



# SPEC CPU®2017 Integer Speed Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

## Cisco Systems

Cisco UCS X215c M8 (AMD EPYC 9254  
2.90 GHz Processor)

SPECspeed®2017\_int\_base = 16.2

SPECspeed®2017\_int\_peak = Not Run

CPU2017 License: 9019

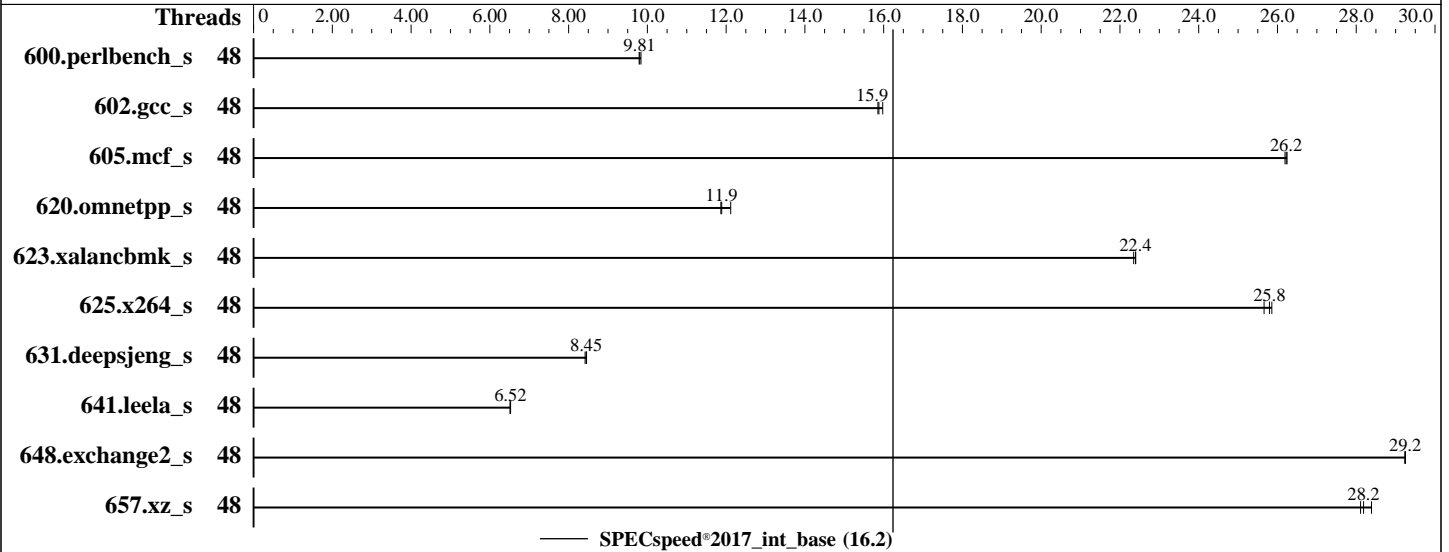
Test Sponsor: Cisco Systems

Tested by: Cisco Systems

Test Date: Jan-2025

Hardware Availability: Oct-2024

Software Availability: Sep-2024



### Hardware

CPU Name: AMD EPYC 9254  
 Max MHz: 4150  
 Nominal: 2900  
 Enabled: 48 cores, 2 chips  
 Orderable: 1,2 chips  
 Cache L1: 32 KB I + 32 KB D on chip per core  
 L2: 1 MB I+D on chip per core  
 L3: 128 MB I+D on chip per chip, 32 MB shared / 6 cores  
 Other: None  
 Memory: 1536 GB (24 x 64 GB 2Rx4 PC5-5600B-R, running at 4800)  
 Storage: 1 x 960 GB NVMe SSD  
 Other: CPU Cooling: Air

