SPEC CPU®2026 Floating Point Rate Result

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ASUSTeK Computer Inc.

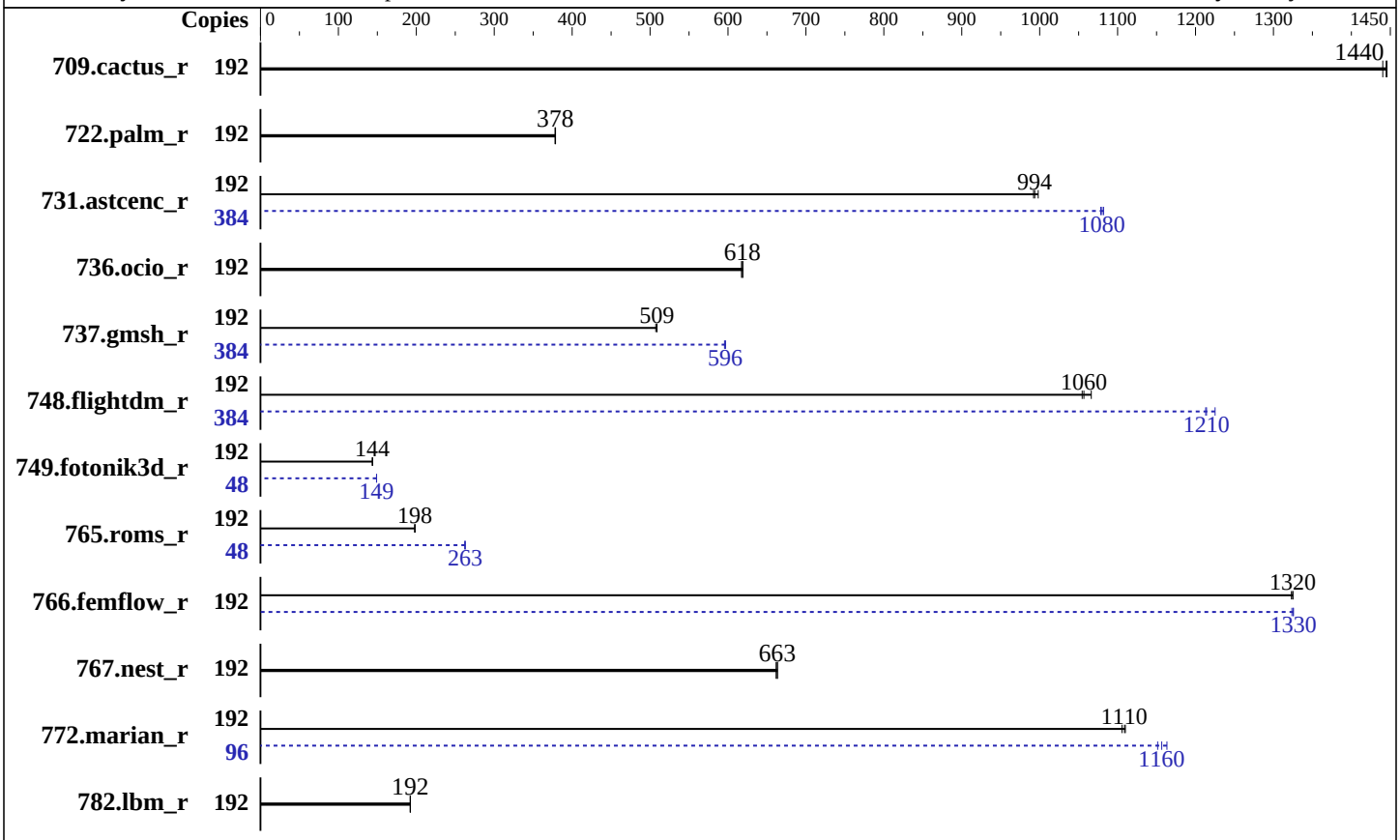
ASUS RS520QA-E13-RS8U
(2.25 GHz, AMD EPYC 9965)

SPECrate®2026_fp_base = 561

SPECrate®2026_fp_peak = 596

CPU2026 License: 9016
Test Sponsor: ASUSTeK Computer Inc.
Tested by: ASUSTeK Computer Inc.

