



SPEC CPU®2026 Integer Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

Supermicro

Hyper A+ Server AS -2126HS-TN
(H14DSH , AMD EPYC 9655)

SPECrate®2026_int_base = 782

SPECrate®2026_int_peak = 782

CPU2026 License: 001176

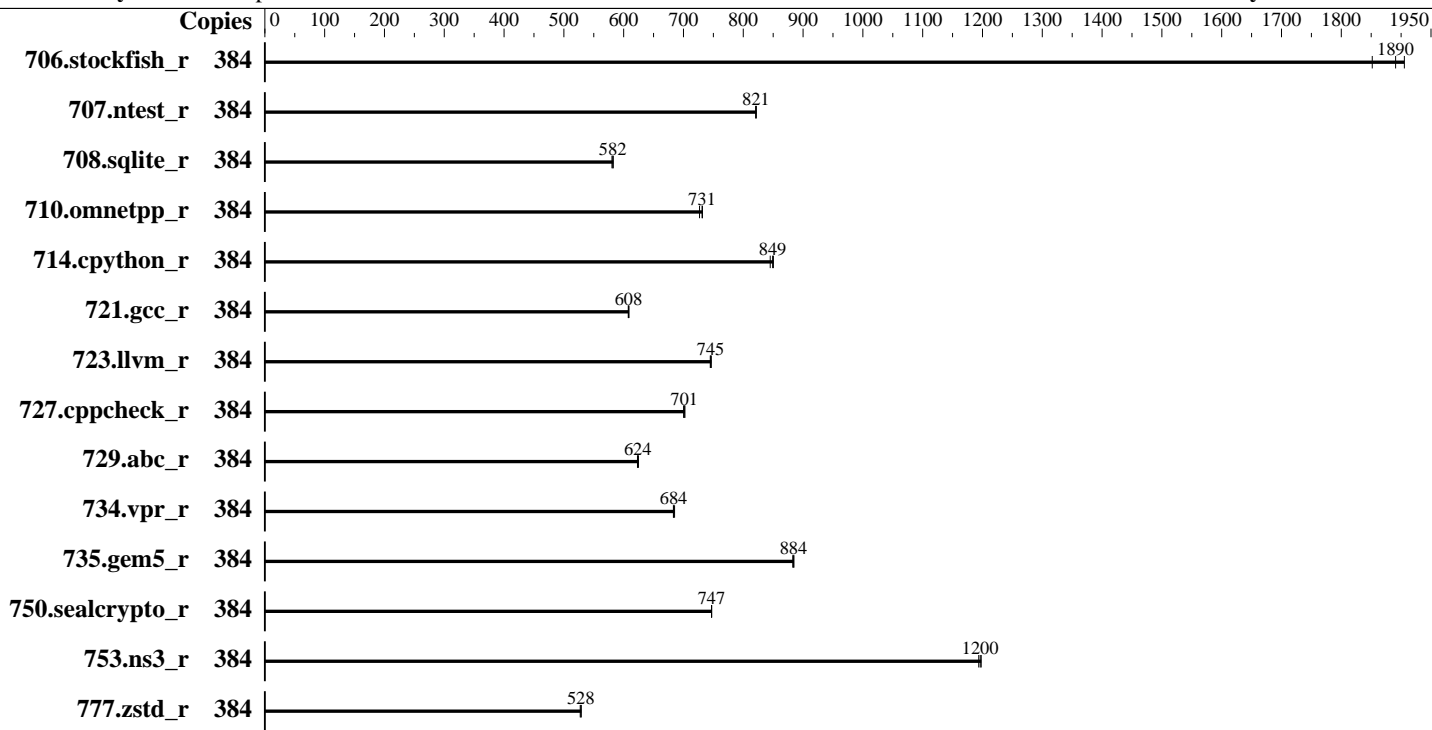
Test Sponsor: Supermicro

Tested by: Supermicro

Test Date: Jan-2026

Hardware Availability: Oct-2024

Software Availability: Jan-2026



Hardware

CPU Name: AMD EPYC 9655
 Max MHz: 4500
 Nominal: 2600
 Enabled: 192 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: 384 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++/Fortran: Version 5.1.0 of AOCC
 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.



