026

Hardware Availability: Oct-2024

Software Availability: Jan-2026



Hardware

CPU Name: AMD EPYC 9575F
 Max MHz: 5000
 Nominal: 3300
 Enabled: 128 cores, 2 chips, 2 threads/core
 Orderable: 2 chips
 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 / 8 cores
 Other: None
 Memory: 1536 GB (24 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 1.5 released May-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

Hyper A+ Server AS -2126HS-TN
(H14DSH , AMD EPYC 9575F)

SPECspeed®2026_fp_base = 17.0

SPECspeed®2026_fp_peak = 17.0

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	48.6	13.8	49.3	13.7	48.7	13.8	128	48.6	13.8	49.3	13.7	48.7	13.8
803.sph_exa_s	128	38.1	32.5	38.0	32.6	38.0	32.6	128	38.1	32.5	38.0	32.6	38.0	32.6
809.cactus_s	128	78.7	14.3	78.3	14.3	78.8	14.2	128	78.7	14.3	78.3	14.3	78.8	14.2
811.tealeaf_s	128	28.6	19.4	28.2	19.8	29.0	19.2	128	28.6	19.4	28.2	19.8	29.0	19.2
816.nab_s	128	44.2	25.5	44.1	25.5	44.1	25.5	128	44.2	25.5	44.1	25.5	44.1	25.5
820.cloverleaf_s	128	56.6	15.1	56.6	15.1	56.6	15.1	128	56.6	15.1	56.6	15.1	56.6	15.1
822.palm_s	128	89.6	13.7	90.4	13.6	90.9	13.5	128	89.6	13.7	90.4	13.6	90.9	13.5
849.fotonik3d_s	128	54.8	12.0	54.5	12.1	54.8	12.1	128	54.8	12.0	54.5	12.1	54.8	12.1
857.namd_s	128	102	14.2	103	14.2	103	14.2	128	102	14.2	103	14.2	103	14.2
865.roms_s	128	37.7	28.9	37.6	29.0	37.5	29.1	128	37.7	28.9	37.6	29.0	37.5	29.1
867.nest_s	128	56.9	37.9	56.7	38.1	56.8	38.0	128	56.9	37.9	56.7	38.1	56.8	38.0
872.marian_s	128	96.1	11.3	95.5	11.3	95.7	11.3	128	96.1	11.3	95.5	11.3	95.7	11.3
881.neutron_s	128	115	7.11	114	7.12	115	7.09	128	115	7.11	114	7.12	115	7.09

SPECspeed®2026_fp_base = 17.0

SPECspeed®2026_fp_peak = 17.0

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

Hyper A+ Server AS -2126HS-TN
(H14DSH , AMD EPYC 9575F)

SPECspeed®2026_fp_base = 17.0

SPECspeed®2026_fp_peak = 17.0

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/speccpu2026speed/amd_speed_aocc510_flang22_znver5_A_lib/lib:/spec
/speccpu2026speed/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 = 400
Package Power Limit Control = Manual
Package Power Limit = 400
TSME = Disabled

Sysinfo program /spec/speccpu2026speed/bin/sysinfo
Rev: 069f95da7e7f5d81b2ce48a82150e54f
running on smc4708-u24-os Thu Feb 5 17:29:36 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

Hyper A+ Server AS -2126HS-TN
(H14DSH , AMD EPYC 9575F)

SPECspeed®2026_fp_base = 17.0

SPECspeed®2026_fp_peak = 17.0

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

```
2. w
17:29:36 up 3:08, 1 user, load average: 122.01, 60.74, 47.16
USER      TTY      FROM          LOGIN@      IDLE        JCPU      PCPU      WHAT
```

```
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
locked memory(kbytes)  2097152
```

(Continued on next page)



SPEC CPU®2026 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Supermicro

Hyper A+ Server AS -2126HS-TN
(H14DSH , AMD EPYC 9575F)

SPECspeed®2026_fp_base = 17.0

SPECspeed®2026_fp_peak = 17.0

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

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

Platform Notes (Continued)

```
process          6190333
nofiles          1024
vmemory(kbytes)  unlimited
locks           unlimited
rtprio          0
```

5. sysinfo process ancestry

```
/sbin/init
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/speccpu2026speed
```

6. /proc/cpuinfo

```
model name      : AMD EPYC 9575F 64-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     : 64
siblings      : 128
2 physical ids (chips)
256 processors (hardware threads)
physical id 0: core ids 0-63
physical id 1: core ids 0-63
physical id 0: apicids 0-127
physical id 1: apicids 128-255
```

