



SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Tyrone Systems

(Test Sponsor: Netweb Technologies India Ltd)

(Tyrone Camarero MDA200A2N-212)

(3.30 GHz, AMD EPYC 9575F)

SPECrate®2017_int_base = 1500

SPECrate®2017_int_peak = 1520

CPU2017 License: 6042

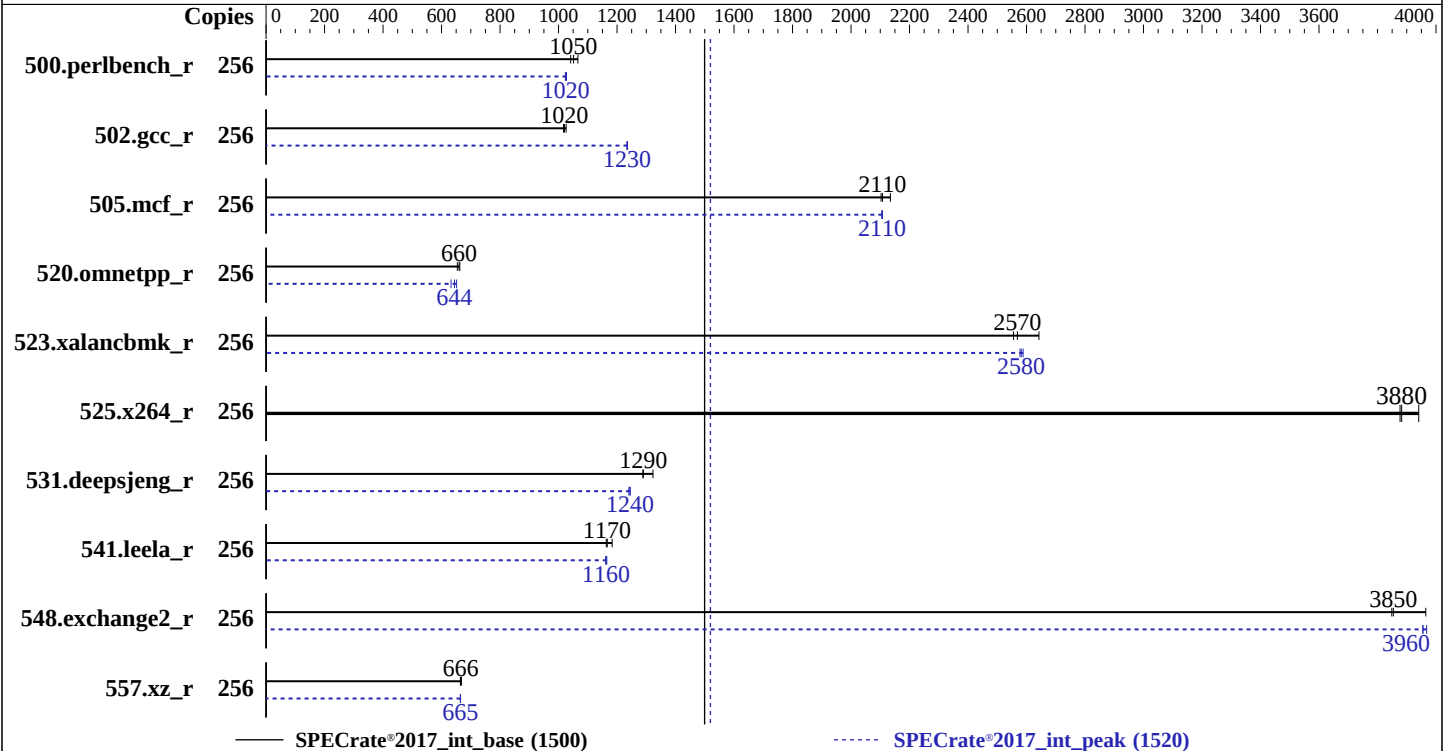
Test Sponsor: Netweb Technologies India Ltd

Tested by: Tyrone Systems

Test Date: Aug-2025

Hardware Availability: Oct-2024

Software Availability: Aug-2025



Hardware

CPU Name: AMD EPYC 9575F
Max MHz: 5000
Nominal: 3300
Enabled: 128 cores, 2 chips, 2 threads/core
Orderable: 1,2 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 PC5-4800B-R)
Storage: 1 x 1 TB NVMe
Other: CPU Cooling: Air