Test Date: Jul-2026
Hardware Availability: Jun-2025
Software Availability: May-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:	384 GB (12 x 32 GB 2Rx4 PC5-6400B-R)
Storage:	1 x 4.0 TB PCIe NVMe SSD
Cooling:	Air
Other:	None

Software

OS:	SUSE Linux Enterprise Server 15 SP6 (x86_64) Kernel 6.4.0-150600.21-default
Compiler:	C/C++/Fortran: Version 5.2.0 of AOCC
Compiler Category:	Vendor
Firmware:	Version 0302 released Jun-2025
File System:	xfs
System State:	Run level 3 (multi-user)
Base Pointers:	64-bit
Peak Pointers:	64-bit
Other:	jemalloc: jemalloc memory allocator library v5.3.1
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
709.cactus_r	192	114	1440	**114**	**1440**	114	1450	192	114	1440	**114**	**1440**	114	1450
722.palm_r	192	**670**	**378**	669	379	670	378	192	**670**	**378**	669	379	670	378
731.astcenc_r	192	162	998	**162**	**994**	163	992	384	298	1080	**299**	**1080**	299	1080
736.ocio_r	192	271	619	**272**	**618**	272	617	192	271	619	**272**	**618**	272	617
737.gmsh_r	192	**173**	**509**	173	509	174	507	384	296	596	295	597	**296**	**596**
748.flightdm_r	192	**130**	**1060**	130	1050	129	1070	384	224	1230	227	1210	**226**	**1210**
749.fotonik3d_r	192	1547	144	**1545**	**144**	1542	144	48	**372**	**149**	373	149	372	149
765.roms_r	192	1528	198	1524	198	**1526**	**198**	48	288	262	288	263	**288**	**263**
766.femflow_r	192	**213**	**1320**	213	1320	213	1320	192	**212**	**1330**	213	1320	212	1330
767.nest_r	192	229	663	230	662	**230**	**663**	192	229	663	230	662	**230**	**663**
772.marian_r	192	**273**	**1110**	273	1110	274	1110	96	**131**	**1160**	130	1160	132	1150
782.lbm_r	192	572	192	572	192	**572**	**192**	192	572	192	572	192	**572**	**192**

SPECrate®2026_fp_base = 561

SPECrate®2026_fp_peak = 596

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
OS set to performance mode via cpupower frequency-set -g performance

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

To limit dirty cache to 8% of memory, 'sysctl -w vm.dirty_ratio=8' run as root.
To limit swap usage to minimum necessary, 'sysctl -w vm.swappiness=1' run as root.
To free node-local memory and avoid remote memory usage,
'sysctl -w vm.zone_reclaim_mode=1' run as root.
```

(Continued on next page)

Operating System Notes (Continued)

```
To clear filesystem caches, 'sync; sysctl -w vm.drop_caches=3' run as root.
To disable address space layout randomization (ASLR) to reduce run-to-run
variability, 'sysctl -w kernel.randomize_va_space=0' run as root.

To enable Transparent Hugepages (THP) for all allocations,
'echo always > /sys/kernel/mm/transparent_hugepage/enabled' and
'echo always > /sys/kernel/mm/transparent_hugepage/defrag' run as root.
```

Environment Variables Notes

```
Environment variables set by runcpu before the start of the run:
LD_LIBRARY_PATH =
     "/aocc520/amd_rate_aocc520_znver5_A_lib/lib:/aocc520/amd_rate_aocc520_zn
     ver5_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
jemalloc: configured and built with GCC v15.2.0 in Ubuntu 24.04 (No options specified)
jemalloc 5.3.1 is available here:
https://github.com/jemalloc/jemalloc/releases/tag/5.3.1
```

Platform Notes