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Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
706.stockfish_r	384	261	1850	<u>256</u>	<u>1890</u>	254	1910	384	261	1850	<u>256</u>	<u>1890</u>	254	1910
707.ntest_r	384	277	822	<u>277</u>	<u>821</u>	277	821	384	277	822	<u>277</u>	<u>821</u>	277	821
708.sqlite_r	384	348	583	<u>349</u>	<u>582</u>	349	580	384	348	583	<u>349</u>	<u>582</u>	349	580
710.omnetpp_r	384	257	727	<u>255</u>	<u>731</u>	255	732	384	257	727	<u>255</u>	<u>731</u>	255	732
714.cpython_r	384	216	850	<u>217</u>	<u>849</u>	218	845	384	216	850	<u>217</u>	<u>849</u>	218	845
721.gcc_r	384	<u>433</u>	<u>608</u>	433	609	433	608	384	<u>433</u>	<u>608</u>	433	609	433	608
723.llvm_r	384	<u>261</u>	<u>745</u>	261	747	261	745	384	<u>261</u>	<u>745</u>	261	747	261	745
727.cppcheck_r	384	197	700	<u>197</u>	<u>701</u>	196	702	384	197	700	<u>197</u>	<u>701</u>	196	702
729.abc_r	384	282	625	283	623	<u>283</u>	<u>624</u>	384	282	625	283	623	<u>283</u>	<u>624</u>
734.vpr_r	384	258	685	259	683	<u>259</u>	<u>684</u>	384	258	685	259	683	<u>259</u>	<u>684</u>
735.gem5_r	384	<u>212</u>	<u>884</u>	211	885	212	883	384	<u>212</u>	<u>884</u>	211	885	212	883
750.sealcrypto_r	384	276	747	<u>276</u>	<u>747</u>	276	747	384	276	747	<u>276</u>	<u>747</u>	276	747
753.ns3_r	384	<u>197</u>	<u>1200</u>	197	1190	197	1200	384	<u>197</u>	<u>1200</u>	197	1190	197	1200
777.zstd_r	384	467	529	<u>468</u>	<u>528</u>	469	527	384	467	529	<u>468</u>	<u>528</u>	469	527

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Results appear in the order in which they were run. Bold underlined text indicates a median measurement.

Compiler Notes

The AMD64 AOCC Compiler Suite is available at
<http://developer.amd.com/amd-aocc/>

Submit Notes

The config file option 'submit' was used.
'numactl' was used to bind copies to the cores.
See the configuration file for details.

Operating System Notes

'ulimit -s unlimited' was used to set environment stack size limit
'ulimit -l 2097152' was used to set environment locked pages in memory limit

runcpu command invoked through numactl i.e.:
numactl --interleave=all runcpu <etc>

To limit dirty cache to 8% of memory, 'sysctl -w vm.dirty_ratio=8' run as root.
To limit swap usage to minimum necessary, 'sysctl -w vm.swappiness=1' run as root.

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Operating System Notes (Continued)

To free node-local memory and avoid remote memory usage,
'sysctl -w vm.zone_reclaim_mode=1' run as root.
To clear filesystem caches, 'sync; sysctl -w vm.drop_caches=3' run as root.
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/speccp
u2026rc2bsub/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:
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
NUMA nodes per socket = NPS4

Sysinfo program /spec/speccpu2026rc2bsub/bin/sysinfo
Rev: 069f95da7e7f5d81b2ce48a82150e54f
running on smc4706turin-u24-os Fri Jan 30 19:50:28 2026

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

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Platform Notes (Continued)

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- 4. ulimit -a
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- 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 -srmv
Linux 6.8.0-94-generic #96-Ubuntu SMP PREEMPT_DYNAMIC Fri Jan 9 20:36:55 UTC 2026 x86_64
```

```
2. w
19:50:28 up 50 min, 3 users, load average: 0.15, 0.03, 0.01
USER      TTY      FROM          LOGIN@   IDLE   JCPU   PCPU   WHAT
root      tty      172.31.137.186 19:49   50:11  0.00s  0.07s  sshd: root@notty
root      tty      172.31.137.186 19:49   50:11  0.00s  0.09s  sshd: root@pts/0
root      tty1    -             19:49   1:14   0.07s  ?      -bash
```

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

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

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Platform Notes (Continued)

```

stack(kbytes)          unlimited
coredump(blocks)      0
memory(kbytes)        unlimited
locked memory(kbytes) 2097152
process                6189786
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_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 intrate
runcpu --configfile amd_rate_aocc510_znver5_A1.cfg --tune base --reportable --iterations 3 --nopower
--runmode rate --tune base --size test:train:refrate intrate --nopreenv --note-preenv --logfile
$SPEC/tmp/CPU2026.004/templogs/preenv.intrate.004.0.log --lognum 004.0 --from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /spec/speccpu2026rc2bsub

```

6. /proc/cpuinfo