Software

OS: Ubuntu 24.04 LTS
kernel version 6.14.0-29-generic
Compiler: C/C++/Fortran: Version 5.0.0 of AOCC
Parallel: No
Firmware: Version ES312AMS.205T4 released May-2025
File System: ext4
System State: Run level 3 (multi-user)
Base Pointers: 64-bit
Peak Pointers: 32/64-bit
Other: None
Power Management: BIOS and OS set to prefer performance at the cost of additional power usage.



SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Tyrone Systems

(Test Sponsor: Netweb Technologies India Ltd)

(Tyrone Camarero MDA200A2N-212)

(3.30 GHz, AMD EPYC 9575F)

SPECrate®2017_int_base = 1500

SPECrate®2017_int_peak = 1520

CPU2017 License: 6042

Test Sponsor: Netweb Technologies India Ltd

Tested by: Tyrone Systems

Test Date: Aug-2025

Hardware Availability: Oct-2024

Software Availability: Aug-2025

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
500.perlbench_r	256	382	1070	<u>388</u>	<u>1050</u>	391	1040	256	397	1030	398	1020	<u>398</u>	<u>1020</u>
502.gcc_r	256	353	1030	<u>355</u>	<u>1020</u>	356	1020	256	294	1230	293	1240	<u>294</u>	<u>1230</u>
505.mcf_r	256	194	2130	<u>196</u>	<u>2110</u>	197	2100	256	196	2110	196	2110	<u>196</u>	<u>2110</u>
520.omnetpp_r	256	507	662	<u>509</u>	<u>660</u>	514	654	256	516	652	<u>521</u>	<u>644</u>	531	632
523.xalancbmk_r	256	102	2640	<u>105</u>	<u>2570</u>	106	2560	256	<u>105</u>	<u>2580</u>	105	2580	104	2590
525.x264_r	256	114	3940	<u>115</u>	<u>3880</u>	116	3880	256	114	3940	<u>115</u>	<u>3880</u>	116	3880
531.deepsjeng_r	256	222	1320	<u>227</u>	<u>1290</u>	228	1290	256	236	1240	<u>236</u>	<u>1240</u>	236	1240
541.leela_r	256	358	1180	<u>363</u>	<u>1170</u>	364	1160	256	364	1160	365	1160	<u>364</u>	<u>1160</u>
548.exchange2_r	256	174	3850	169	3970	<u>174</u>	<u>3850</u>	256	169	3970	170	3950	<u>170</u>	<u>3960</u>
557.xz_r	256	414	668	416	664	<u>415</u>	<u>666</u>	256	<u>416</u>	<u>665</u>	416	665	416	664

SPECrate®2017_int_base = 1500

SPECrate®2017_int_peak = 1520

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.
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.



SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Tyrone Systems

(Test Sponsor: Netweb Technologies India Ltd)
(Tyrone Camarero MDA200A2N-212)
(3.30 GHz, AMD EPYC 9575F)

SPECrate®2017_int_base = 1500

SPECrate®2017_int_peak = 1520

CPU2017 License: 6042

Test Sponsor: Netweb Technologies India Ltd

Tested by: Tyrone Systems

Test Date: Aug-2025

Hardware Availability: Oct-2024

Software Availability: Aug-2025

Environment Variables Notes

Environment variables set by runcpu before the start of the run:

LD_LIBRARY_PATH =

"/home/cpu2017/amd_rate_aocc500_znver5_A_lib/lib:/home/cpu2017/amd_rate_aocc500_znver5_A_lib/lib32:"

MALLOC_CONF = "retain:true"

Environment variables set by runcpu during the 523.xalancbmk_r peak run:

MALLOC_CONF = "thp:always"

General Notes

Binaries were compiled on a system with 2x AMD EPYC 9174F CPU + 1.5TiB Memory using RHEL 8.6

NA: The test sponsor attests, as of date of publication, that CVE-2017-5754 (Meltdown) is mitigated in the system as tested and documented.