```
BIOS Configuration:
SR-IOV Support = Disabled
SVM Mode = Disabled
NUMA nodes per socket = NPS4
Determinism Control = Manual
DRAM Scrub time = Disabled
Engine Boost = Aggressive
TDP Control = Manual
TDP = 500
PPT Control = Manual
PPT = 500
L1 Stream HW Prefetcher = Disabled
L2 Stream HW Prefetcher = Disabled
BMC Configuration:
Fan mode = Full speed mode

 Sysinfo program /aocc520/bin/sysinfo
```

(Continued on next page)

Platform Notes (Continued)

```
Rev: 779ab21020787073335a329f3a45e2cd
running on localhost Fri Jul 24 21:08:45 2026

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

------------------------------------------------------------
Table of contents
------------------------------------------------------------
 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 254 (254.10+suse.84.ge8d77af424)
12. Services, from systemctl list-unit-files
13. Linux kernel boot-time arguments, from /proc/cmdline
14. cpupower frequency-info
15. tuned-adm active
16. sysctl
17. /sys/kernel/mm/transparent_hugepage
18. /sys/kernel/mm/transparent_hugepage/khugepaged
19. OS release
20. Disk information
21. /sys/devices/virtual/dmi/id
22. dmidecode
23. BIOS
------------------------------------------------------------

------------------------------------------------------------
1. uname -srvm
  Linux 6.4.0-150600.21-default #1 SMP PREEMPT_DYNAMIC Thu May 16 11:09:22 UTC 2024 (36c1e09) x86_64

------------------------------------------------------------
2. w
   21:08:45 up 1 day,  7:19,  2 users,  load average: 34.33, 90.91, 132.45
  USER     TTY      FROM             LOGIN@   IDLE   JCPU   PCPU WHAT
 root     tty1     -                Thu13    7:37m  4.42s  3.26s python3 ./run_amd_rate_aocc520_znver5_A1.py
  root     tty2     -                08:45    8:11m  0.05s  0.05s -bash

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

(Continued on next page)

Platform Notes (Continued)

```
------------------------------------------------------------
4. ulimit -a
  core file size          (blocks, -c) unlimited
  data seg size           (kbytes, -d) unlimited
  scheduling priority             (-e) 0
  file size               (blocks, -f) unlimited
  pending signals                 (-i) 1544040
  max locked memory       (kbytes, -l) 2048
  max memory size         (kbytes, -m) unlimited
  open files                      (-n) 1024
  pipe size            (512 bytes, -p) 8
  POSIX message queues     (bytes, -q) 819200
  real-time priority              (-r) 0
  stack size              (kbytes, -s) unlimited
  cpu time               (seconds, -t) unlimited
  max user processes              (-u) 1544040
  virtual memory          (kbytes, -v) unlimited
  file locks                      (-x) unlimited

------------------------------------------------------------
5. sysinfo process ancestry
 /usr/lib/systemd/systemd --switched-root --system --deserialize=42
 login -- root
 -bash
 /bin/bash ./rate.sh
 python3 ./run_amd_rate_aocc520_znver5_A1.py
 runcpu --config amd_rate_aocc520_znver5_A1.cfg --tune all --reportable --iterations 3 fprate
 runcpu --configfile amd_rate_aocc520_znver5_A1.cfg --tune all --reportable --iterations 3 --nopower
   --runmode rate --tune base:peak --size test:train:refrate fprate --nopreenv --note-preenv --logfile
   $SPEC/tmp/CPU2026.029/templogs/preenv.fprate.029.0.log --lognum 029.0 --from_runcpu 2
 specperl $SPEC/bin/sysinfo
$SPEC = /aocc520

------------------------------------------------------------
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)
```

(Continued on next page)

Platform Notes (Continued)

```
     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

 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:                   62%
   CPU max MHz:                          3700.1951
   CPU min MHz:                          1500.0000
   BogoMIPS:                             4493.13
   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 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 arat npt lbrv svm_lock
  nrip_save tsc_scale vmcb_clean flushbyasid decodeassists pausefilter
```

(Continued on next page)