### Software

OS: SUSE Linux Enterprise Server 15 SP6  
 kernel version 6.4.0-150600.21-default  
 Compiler: C/C++/Fortran: Version 5.0.0 of AOCC  
 Parallel: Yes  
 Firmware: Version 4.3.5a released Sep-2024  
 File System: btrfs  
 System State: Run level 3 (multi-user)  
 Base Pointers: 64-bit  
 Peak Pointers: Not Applicable  
 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							
	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio		
600.perlbench_s	48	181	9.79	180	9.84	<b><u>181</u></b>	<b><u>9.81</u></b>									
602.gcc_s	48	249	16.0	<b><u>251</u></b>	<b><u>15.9</u></b>	251	15.9									
605.mcf_s	48	<b><u>180</u></b>	<b><u>26.2</u></b>	180	26.2	180	26.2									
620.omnetpp_s	48	137	11.9	135	12.1	<b><u>137</u></b>	<b><u>11.9</u></b>									
623.xalancbmk_s	48	<b><u>63.3</u></b>	<b><u>22.4</u></b>	63.4	22.3	63.3	22.4									
625.x264_s	48	68.2	25.9	<b><u>68.4</u></b>	<b><u>25.8</u></b>	68.7	25.7									
631.deepsjeng_s	48	169	8.46	170	8.42	<b><u>170</u></b>	<b><u>8.45</u></b>									
641.leela_s	48	262	6.51	261	6.53	<b><u>261</u></b>	<b><u>6.52</u></b>									
648.exchange2_s	48	101	29.2	101	29.2	<b><u>101</u></b>	<b><u>29.2</u></b>									
657.xz_s	48	<b><u>219</u></b>	<b><u>28.2</u></b>	220	28.1	218	28.4									

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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.  
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) only on request for base runs,  
'echo madvise > /sys/kernel/mm/transparent\_hugepage/enabled' run as root.  
To enable THP for all allocations for peak runs,  
'echo always > /sys/kernel/mm/transparent\_hugepage/enabled' and  
'echo always > /sys/kernel/mm/transparent\_hugepage/defrag' run as root.



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## Environment Variables Notes

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

GOMP\_CPU\_AFFINITY = "0-95"

LD\_LIBRARY\_PATH =

"/home/cpu2017/amd\_speed\_aocc500\_znver5\_A\_lib/lib:/home/cpu2017/amd\_speed\_aocc500\_znver5\_A\_lib/lib32:"

LIBOMP\_NUM\_HIDDEN\_HELPER\_THREADS = "0"

MALLOC\_CONF = "retain:true"

OMP\_DYNAMIC = "false"

OMP\_SCHEDULE = "static"

OMP\_STACKSIZE = "128M"

OMP\_THREAD\_LIMIT = "96"

## General Notes

Binaries were compiled on a system with 2x AMD EPYC 9D64 CPU + 500GiB Memory using Ubuntu 22.04

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:

SMT Mode set to Disabled

NUMA nodes per socket set to NPS1

Determinism Slider set to Power

DF C-States set to Disabled

Sysinfo program /home/cpu2017/bin/sysinfo

Rev: r6732 of 2022-11-07 fe91c89b7ed5c36ae2c92cc097bec197

running on localhost Wed Jan 15 02:24:25 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 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. sysctl

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### Platform Notes (Continued)

- 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 -a
Linux localhost 6.4.0-150600.21-default #1 SMP PREEMPT_DYNAMIC Thu May 16 11:09:22 UTC 2024 (36c1e09)
x86_64 x86_64 x86_64 GNU/Linux
```

```
2. w
02:24:25 up 17 min, 3 users, load average: 0.10, 0.03, 0.01
USER      TTY      FROM            LOGIN@   IDLE   JCPU   PCPU   WHAT
root      tty1    -                02:07   16.00s  1.10s  0.12s /bin/bash ./amd_speed_aocc500_znver5_A1.sh
```

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