Yes: The test sponsor attests, as of date of publication, that CVE-2017-5753 (Spectre variant 1) is mitigated in the system as tested and documented.

Yes: The test sponsor attests, as of date of publication, that CVE-2017-5715 (Spectre variant 2) is mitigated in the system as tested and documented.

Platform Notes

BIOS Settings:

cTDP: 400

Determinism Slider set to Power

Package Power: 400

EDC: 400

ACPI SRAT L3 Cache as NUMA Domain: enabled

Sysinfo program /home/cpu2017/bin/sysinfo

Rev: r6732 of 2022-11-07 fe91c89b7ed5c36ae2c92cc097bec197

running on amd-benchmark Sat Aug 30 18:08:49 2025

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

Table of contents

1. uname -a
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 (255.4-1ubuntu8.8)
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

(Continued on next page)



SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Tyrone Systems

(Test Sponsor: Netweb Technologies India Ltd)
(Tyrone Camarero MDA200A2N-212)
(3.30 GHz, AMD EPYC 9575F)

SPECrate®2017_int_base = 1500

SPECrate®2017_int_peak = 1520

CPU2017 License: 6042

Test Sponsor: Netweb Technologies India Ltd

Tested by: Tyrone Systems

Test Date: Aug-2025

Hardware Availability: Oct-2024

Software Availability: Aug-2025

Platform Notes (Continued)

```
20. /sys/devices/virtual/dmi/id
21. dmidecode
22. BIOS
```

```
1. uname -a
Linux amd-benchmark 6.14.0-29-generic #29~24.04.1-Ubuntu SMP PREEMPT_DYNAMIC Thu Aug 14 16:52:50 UTC 2
x86_64 x86_64 x86_64 GNU/Linux
```

```
2. w
18:08:49 up 9 min, 1 user, load average: 0.14, 0.05, 0.01
USER TTY FROM LOGIN@ IDLE JCPU PCPU WHAT
amd tty1 - 18:05 7.00s 0.03s 0.03s sudo su
```

```
3. Username
From environment variable $USER: root
From the command 'logname': amd
```

```
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
process 6189861
nofiles 1024
vmemory(kbytes) unlimited
locks unlimited
rtprio 0
```

```
5. sysinfo process ancestry
/sbin/init splash
/bin/login -p --
-bash
sudo su
sudo su
su
bash
python3 ./run_amd_rate_aocc500_znver5_A1.py
/bin/bash ./amd_rate_aocc500_znver5_A1.sh
runcpu --config amd_rate_aocc500_znver5_A1.cfg --tune all --reportable --iterations 3 intrate
runcpu --configfile amd_rate_aocc500_znver5_A1.cfg --tune all --reportable --iterations 3 --nopower
--runmode rate --tune base:peak --size test:train:refrate intrate --nopreenv --note-preenv --logfile
$SPEC/tmp/CPU2017.001/temlogs/preenv.intrate.001.0.log --lognum 001.0 --from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /home/cpu2017
```

```
6. /proc/cpuinfo
model name : AMD EPYC 9575F 64-Core Processor
vendor_id : AuthenticAMD
cpu family : 26
model : 2
```

(Continued on next page)



SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Tyrone Systems

(Test Sponsor: Netweb Technologies India Ltd)

(Tyrone Camarero MDA200A2N-212)

(3.30 GHz, AMD EPYC 9575F)

SPECrate®2017_int_base = 1500

SPECrate®2017_int_peak = 1520

CPU2017 License: 6042

Test Sponsor: Netweb Technologies India Ltd

Tested by: Tyrone Systems

Test Date: Aug-2025

Hardware Availability: Oct-2024

Software Availability: Aug-2025

Platform Notes (Continued)

```
stepping      : 1
microcode     : 0xb00211a
bugs          : sysret_ss_attrs spectre_v1 spectre_v2 spec_store_bypass srso
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
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
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:    49%
CPU max MHz:           5008.0000
CPU min MHz:           600.0000
BogoMIPS:              6590.16
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 xtopology
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 svm 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 pfthreshold avic
v_vmsave_vmload vgif x2avic v_spec_ctrl vnmi avx512vbmi umip pku
ospke avx512_vbmi2 gfni vaes vpclmulqdq avx512_vnni avx512_bitalg
```