```

model name      : AMD EPYC 9655 96-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     : 96
siblings      : 192
2 physical ids (chips)
384 processors (hardware threads)
physical id 0: core ids 0-95
physical id 1: core ids 0-95
physical id 0: apicids 0-191
physical id 1: apicids 256-447

```

Caution: /proc/cpuinfo data regarding chips, cores, and threads is not necessarily reliable, especially for

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Platform Notes (Continued)

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
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 9655 96-Core Processor
BIOS Model name:              AMD EPYC 9655 96-Core Processor           Unknown CPU @ 2.6GHz
BIOS CPU family:              107
CPU family:                   26
Model:                        2
Thread(s) per core:          2
Core(s) per socket:          96
Socket(s):                    2
Stepping:                     1
Frequency boost:              enabled
CPU(s) scaling MHz:          100%
CPU max MHz:                  2600.0000
CPU min MHz:                  1500.0000
BogoMIPS:                     5199.96

```

```

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
rdtsmp lm constant_tsc rep_good amd_lbr_v2 nopl nonstop_tsc cpuid
extd_apicid aperfmperf rapl pni pclmulqdq monitor ssse3 fma cx16 pcid
sse4_1 sse4_2 x2apic movbe popcnt aes xsave avx f16c rdrand lahf_lm
cmp_legacy extapic cr8_legacy abm sse4a misalignsse 3dnowprefetch
osvw ibs skinit wdt tce topoext perfctr_core perfctr_nb bpext
perfctr_llc mwaitx cpb cat_l3 cdp_l3 hw_pstate ssbd mba perfmon_v2
ibrs ibpb stibp ibrs_enhanced vmmcall fsgsbase tsc_adjust bmi1 avx2
smep bmi2 erms invpcid cqm rdt_a avx512f avx512dq rdseed adx smap
avx512ifma clflushopt clwb avx512cd sha_ni avx512bw avx512vl xsaveopt
xsavec xgetbv1 xsaves cqm_llc cqm_occup_llc cqm_mbm_total
cqm_mbm_local user_shstk avx_vnni avx512_bf16 clzero irperf
xsaveerptr rdpru wbnoinvd amd_ppin cppc amd_ibpb_ret arat npt lbrv
svm_lock nrrip_save tsc_scale vmcb_clean flushbyasid decodeassists
pausefilter pfthreshold avic v_vmsave_vmload vgif x2avic v_spec_ctrl
vnm1 avx512vbmi umip pku ospke avx512_vbmi2 gfni vaes vpclmulqdq
avx512_vnni avx512_bitalg avx512_vpopcntdq la57 rdpid bus_lock_detect
movdiri movdir64b overflow_recov succor smca fsmr avx512_vp2intersect

```

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Platform Notes (Continued)

```

flush_llld debug_swap
Lld cache:          9 MiB (192 instances)
Lli cache:          6 MiB (192 instances)
L2 cache:           192 MiB (192 instances)
L3 cache:           768 MiB (24 instances)
NUMA node(s):       8
NUMA node0 CPU(s): 0-23,192-215
NUMA node1 CPU(s): 24-47,216-239
NUMA node2 CPU(s): 48-71,240-263
NUMA node3 CPU(s): 72-95,264-287
NUMA node4 CPU(s): 96-119,288-311
NUMA node5 CPU(s): 120-143,312-335
NUMA node6 CPU(s): 144-167,336-359
NUMA node7 CPU(s): 168-191,360-383
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; PBRsB-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
Lld	48K	9M	12	Data	1	64	1	64
Lli	32K	6M	8	Instruction	1	64	1	64
L2	1M	192M	16	Unified	2	1024	1	64
L3	32M	768M	16	Unified	3	32768	1	64

8. numactl --hardware

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

```

available: 8 nodes (0-7)
node 0 cpus: 0-23,192-215
node 0 size: 193012 MB
node 0 free: 192341 MB
node 1 cpus: 24-47,216-239
node 1 size: 193519 MB

```

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Platform Notes (Continued)

```

node 1 free: 192291 MB
node 2 cpus: 48-71,240-263
node 2 size: 193519 MB
node 2 free: 192963 MB
node 3 cpus: 72-95,264-287
node 3 size: 193476 MB
node 3 free: 192926 MB
node 4 cpus: 96-119,288-311
node 4 size: 193519 MB
node 4 free: 192986 MB
node 5 cpus: 120-143,312-335
node 5 size: 193519 MB
node 5 free: 193012 MB
node 6 cpus: 144-167,336-359
node 6 size: 193519 MB
node 6 free: 193040 MB
node 7 cpus: 168-191,360-383
node 7 size: 193438 MB
node 7 free: 192479 MB
node distances:
node  0  1  2  3  4  5  6  7
  0:  10 12 12 12 32 32 32 32
  1:  12 10 12 12 32 32 32 32
  2:  12 12 10 12 32 32 32 32
  3:  12 12 12 10 32 32 32 32
  4:  32 32 32 32 10 12 12 12
  5:  32 32 32 32 12 10 12 12
  6:  32 32 32 32 12 12 10 12
  7:  32 32 32 32 12 12 12 10

```