```
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) 6191421
max locked memory       (kbytes, -l) 2097152
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) 6191421
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
python3 ./run_amd_speed_aocc500_znver5_A1.py -b intspeed
/bin/bash ./amd_speed_aocc500_znver5_A1.sh
runcpu --config amd_speed_aocc500_znver5_A1.cfg --tune base --reportable --iterations 3 intspeed
runcpu --configfile amd_speed_aocc500_znver5_A1.cfg --tune base --reportable --iterations 3 --nopower
--runmode speed --tune base --size test:train:refspeed intspeed --nopreenv --note-preenv --logfile
$SPEC/tmp/CPU2017.001/templogs/preenv.intspeed.001.0.log --lognum 001.0 --from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /home/cpu2017
```

```
6. /proc/cpuinfo
model name      : AMD EPYC 9254 24-Core Processor
```

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### Platform Notes (Continued)

```

vendor_id      : AuthenticAMD
cpu family    : 25
model         : 17
stepping      : 1
microcode     : 0xa101148
bugs          : sysret_ss_attrs spectre_v1 spectre_v2 spec_store_bypass rsrso
TLB size     : 3584 4K pages
cpu cores     : 24
siblings      : 24
2 physical ids (chips)
48 processors (hardware threads)
physical id 0: core ids 0-5,16-21,32-37,48-53
physical id 1: core ids 0-5,16-21,32-37,48-53
physical id 0: apicids 0-5,16-21,32-37,48-53
physical id 1: apicids 64-69,80-85,96-101,112-117

```

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):                       48
On-line CPU(s) list:         0-47
Vendor ID:                    AuthenticAMD
BIOS Vendor ID:              Advanced Micro Devices, Inc.
Model name:                   AMD EPYC 9254 24-Core Processor
BIOS Model name:              AMD EPYC 9254 24-Core Processor           Unknown CPU @ 2.9GHz
BIOS CPU family:              107
CPU family:                   25
Model:                        17
Thread(s) per core:           1
Core(s) per socket:           24
Socket(s):                    2
Stepping:                     1
Frequency boost:              enabled
CPU(s) scaling MHz:           72%
CPU max MHz:                  4151.7568
CPU min MHz:                  1500.0000
BogoMIPS:                     5791.75
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 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 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 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

```

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### Platform Notes (Continued)

ospke avx512\_vbmi2 gfni vaes vpclmulqdq avx512\_vnni avx512\_bitalg  
avx512\_vpopcntdq la57 rdpid overflow\_recov succor smca fsrm flush\_l1d  
debug\_swap

Virtualization:

L1d cache: 1.5 MiB (48 instances)

L1i cache: 1.5 MiB (48 instances)

L2 cache: 48 MiB (48 instances)

L3 cache: 256 MiB (8 instances)

NUMA node(s): 4

NUMA node0 CPU(s): 0-11

NUMA node1 CPU(s): 12-23

NUMA node2 CPU(s): 24-35

NUMA node3 CPU(s): 36-47

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: Mitigation; Safe RET

Vulnerability Spec store bypass: Mitigation; Speculative Store Bypass disabled via prctl

Vulnerability Spectre v1: Mitigation; usercopy/swaps barriers and \_\_user pointer sanitization

Vulnerability Spectre v2: Mitigation; Enhanced / Automatic IBRS; IBPB conditional; STIBP

disabled; RSB filling; 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	32K	1.5M	8	Data	1	64	1	64
L1i	32K	1.5M	8	Instruction	1	64	1	64
L2	1M	48M	8	Unified	2	2048	1	64
L3	32M	256M	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: 0-11

node 0 size: 386766 MB

node 0 free: 386020 MB

node 1 cpus: 12-23

node 1 size: 387029 MB

node 1 free: 386475 MB

node 2 cpus: 24-35

node 2 size: 387068 MB

node 2 free: 386429 MB

node 3 cpus: 36-47

node 3 size: 387017 MB

node 3 free: 386150 MB

node distances:

node 0 1 2 3

0: 10 12 32 32

1: 12 10 32 32

2: 32 32 10 12

3: 32 32 12 10

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### Platform Notes (Continued)