Platform Notes (Continued)

```
                                    pfthreshold avic v_vmsave_vmload vgif x2avic v_spec_ctrl vnmi
                                     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_l1d 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)
  NUMA node(s):                             4
  NUMA node0 CPU(s):                        0-47,192-239
  NUMA node1 CPU(s):                        48-95,240-287
  NUMA node2 CPU(s):                        96-143,288-335
  NUMA node3 CPU(s):                        144-191,336-383
  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; PBRSB-eIBRS Not affected; BHI Not affected
  Vulnerability Srbds:                      Not affected
  Vulnerability Tsx async abort:            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: 4 nodes (0-3)
  node 0 cpus: 0-47,192-239
  node 0 size: 95990 MB
  node 0 free: 95303 MB
  node 1 cpus: 48-95,240-287
  node 1 size: 96704 MB
  node 1 free: 95963 MB
```

(Continued on next page)

Platform Notes (Continued)

```
  node 2 cpus: 96-143,288-335
  node 2 size: 96743 MB
  node 2 free: 96096 MB
  node 3 cpus: 144-191,336-383
  node 3 size: 96597 MB
  node 3 free: 95957 MB
  node distances:
  node   0   1   2   3
    0:  10  12  12  12
    1:  12  10  12  12
    2:  12  12  10  12
    3:  12  12  12  10

------------------------------------------------------------
9. /proc/meminfo
   MemTotal:       395301024 kB

------------------------------------------------------------
10. who -r
  run-level 3 Jul 23 13:50

------------------------------------------------------------
11. Systemd service manager version: systemd 254 (254.10+suse.84.ge8d77af424)
  Default Target  Status
  multi-user      running

------------------------------------------------------------
12. Services, from systemctl list-unit-files
  STATE            UNIT FILES
  enabled          YaST2-Firstboot YaST2-Second-Stage apparmor auditd cron display-manager getty@ irqbalance
                     issue-generator kbdsettings klog lvm2-monitor nscd nvmefc-boot-connections
                   nvmf-autoconnect postfix purge-kernels rollback rsyslog smartd sshd systemd-pstore wicked
                     wickedd-auto4 wickedd-dhcp4 wickedd-dhcp6 wickedd-nanny
  enabled-runtime  systemd-remount-fs
  disabled         autofs autoyast-initscripts blk-availability boot-sysctl ca-certificates chrony-wait
                    chronyd console-getty cups cups-browsed debug-shell ebtables exchange-bmc-os-info
                   firewalld fsidd gpm grub2-once haveged hwloc-dump-hwdata ipmi ipmievd issue-add-ssh-keys
                   kexec-load lunmask man-db-create multipathd nfs nfs-blkmap rpcbind rpmconfigcheck rsyncd
                   serial-getty@ smartd_generate_opts snmpd snmptrapd svnserve systemd-boot-check-no-failures
                     systemd-confext systemd-network-generator systemd-sysext systemd-time-wait-sync
                     systemd-timesyncd tuned udisks2 vncserver@
  indirect           systemd-userdbd wickedd

------------------------------------------------------------
13. Linux kernel boot-time arguments, from /proc/cmdline
  BOOT_IMAGE=/boot/vmlinuz-6.4.0-150600.21-default
  root=UUID=bd4eeb48-8f2c-47c9-ae06-b7241b1d0eb7
```

(Continued on next page)

Platform Notes (Continued)

```
  splash=silent
  mitigations=auto
  quiet
  security=apparmor
  video=1024x768

------------------------------------------------------------
14. cpupower frequency-info
  analyzing CPU 49:
    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

------------------------------------------------------------
15. tuned-adm active
  It seems that tuned daemon is not running, preset profile is not activated.
  Preset profile: throughput-performance

------------------------------------------------------------
16. sysctl
  kernel.numa_balancing               1
  kernel.randomize_va_space           0
  vm.compaction_proactiveness        20
  vm.dirty_background_bytes           0
  vm.dirty_background_ratio          10
  vm.dirty_bytes                      0
  vm.dirty_expire_centisecs        3000
  vm.dirty_ratio                      8
  vm.dirty_writeback_centisecs      500
  vm.dirtytime_expire_seconds     43200
  vm.extfrag_threshold              500
  vm.min_unmapped_ratio               1
  vm.nr_hugepages                     0
  vm.nr_hugepages_mempolicy           0
  vm.nr_overcommit_hugepages          0
  vm.swappiness                       1
  vm.watermark_boost_factor       15000
  vm.watermark_scale_factor          10
  vm.zone_reclaim_mode                1

------------------------------------------------------------
17. /sys/kernel/mm/transparent_hugepage
  defrag          [always] defer defer+madvise madvise never
  enabled         [always] madvise never
```