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

7. lscpu

```
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 Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Supermicro

Hyper A+ Server AS -2126HS-TN
(H14DSH , AMD EPYC 9575F)

SPECspeed®2026_fp_base = 17.0

SPECspeed®2026_fp_peak = 17.0

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

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

Platform Notes (Continued)

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 9575F 64-Core Processor
 BIOS Model name: AMD EPYC 9575F 64-Core Processor Unknown CPU @ 3.3GHz
 BIOS CPU family: 107
 CPU family: 26
 Model: 2
 Thread(s) per core: 2
 Core(s) per socket: 64
 Socket(s): 2
 Stepping: 1
 Frequency boost: enabled
 CPU(s) scaling MHz: 100%
 CPU max MHz: 3300.0000
 CPU min MHz: 1500.0000
 BogomIPS: 6600.32
 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: 6 MiB (128 instances)
 L1i cache: 4 MiB (128 instances)
 L2 cache: 128 MiB (128 instances)
 L3 cache: 512 MiB (16 instances)
 NUMA node(s): 2
 NUMA node0 CPU(s): 0-63,128-191
 NUMA node1 CPU(s): 64-127,192-255

(Continued on next page)



SPEC CPU®2026 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Supermicro

Hyper A+ Server AS -2126HS-TN
(H14DSH , AMD EPYC 9575F)

SPECspeed®2026_fp_base = 17.0

SPECspeed®2026_fp_peak = 17.0

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

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

Platform Notes (Continued)

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: 2 nodes (0-1)
node 0 cpus: 0-63,128-191
node 0 size: 773675 MB
node 0 free: 771244 MB
node 1 cpus: 64-127,192-255
node 1 size: 773985 MB
node 1 free: 771985 MB
node distances:
node  0  1
  0:  10 32
  1:  32 10
```

9. /proc/meminfo

MemTotal: 1584804996 kB

10. who -r

run-level 5 Feb 5 14:20

(Continued on next page)



SPEC CPU®2026 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Supermicro

Hyper A+ Server AS -2126HS-TN
(H14DSH , AMD EPYC 9575F)

SPECspeed®2026_fp_base = 17.0

SPECspeed®2026_fp_peak = 17.0

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

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

Platform Notes (Continued)

11. Systemd service manager version: systemd 255 (255.4-lubuntu8.10)
Default Target Status
graphical running

12. Services, from systemctl list-unit-files

STATE	UNIT FILES
enabled	ModemManager apparmor apport 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=/boot/vmlinuz-6.8.0-94-generic
root=UUID=37460a2f-d72f-4128-8c72-fa141f99c424
ro

14. cpupower frequency-info
analyzing CPU 56:
current policy: frequency should be within 1.50 GHz and 3.30 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: 3300MHz

15. sysctl

(Continued on next page)



SPEC CPU®2026 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Supermicro

Hyper A+ Server AS -2126HS-TN
(H14DSH , AMD EPYC 9575F)

SPECspeed®2026_fp_base = 17.0

SPECspeed®2026_fp_peak = 17.0

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

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

Platform Notes (Continued)

```

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+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/speccpu2026speed
Filesystem      Type  Size  Used Avail Use% Mounted on
/dev/nvme0n1p2 ext4  457G  229G  205G  53% /

```

(Continued on next page)



SPEC CPU®2026 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Supermicro

Hyper A+ Server AS -2126HS-TN
(H14DSH , AMD EPYC 9575F)

SPECspeed®2026_fp_base = 17.0

SPECspeed®2026_fp_peak = 17.0

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 -2126HS-TN
Product Family: SMC H14
Serial: S920464X4524708

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:
24x Samsung M321R8GA0PB1-CCPWC 64 GB 2 rank 6400

22. BIOS
(This section combines info from /sys/devices and dmidecode.)
BIOS Vendor: American Megatrends International, LLC.
BIOS Version: 1.5
BIOS Date: 05/12/2025
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

Hyper A+ Server AS -2126HS-TN
(H14DSH , AMD EPYC 9575F)

SPECspeed®2026_fp_base = 17.0

SPECspeed®2026_fp_peak = 17.0

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

```

(Continued on next page)



SPEC CPU®2026 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Supermicro

Hyper A+ Server AS -2126HS-TN
(H14DSH , AMD EPYC 9575F)

SPECspeed®2026_fp_base = 17.0

SPECspeed®2026_fp_peak = 17.0

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)

822.palm_s: -DSPEC_LP64
849.fotonik3d_s: -DSPEC_LP64
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

Hyper A+ Server AS -2126HS-TN
(H14DSH , AMD EPYC 9575F)

SPECspeed®2026_fp_base = 17.0

SPECspeed®2026_fp_peak = 17.0

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

Hyper A+ Server AS -2126HS-TN
(H14DSH , AMD EPYC 9575F)

SPECspeed®2026_fp_base = 17.0

SPECspeed®2026_fp_peak = 17.0

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.

Tested with SPEC CPU®2026 v0.902.0 on 2026-02-05 12:29:36-0500.

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

Originally published on 2026-05-05.