(Continued on next page)



SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Tyrone Systems

(Test Sponsor: Netweb Technologies India Ltd)
(Tyrone Camarero MDA200A2N-212)
(3.30 GHz, AMD EPYC 9575F)

SPECrate®2017_int_base = 1500

SPECrate®2017_int_peak = 1520

CPU2017 License: 6042

Test Sponsor: Netweb Technologies India Ltd

Tested by: Tyrone Systems

Test Date: Aug-2025

Hardware Availability: Oct-2024

Software Availability: Aug-2025

Platform Notes (Continued)

Virtualization:

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

Vulnerability Gather data sampling:

Not affected

Vulnerability Ghostwrite: Not affected

Vulnerability Indirect target selection: 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: Mitigation; IBPB on VMEXIT only

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; PBRSE-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	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: 773617 MB

node 0 free: 771768 MB

node 1 cpus: 64-127,192-255

node 1 size: 774027 MB

node 1 free: 772231 MB

node distances:

node 0 1

0: 10 32

1: 32 10

9. /proc/meminfo

MemTotal: 1584788156 kB

10. who -r

run-level 3 Aug 30 17:28

(Continued on next page)



SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Tyrone Systems

(Test Sponsor: Netweb Technologies India Ltd)

(Tyrone Camarero MDA200A2N-212)

(3.30 GHz, AMD EPYC 9575F)

SPECrate®2017_int_base = 1500

SPECrate®2017_int_peak = 1520

CPU2017 License: 6042

Test Sponsor: Netweb Technologies India Ltd

Tested by: Tyrone Systems

Test Date: Aug-2025

Hardware Availability: Oct-2024

Software Availability: Aug-2025

Platform Notes (Continued)

11. Systemd service manager version: systemd 255 (255.4-1ubuntu8.8)

Default Target	Status
multi-user	running

12. Services, from systemctl list-unit-files

STATE	UNIT FILES
enabled	ModemManager NetworkManager NetworkManager-dispatcher NetworkManager-wait-online accounts-daemon anacron apparmor apport avahi-daemon bluetooth cloud-config cloud-final cloud-init cloud-init-local collectd console-setup cron cups cups-browsed dmesg e2scrub_reap getty@ gnome-remote-desktop gpu-manager grub-common grub-initrd-fallback kerneloops keyboard-setup networkd-dispatcher openvpn power-profiles-daemon rsyslog secureboot-db setvtrgb snapd ssl-cert sssd switcheroo-control sysstat systemd-oom systemd-pstore systemd-resolved systemd-timesyncd thermald ua-reboot-cmds ubuntu-advantage udisks2 ufw unattended-upgrades wpa_supplicant
enabled-runtime	netplan-ovs-cleanup systemd-fsck-root systemd-remount-fs
disabled	brltty console-getty debug-shell ipmievdt nftables openvpn-client@ openvpn-server@ openvpn@ rsync rtkit-daemon serial-getty@ speech-dispatcherd ssh systemd-boot-check-no-failures systemd-confext systemd-network-generator systemd-networkd systemd-networkd-wait-online 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-sysextd systemd-time-wait-sync upower wpa_supplicant-nl80211@ wpa_supplicant-wired@ wpa_supplicant@
generated	openipmi speech-dispatcher
indirect	saned@ spice-vdagentd sssd-autofs sssd-nss sssd-pac sssd-pam sssd-ssh sssd-sudo systemd-sysupdate systemd-sysupdate-reboot uidd
masked	alsa-utils cryptdisks cryptdisks-early hwclock saned sudo x11-common

13. Linux kernel boot-time arguments, from /proc/cmdline

```
BOOT_IMAGE=/vmlinuz-6.14.0-29-generic
root=UUID=4c4111a1-2027-4689-8cc8-4d6d365932ca
ro
quiet
splash
vt.handoff=7
```

14. cpupower frequency-info

analyzing CPU 54:
current policy: frequency should be within 2.40 GHz and 5.01 GHz.
The governor "performance" may decide which speed to use within this range.

boost state support:

Supported: yes
Active: yes

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

(Continued on next page)



SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Tyrone Systems

(Test Sponsor: Netweb Technologies India Ltd)

(Tyrone Camarero MDA200A2N-212)

(3.30 GHz, AMD EPYC 9575F)

SPECrate®2017_int_base = 1500

SPECrate®2017_int_peak = 1520

CPU2017 License: 6042

Test Sponsor: Netweb Technologies India Ltd

Tested by: Tyrone Systems

Test Date: Aug-2025

Hardware Availability: Oct-2024

Software Availability: Aug-2025

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+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 LTS
```

```
-----
19. Disk information
SPEC is set to: /home/cpu2017
Filesystem  Type  Size  Used Avail Use% Mounted on
/dev/nvme0n1p5 ext4  701G  7.6G  658G   2% /home
```

```
-----
20. /sys/devices/virtual/dmi/id
Vendor:      TyroneSystems
Product:     Tyrone_Camarero_SDA200A2N-212
Serial:      TEST
```

```
-----
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 M321R8GA0BB0-CQKZJ 64 GB 2 rank 4800
```

```
-----
22. BIOS
(This section combines info from /sys/devices and dmidecode.)
BIOS Vendor:   American Megatrends International, LLC.
BIOS Version:  ES312AMS.205T4
```

(Continued on next page)



SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Tyrone Systems

(Test Sponsor: Netweb Technologies India Ltd)
(Tyrone Camarero MDA200A2N-212)
(3.30 GHz, AMD EPYC 9575F)

SPECrate®2017_int_base = 1500

SPECrate®2017_int_peak = 1520

CPU2017 License: 6042

Test Sponsor: Netweb Technologies India Ltd

Tested by: Tyrone Systems

Test Date: Aug-2025

Hardware Availability: Oct-2024

Software Availability: Aug-2025

Platform Notes (Continued)

BIOS Date: 05/05/2025
BIOS Revision: 5.35

Compiler Version Notes

C | 502.gcc_r(peak)

AMD clang version 17.0.6 (CLANG: AOCC_5.0.0-Build#1316 2024_09_09)
Target: i386-unknown-linux-gnu
Thread model: posix
InstalledDir: /opt/AMD/aocc/aocc-compiler-rel-5.0.0-4925-1316/bin

C | 500.perlbench_r(base, peak) 502.gcc_r(base) 505.mcf_r(base, peak) 525.x264_r(base, peak)
| 557.xz_r(base, peak)

AMD clang version 17.0.6 (CLANG: AOCC_5.0.0-Build#1316 2024_09_09)
Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /opt/AMD/aocc/aocc-compiler-rel-5.0.0-4925-1316/bin

C | 502.gcc_r(peak)

AMD clang version 17.0.6 (CLANG: AOCC_5.0.0-Build#1316 2024_09_09)
Target: i386-unknown-linux-gnu
Thread model: posix
InstalledDir: /opt/AMD/aocc/aocc-compiler-rel-5.0.0-4925-1316/bin

C | 500.perlbench_r(base, peak) 502.gcc_r(base) 505.mcf_r(base, peak) 525.x264_r(base, peak)
| 557.xz_r(base, peak)

AMD clang version 17.0.6 (CLANG: AOCC_5.0.0-Build#1316 2024_09_09)
Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /opt/AMD/aocc/aocc-compiler-rel-5.0.0-4925-1316/bin

C++ | 520.omnetpp_r(base, peak) 523.xalancbmk_r(base, peak) 531.deepsjeng_r(base, peak)
| 541.leela_r(base, peak)

AMD clang version 17.0.6 (CLANG: AOCC_5.0.0-Build#1316 2024_09_09)
Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /opt/AMD/aocc/aocc-compiler-rel-5.0.0-4925-1316/bin

Fortran | 548.exchange2_r(base, peak)

AMD clang version 17.0.6 (CLANG: AOCC_5.0.0-Build#1316 2024_09_09)
Target: x86_64-unknown-linux-gnu
Thread model: posix

(Continued on next page)



SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Tyrone Systems

(Test Sponsor: Netweb Technologies India Ltd)
(Tyrone Camarero MDA200A2N-212)
(3.30 GHz, AMD EPYC 9575F)

SPECrate®2017_int_base = 1500

SPECrate®2017_int_peak = 1520

CPU2017 License: 6042

Test Sponsor: Netweb Technologies India Ltd

Tested by: Tyrone Systems

Test Date: Aug-2025

Hardware Availability: Oct-2024

Software Availability: Aug-2025

Compiler Version Notes (Continued)

InstalledDir: /opt/AMD/aocc/aocc-compiler-rel-5.0.0-4925-1316/bin

Base Compiler Invocation

C benchmarks:

clang

C++ benchmarks:

clang++

Fortran benchmarks:

flang

Base Portability Flags

500.perlbench_r: -DSPEC_LINUX_X64 -DSPEC_LP64
502.gcc_r: -DSPEC_LP64
505.mcf_r: -DSPEC_LP64
520.omnetpp_r: -DSPEC_LP64
523.xalancbmk_r: -DSPEC_LINUX -DSPEC_LP64
525.x264_r: -DSPEC_LP64
531.deepsjeng_r: -DSPEC_LP64
541.leela_r: -DSPEC_LP64
548.exchange2_r: -DSPEC_LP64
557.xz_r: -DSPEC_LP64

Base Optimization Flags

C benchmarks:

-m64 -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 -z muldefs -O3 -march=znver5
-fveclib=AMDLIBM -ffast-math -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-ext -ldl

C++ benchmarks:

-m64 -std=c++14 -Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6

(Continued on next page)



SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Tyrone Systems

(Test Sponsor: Netweb Technologies India Ltd)
(Tyrone Camarero MDA200A2N-212)
(3.30 GHz, AMD EPYC 9575F)

SPECrate®2017_int_base = 1500

SPECrate®2017_int_peak = 1520

CPU2017 License: 6042

Test Sponsor: Netweb Technologies India Ltd

Tested by: Tyrone Systems

Test Date: Aug-2025

Hardware Availability: Oct-2024

Software Availability: Aug-2025

Base Optimization Flags (Continued)

C++ benchmarks (continued):