```

-----
9. /proc/meminfo
   MemTotal:      1584665144 kB

```

```

-----
10. who -r
    run-level 5 Jan 30 19:00

```

```

-----
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

```

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Platform Notes (Continued)

```

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 uuid
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=03383914-c98d-47f6-9c7e-25b8eb120794
ro

```

```

-----
14. cpupower frequency-info
analyzing CPU 17:
current policy: frequency should be within 1.50 GHz and 2.60 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: 2600MHz

```

```

-----
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

```

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Platform Notes (Continued)

```

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/speccpu2026rc2bsub
Filesystem      Type  Size  Used Avail Use% Mounted on
/dev/nvme7nlp2 ext4  457G   25G  409G   6% /

```

```

-----
20. /sys/devices/virtual/dmi/id
Vendor:          Supermicro
Product:         AS -2126HS-TN
Product Family:  SMC H14
Serial:          S920464X4524706

```

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Platform Notes (Continued)

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 | 708.sqlite_r(base) 714.cpython_r(base) 777.zstd_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++ | 706.stockfish_r(base) 707.ntest_r(base) 727.cppcheck_r(base)
| 753.ns3_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 | 710.omnetpp_r(base) 721.gcc_r(base) 723.llvm_r(base) 729.abc_r(base)
| 734.vpr_r(base) 735.gem5_r(base) 750.sealcrypto_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
=====

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SPEC CPU®2026 Integer Rate Result

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Supermicro

Hyper A+ Server AS -2126HS-TN
(H14DSH , AMD EPYC 9655)

SPECrate®2026_int_base = 782

SPECrate®2026_int_peak = 782

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

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

Compiler Version Notes (Continued)

Base Compiler Invocation

C benchmarks:

clang

C++ benchmarks:

clang++

Benchmarks using both C and C++:

clang++ clang

Base Portability Flags

706.stockfish_r: -DSPEC_LP64
707.ntest_r: -DSPEC_LP64
708.sqlite_r: -DSPEC_LP64
710.omnetpp_r: -DSPEC_LP64
714.cpython_r: -DSPEC_LP64
721.gcc_r: -DSPEC_LP64
723.llvm_r: -DSPEC_LP64
727.cppcheck_r: -DSPEC_LP64
729.abc_r: -DSPEC_LP64
734.vpr_r: -DSPEC_LP64
735.gem5_r: -DSPEC_LP64
750.sealcrypto_r: -DSPEC_LP64
753.ns3_r: -DSPEC_LP64
777.zstd_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
-Wl,-mllvm -Wl,-extra-inliner -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 -lflang
-lamdalloc

(Continued on next page)



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Base Optimization Flags (Continued)

C++ benchmarks:

```
-m64 -std=c++17 -Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
-Wl,-mllvm -Wl,-reduce-array-computations=3 -O3 -march=znver5
-fveclib=AMDLIBM -flto -mllvm -unroll-threshold=100
-mllvm -loop-unswitch-threshold=200000
-mllvm -reduce-array-computations=3 -zopt -fno-PIE -no-pie
-fvirtual-function-elimination -fvisibility=hidden -lamdlibm -lflang
-lamdalloc
```

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 -march=znver5
-fveclib=AMDLIBM -fno-PIE -no-pie -flto -fstruct-layout=7
-mllvm -unroll-threshold=50 -mllvm -inline-threshold=1000
-freemap-arrays -fstrip-mining -mllvm -reduce-array-computations=3
-zopt -mllvm -unroll-threshold=100
-mllvm -loop-unswitch-threshold=200000 -fvirtual-function-elimination
-fvisibility=hidden -lamdlibm -lflang -lamdalloc
```

Peak Optimization Flags

C benchmarks:

708.sqlite_r: basepeak = yes

714.cpython_r: basepeak = yes

777.zstd_r: basepeak = yes

C++ benchmarks:

706.stockfish_r: basepeak = yes

707.ntest_r: basepeak = yes

727.cppcheck_r: basepeak = yes

753.ns3_r: basepeak = yes

Benchmarks using both C and C++:

(Continued on next page)



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Software Availability: Jan-2026

Peak Optimization Flags (Continued)

710.omnetpp_r: basepeak = yes

721.gcc_r: basepeak = yes

723.llvm_r: basepeak = yes

729.abc_r: basepeak = yes

734.vpr_r: basepeak = yes

735.gem5_r: basepeak = yes

750.sealcrypto_r: basepeak = yes

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

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

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