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Platform Notes (Continued)

```
  hpage_pmd_size  2097152
  shmem_enabled   always within_size advise [never] deny force

------------------------------------------------------------
18. /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

------------------------------------------------------------
19. OS release
  From /etc/*-release /etc/*-version
  os-release SUSE Linux Enterprise Server 15 SP6

------------------------------------------------------------
20. Disk information
SPEC is set to: /aocc520
  Filesystem     Type  Size  Used Avail Use% Mounted on
  /dev/nvme0n1p4 xfs   2.0T  549G  1.5T  27% /

------------------------------------------------------------
21. /sys/devices/virtual/dmi/id
    Vendor:         ASUSTeK COMPUTER INC.
    Product:        RS520QA-E13-RS8U
    Product Family: Server
    Serial:         /psn/

------------------------------------------------------------
22. dmidecode
  Additional information from dmidecode 3.4 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 Samsung M321R4GA3PB2-CCPKC 32 GB 2 rank 6400


------------------------------------------------------------
23. BIOS
(This section combines info from /sys/devices and dmidecode.)
   BIOS Vendor:       American Megatrends Inc.
   BIOS Version:      0302
   BIOS Date:         06/26/2025
```

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Platform Notes (Continued)

```
    BIOS Revision:     3.2
```

Compiler Version Notes

```
==============================================================================
C       | 782.lbm_r(base, peak)
------------------------------------------------------------------------------
AMD clang version 17.0.6 (CLANG: AOCC_5.2.0-Build#2035 2026_04_10)
Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /opt/AMD/aocc/aocc-compiler-rel-5.2.0-4925-2035/bin
------------------------------------------------------------------------------

==============================================================================
C++     | 731.astcenc_r(base, peak) 736.ocio_r(base, peak)
        | 748.flightdm_r(base, peak) 766.femflow_r(base, peak)
        | 767.nest_r(base, peak) 772.marian_r(base, peak)
------------------------------------------------------------------------------
AMD clang version 17.0.6 (CLANG: AOCC_5.2.0-Build#2035 2026_04_10)
Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /opt/AMD/aocc/aocc-compiler-rel-5.2.0-4925-2035/bin
------------------------------------------------------------------------------

==============================================================================
C++, C  | 709.cactus_r(base, peak) 737.gmsh_r(base, peak)
------------------------------------------------------------------------------
AMD clang version 17.0.6 (CLANG: AOCC_5.2.0-Build#2035 2026_04_10)
Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /opt/AMD/aocc/aocc-compiler-rel-5.2.0-4925-2035/bin
------------------------------------------------------------------------------

==============================================================================
Fortran | 722.palm_r(base, peak) 749.fotonik3d_r(base, peak) 765.roms_r(base,
        | peak)
------------------------------------------------------------------------------
AMD clang version 17.0.6 (CLANG: AOCC_5.2.0-Build#2035 2026_04_10)
Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /opt/AMD/aocc/aocc-compiler-rel-5.2.0-4925-2035/bin
------------------------------------------------------------------------------
```

Base Compiler Invocation

C benchmarks:
clang

C++ benchmarks:
clang++

Fortran benchmarks:
flang

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

Base Portability Flags

736.ocio_r: -fno-finite-math-only
737.gmsh_r: -fno-fast-math
748.flightdm_r: -fno-reciprocal-math
767.nest_r: -fno-finite-math-only