```
-Wl,-mllvm -Wl,-reduce-array-computations=3  
-Wl,-mllvm -Wl,-do-block-reorder=advanced -z muldefs -O3 -march=znver5  
-fveclib=AMDLIBM -ffast-math -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  
-mllvm -do-block-reorder=advanced -lamdlibm -lflang -lamdalloc-ext  
-ldl
```

Fortran benchmarks:

```
-m64 -Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6  
-Wl,-mllvm -Wl,-reduce-array-computations=3  
-Wl,-mllvm -Wl,-inline-recursion=4 -Wl,-mllvm -Wl,-lsr-in-nested-loop  
-Wl,-mllvm -Wl,-enable-iv-split -z muldefs -O3 -march=znver5  
-fveclib=AMDLIBM -ffast-math -flto  
-fepilog-vectorization-of-inductions -mllvm -optimize-strided-mem-cost  
-floop-transform -mllvm -unroll-aggressive -mllvm -unroll-threshold=500  
-lamdlibm -lflang -lamdalloc -ldl
```

Base Other Flags

C benchmarks:

```
-Wno-unused-command-line-argument
```

C++ benchmarks:

```
-Wno-unused-command-line-argument
```

Fortran benchmarks:

```
-Wno-unused-command-line-argument
```

Peak Compiler Invocation

C benchmarks:

```
clang
```

C++ benchmarks:

```
clang++
```

Fortran benchmarks:

```
flang
```



SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Tyrone Systems

(Test Sponsor: Netweb Technologies India Ltd)
(Tyrone Camarero MDA200A2N-212)
(3.30 GHz, AMD EPYC 9575F)

SPECrate®2017_int_base = 1500

SPECrate®2017_int_peak = 1520

CPU2017 License: 6042

Test Sponsor: Netweb Technologies India Ltd

Tested by: Tyrone Systems

Test Date: Aug-2025

Hardware Availability: Oct-2024

Software Availability: Aug-2025

Peak Portability Flags

500.perlbench_r: -DSPEC_LINUX_X64 -DSPEC_LP64
502.gcc_r: -D_FILE_OFFSET_BITS=64
505.mcf_r: -DSPEC_LP64
520.omnetpp_r: -DSPEC_LP64
523.xalancbmk_r: -DSPEC_LINUX -DSPEC_LP64
525.x264_r: -DSPEC_LP64
531.deepsjeng_r: -DSPEC_LP64
541.leela_r: -DSPEC_LP64
548.exchange2_r: -DSPEC_LP64
557.xz_r: -DSPEC_LP64

Peak Optimization Flags

C benchmarks:

500.perlbench_r: -m64 -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
-fprofile-instr-generate(pass 1)
-fprofile-instr-use(pass 2) -Ofast -march=znver5
-fveclib=AMDLIBM -ffast-math -flto -fstruct-layout=7
-mllvm -unroll-threshold=50 -fremap-arrays
-mllvm -inline-threshold=1000
-mllvm -reduce-array-computations=3
-faggressive-loop-transform -fvector-transform
-fscalar-transform -lamdlibm -lflang -lamdalloc-ext -ldl

502.gcc_r: -m32 -flto -Wl,-mllvm -Wl,-ldist-scalar-expand
-fenable-aggressive-gather -Wl,-mllvm -Wl,-extra-inliner
-z muldefs -Ofast -march=znver5 -fveclib=AMDLIBM
-ffast-math -fstruct-layout=7 -mllvm -unroll-threshold=50
-fremap-arrays -fstrip-mining
-mllvm -inline-threshold=1000
-mllvm -reduce-array-computations=3 -zopt -fgnu89-inline
-lamdalloc

505.mcf_r: -m64 -Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
-Wl,-mllvm -Wl,-reduce-array-computations=3
-Wl,-mllvm -Wl,-extra-inliner -Ofast -march=znver5
-fveclib=AMDLIBM -ffast-math -flto -fstruct-layout=7
-mllvm -unroll-threshold=50 -fremap-arrays -fstrip-mining
-mllvm -inline-threshold=1000
-mllvm -reduce-array-computations=3 -zopt -lamdlibm

(Continued on next page)



SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Tyrone Systems

(Test Sponsor: Netweb Technologies India Ltd)
(Tyrone Camarero MDA200A2N-212)
(3.30 GHz, AMD EPYC 9575F)

SPECrate®2017_int_base = 1500

SPECrate®2017_int_peak = 1520

CPU2017 License: 6042

Test Sponsor: Netweb Technologies India Ltd

Tested by: Tyrone Systems

Test Date: Aug-2025

Hardware Availability: Oct-2024

Software Availability: Aug-2025

Peak Optimization Flags (Continued)

505.mcf_r (continued):

-lflang -lamdalloc-ext -ldl

525.x264_r: basepeak = yes

557.xz_r: -m64 -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
-Ofast -march=znver5 -fveclib=AMDLIBM -ffast-math -flto
-fstruct-layout=7 -mllvm -unroll-threshold=50
-fremap-arrays -fstrip-mining
-mllvm -inline-threshold=1000
-mllvm -reduce-array-computations=3 -zopt -lamdlibm
-lflang -lamdalloc-ext -ldl

C++ benchmarks:

520.omnetpp_r: -m64 -std=c++14
-Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
-Wl,-mllvm -Wl,-reduce-array-computations=3
-Wl,-mllvm -Wl,-do-block-reorder=advanced -Ofast
-march=znver5 -fveclib=AMDLIBM -ffast-math -flto
-mllvm -unroll-threshold=100
-mllvm -reduce-array-computations=3 -zopt -fno-PIE
-no-pie -fvirtual-function-elimination -fvisibility=hidden
-mllvm -do-block-reorder=advanced -lamdlibm -lamdalloc-ext
-ldl

523.xalancbmk_r: -m64 -std=c++14
-Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
-Wl,-mllvm -Wl,-reduce-array-computations=3
-Wl,-mllvm -Wl,-do-block-reorder=advanced -Ofast