9. /proc/meminfo  
MemTotal: 1585031628 kB

10. who -r  
run-level 3 Jan 15 02:07

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 getty@ irqbalance iscsi issue-generator kbdsettings klog lvm2-monitor nscd nvme-fc-boot-connections nvme-fc-autoconnect postfix purge-kernels rollback rsyslog smartd sshd systemd-pstore virtqemu-wicked wickedd-auto4 wickedd-dhcp4 wickedd-dhcp6 wickedd-nanny
enabled-runtime	systemd-remount-fs
disabled	autofs autovast-initscripts blk-availability boot-sysctl ca-certificates chrony-wait chronyd console-getty cups cups-browsed debug-shell dnsmasq ebttables exchange-bmc-os-info firewallld fsidd gpm grub2-once haveged hv_fc-copy_daemon hv_kv_daemon hv_vss_daemon hwloc-dump-hwdata ipmi ipmievd iscsi-init iscsid issue-add-ssh-keys kexec-load ksm kvm_stat libvirt-guests lunmask man-db-create multipathd munge nfs nfs-blkmap nfs-server nfs-server rpcbind rpmconfigcheck rsyncd rtkit-daemon salt-minion serial-getty@ slurmd smartd_generate_opts snmpd snmptrapd strongswan strongswan-starter svnservice systemd-boot-check-no-failures systemd-confext systemd-network-generator systemd-nspawn@ systemd-sysext systemd-time-wait-sync systemd-timesyncd tcsd udisks2 virtinterfaced virtlockd virtlogd virtnetworkd virtnodevdev virtnwfilterd virtsecret virtstaged yppbind
indirect	pcsd systemd-userdbd tftpd wickedd

13. Linux kernel boot-time arguments, from /proc/cmdline  
BOOT\_IMAGE=/boot/vmlinuz-6.4.0-150600.21-default  
root=UUID=83fde4e5-9ebb-45df-bdc4-d6d12ff34604  
splash=silent  
mitigations=auto  
quiet  
security=apparmor

14. cpupower frequency-info  
analyzing CPU 13:  
current policy: frequency should be within 1.50 GHz and 2.90 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

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### Platform Notes (Continued)

```

vm.dirty_ratio                8
vm.dirty_writeback_centisecs  500
vm.dirtytime_expire_seconds  43200
vm.extfrag_threshold         500
vm.min_unmapped_ratio        1
vm.nr_hugepages               0
vm.nr_hugepages_mempolicy    0
vm.nr_overcommit_hugepages   0
vm.swappiness                 1
vm.watermark_boost_factor     15000
vm.watermark_scale_factor     10
vm.zone_reclaim_mode         1

```

```

-----
16. /sys/kernel/mm/transparent_hugepage
defrag          [always] defer defer+madvise madvise never
enabled         [always] madvise never
hpage_pmd_size 2097152
shmem_enabled  always within_size advise [never] deny force

```

```

-----
17. /sys/kernel/mm/transparent_hugepage/khugepaged
alloc_sleep_millisecs  60000
defrag                 1
max_ptes_none          511
max_ptes_shared        256
max_ptes_swap          64
pages_to_scan          4096
scan_sleep_millisecs  10000

```

```

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

```

```

-----
19. Disk information
SPEC is set to: /home/cpu2017
Filesystem Type Size Used Avail Use% Mounted on
/dev/nvme0n1p3 btrfs 477G 14G 462G 3% /home

```

```

-----
20. /sys/devices/virtual/dmi/id
Vendor:         Cisco Systems Inc
Product:        UCSX-215C-M8
Serial:         FCH282172EL

```

```

-----
21. 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:
13x 0xCE00 M321R8GA0PB0-CWMCH 64 GB 2 rank 5600, configured at 4800
2x 0xCE00 M321R8GA0PB0-CWMJH 64 GB 2 rank 5600, configured at 4800
9x 0xCE00 M321R8GA0PB0-CWMKJ 64 GB 2 rank 5600, configured at 4800

```

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## Platform Notes (Continued)

22. BIOS

(This section combines info from /sys/devices and dmidecode.)