Base Optimization Flags

C benchmarks:
-std=c18 -no-pie -Wl,-mllvm -Wl,-inline-threshold=1500 -fstrip-mining
-O3 -march=znver5 -fveclib=AMDLIBM -flto -fno-PIE -fno-plt
-ffast-math -fremap-arrays -mllvm -inline-threshold=1500 -ljemalloc
-lamdlibm

C++ benchmarks:
-std=c++17 -no-pie -Wl,-mllvm -Wl,-inline-threshold=1500 -O3
-march=znver5 -fveclib=AMDLIBM -flto -fno-PIE -fno-plt -ffast-math
-fvirtual-function-elimination -fvisibility=hidden
-mllvm -inline-threshold=1500 -ljemalloc -lamdlibm

Fortran benchmarks:
-std=f2008 -no-pie -O3 -march=znver5 -fveclib=AMDLIBM -flto
-fno-PIE -fno-plt -ffast-math -mllvm -fuse-tile-inner-loop -ljemalloc
-lamdlibm

Benchmarks using both C and C++:
-std=c++17 -std=c18 -no-pie -Wl,-mllvm -Wl,-inline-threshold=1500 -O3
-march=znver5 -fveclib=AMDLIBM -flto -fno-PIE -fno-plt -ffast-math
-fremap-arrays -mllvm -inline-threshold=1500

(Continued on next page)

Base Optimization Flags (Continued)

Benchmarks using both C and C++ (continued):
`-fvirtual-function-elimination -fvisibility=hidden -ljemalloc -lamdlibm`

Peak Compiler Invocation

C benchmarks:
`clang`

C++ benchmarks:
`clang++`

Fortran benchmarks:
`flang`

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

Peak Portability Flags

736.ocio_r: `-fno-finite-math-only`
737.gmsh_r: `-fno-fast-math`
748.flightdm_r: `-fno-reciprocal-math`
767.nest_r: `-fno-finite-math-only`

Peak Optimization Flags

C benchmarks:

782.lbm_r: `basepeak = yes`

C++ benchmarks:

731.astcenc_r: `-std=c++17 -no-pie -Wl,-mllvm -Wl,-inline-threshold=1500 -O3 -march=znver5 -fveclib=AMDLIBM -flto -fno-PIE -fno-plt -ffast-math -fvirtual-function-elimination -fvisibility=hidden -mllvm -inline-threshold=1500 -ljemalloc -lamdlibm`

(Continued on next page)

Peak Optimization Flags (Continued)

736.ocio_r: `basepeak = yes`

748.flightdm_r: `Same as 731.astcenc_r`

766.femflow_r: `Same as 731.astcenc_r`

767.nest_r: `basepeak = yes`

772.marian_r: `Same as 731.astcenc_r`

Fortran benchmarks:

722.palm_r: `basepeak = yes`

749.fotonik3d_r: `-std=f2008 -no-pie -O3 -march=znver5 -fveclib=AMDLIBM -flto -fno-PIE -fno-plt -ffast-math -mllvm -fuse-tile-inner-loop -ljemalloc -lamdlibm`

765.roms_r: `Same as 749.fotonik3d_r`

Benchmarks using both C and C++:

709.cactus_r: `basepeak = yes`

737.gmsh_r: `-std=c++17 -std=c18 -no-pie -Wl,-mllvm -Wl,-inline-threshold=1500 -O3 -march=znver5 -fveclib=AMDLIBM -flto -fno-PIE -fno-plt -ffast-math -fremap-arrays -mllvm -inline-threshold=1500 -fvirtual-function-elimination -fvisibility=hidden -ljemalloc -lamdlibm`

The flags files that were used to format this result can be browsed at
http://www.spec.org/cpu2026/results/flags/aocc-flags.2026-08-11.html
http://www.spec.org/cpu2026/results/flags/ASUSTekPlatform-Settings-AMD-K15-V1.1.html

You can also download the XML flags sources by saving the following links:
http://www.spec.org/cpu2026/results/flags/aocc-flags.2026-08-11.xml
http://www.spec.org/cpu2026/results/flags/ASUSTekPlatform-Settings-AMD-K15-V1.1.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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