-march=znver5 -fveclib=AMDLIBM -ffast-math -flto
-mllvm -unroll-threshold=100
-mllvm -reduce-array-computations=3 -zopt
-fvirtual-function-elimination -fvisibility=hidden
-mllvm -do-block-reorder=advanced -lamdlibm -lflang
-lamdalloc-ext -ldl

531.deepsjeng_r: -m64 -std=c++14
-Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
-Wl,-mllvm -Wl,-reduce-array-computations=3 -Ofast
-march=znver5 -fveclib=AMDLIBM -ffast-math -flto
-mllvm -unroll-threshold=100
-mllvm -loop-unswitch-threshold=200000

(Continued on next page)



SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Tyrone Systems

(Test Sponsor: Netweb Technologies India Ltd)
(Tyrone Camarero MDA200A2N-212)
(3.30 GHz, AMD EPYC 9575F)

SPECrate®2017_int_base = 1500

SPECrate®2017_int_peak = 1520

CPU2017 License: 6042

Test Sponsor: Netweb Technologies India Ltd

Tested by: Tyrone Systems

Test Date: Aug-2025

Hardware Availability: Oct-2024

Software Availability: Aug-2025

Peak Optimization Flags (Continued)

531.deepsjeng_r (continued):

-mllvm -reduce-array-computations=3 -zopt
-fvirtual-function-elimination -fvisibility=hidden
-lamdlibm -lamdalloc-ext -ldl

541.leela_r: -m64 -std=c++14

-Wl, -mllvm -Wl, -align-all-nofallthru-blocks=6
-Wl, -mllvm -Wl, -reduce-array-computations=3
-Wl, -mllvm -Wl, -do-block-reorder=advanced -Ofast
-march=znver5 -fveclib=AMDLIBM -ffast-math -flto
-mllvm -unroll-threshold=100
-mllvm -reduce-array-computations=3 -zopt -fno-PIE
-no-pie -fvirtual-function-elimination -fvisibility=hidden
-mllvm -do-block-reorder=advanced -lamdlibm -lflang
-lamdalloc-ext -ldl

Fortran benchmarks:

-m64 -Wl, -mllvm -Wl, -align-all-nofallthru-blocks=6
-Wl, -mllvm -Wl, -reduce-array-computations=3
-Wl, -mllvm -Wl, -inline-recursion=4 -Wl, -mllvm -Wl, -lsr-in-nested-loop
-Wl, -mllvm -Wl, -enable-iv-split -O3 -march=znver5 -fveclib=AMDLIBM
-ffast-math -flto -fepilog-vectorization-of-inductions
-mllvm -optimize-strided-mem-cost -floop-transform
-mllvm -unroll-aggressive -mllvm -unroll-threshold=500 -lamdlibm
-lflang -lamdalloc -ldl

Peak Other Flags

C benchmarks (except as noted below):

-Wno-unused-command-line-argument

502.gcc_r: -L/usr/lib32 -Wno-unused-command-line-argument

-L/home/work/cpu2017/v119/aocc5/1316/amd_rate_aocc500_znver5_A_lib/lib32

C++ benchmarks:

-Wno-unused-command-line-argument

Fortran benchmarks:

-Wno-unused-command-line-argument

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

<http://www.spec.org/cpu2017/flags/aocc500-flags.2024-10-10.html>

<http://www.spec.org/cpu2017/flags/Tyrone-Platform-Settings-V1.1-Turin-revA.html>



SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

Tyrone Systems

(Test Sponsor: Netweb Technologies India Ltd)
(Tyrone Camarero MDA200A2N-212)
(3.30 GHz, AMD EPYC 9575F)

SPECrate®2017_int_base = 1500

SPECrate®2017_int_peak = 1520

CPU2017 License: 6042

Test Sponsor: Netweb Technologies India Ltd

Tested by: Tyrone Systems

Test Date: Aug-2025

Hardware Availability: Oct-2024

Software Availability: Aug-2025

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

<http://www.spec.org/cpu2017/flags/aocc500-flags.2024-10-10.xml>

<http://www.spec.org/cpu2017/flags/Tyrone-Platform-Settings-V1.1-Turin-revA.xml>

SPEC CPU and SPECrate 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®2017 v1.1.9 on 2025-08-30 08:38:48-0400.

Report generated on 2025-10-30 10:14:15 by CPU2017 PDF formatter v6716.

Originally published on 2025-10-30.