BIOS Vendor: Cisco Systems, Inc.  
BIOS Version: X215M8.4.3.5a.0.0904241153  
BIOS Date: 09/04/2024  
BIOS Revision: 5.27

## Compiler Version Notes

=====  
C | 600.perlbench\_s(base) 602.gcc\_s(base) 605.mcf\_s(base) 625.x264\_s(base) 657.xz\_s(base)  
=====

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++ | 620.omnetpp\_s(base) 623.xalancbmk\_s(base) 631.deepsjeng\_s(base) 641.leela\_s(base)  
=====

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 | 648.exchange2\_s(base)  
=====

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  
=====

## Base Compiler Invocation

C benchmarks:

clang

C++ benchmarks:

clang++

Fortran benchmarks:

flang



# SPEC CPU®2017 Integer Speed Result

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## Cisco Systems

Cisco UCS X215c M8 (AMD EPYC 9254  
2.90 GHz Processor)

SPECspeed®2017\_int\_base = 16.2

SPECspeed®2017\_int\_peak = Not Run

**CPU2017 License:** 9019

**Test Sponsor:** Cisco Systems

**Tested by:** Cisco Systems

**Test Date:** Jan-2025

**Hardware Availability:** Oct-2024

**Software Availability:** Sep-2024

## Base Portability Flags

```
600.perlbench_s: -DSPEC_LINUX_X64 -DSPEC_LP64
602.gcc_s: -DSPEC_LP64
605.mcf_s: -DSPEC_LP64
620.omnetpp_s: -DSPEC_LP64
623.xalancbmk_s: -DSPEC_LINUX -DSPEC_LP64
625.x264_s: -DSPEC_LP64
631.deepsjeng_s: -DSPEC_LP64
641.leela_s: -DSPEC_LP64
648.exchange2_s: -DSPEC_LP64
657.xz_s: -DSPEC_LP64
```

## Base Optimization Flags

### C benchmarks:

```
-m64 -Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
-Wl,-mllvm -Wl,-reduce-array-computations=3
-Wl,-allow-multiple-definition -Wl,-mllvm -Wl,-extra-inliner -O3
-march=znver5 -fveclib=AMDLIBM -ffast-math -fopenmp -DSPEC_OPENMP
-flto -fremap-arrays -fstrip-mining -fstruct-layout=7
-mllvm -inline-threshold=1000 -mllvm -reduce-array-computations=3
-mllvm -unroll-threshold=50 -zopt -fopenmp=libomp -lomp -lamdlibm
-lflang -lamdalloc
```

### C++ benchmarks:

```
-m64 -std=c++14 -Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
-Wl,-mllvm -Wl,-reduce-array-computations=3 -O3 -march=znver5
-fveclib=AMDLIBM -ffast-math -fopenmp -DSPEC_OPENMP -flto
-mllvm -loop-unswitch-threshold=200000
-mllvm -reduce-array-computations=3 -mllvm -unroll-threshold=100 -zopt
-fvirtual-function-elimination -fvisibility=hidden -fopenmp=libomp
-lomp -lamdlibm -lflang -lamdalloc-ext
```

### Fortran benchmarks:

```
-m64 -Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
-Wl,-mllvm -Wl,-reduce-array-computations=3
-Wl,-mllvm -Wl,-enable-iv-split -Wl,-mllvm -Wl,-inline-recursion=4
-Wl,-mllvm -Wl,-lsr-in-nested-loop -O3 -march=znver5 -fveclib=AMDLIBM
-ffast-math -fopenmp -flto -mllvm -optimize-strided-mem-cost
-mllvm -unroll-aggressive -mllvm -unroll-threshold=150 -fopenmp=libomp
-lomp -lamdlibm -lflang -lamdalloc
```



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## Base Other Flags

C benchmarks:

-Wno-return-type -Wno-unused-command-line-argument

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.html>

<http://www.spec.org/cpu2017/flags/Cisco-Platform-Settings-AMD-v3-revA.html>

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

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

<http://www.spec.org/cpu2017/flags/Cisco-Platform-Settings-AMD-v3-revA.xml>

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For questions about this result, please contact the tester. For other inquiries, please contact [info@spec.org](mailto:info@spec.org).

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