SPEC CPU®2026 Integer Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Dell Inc.

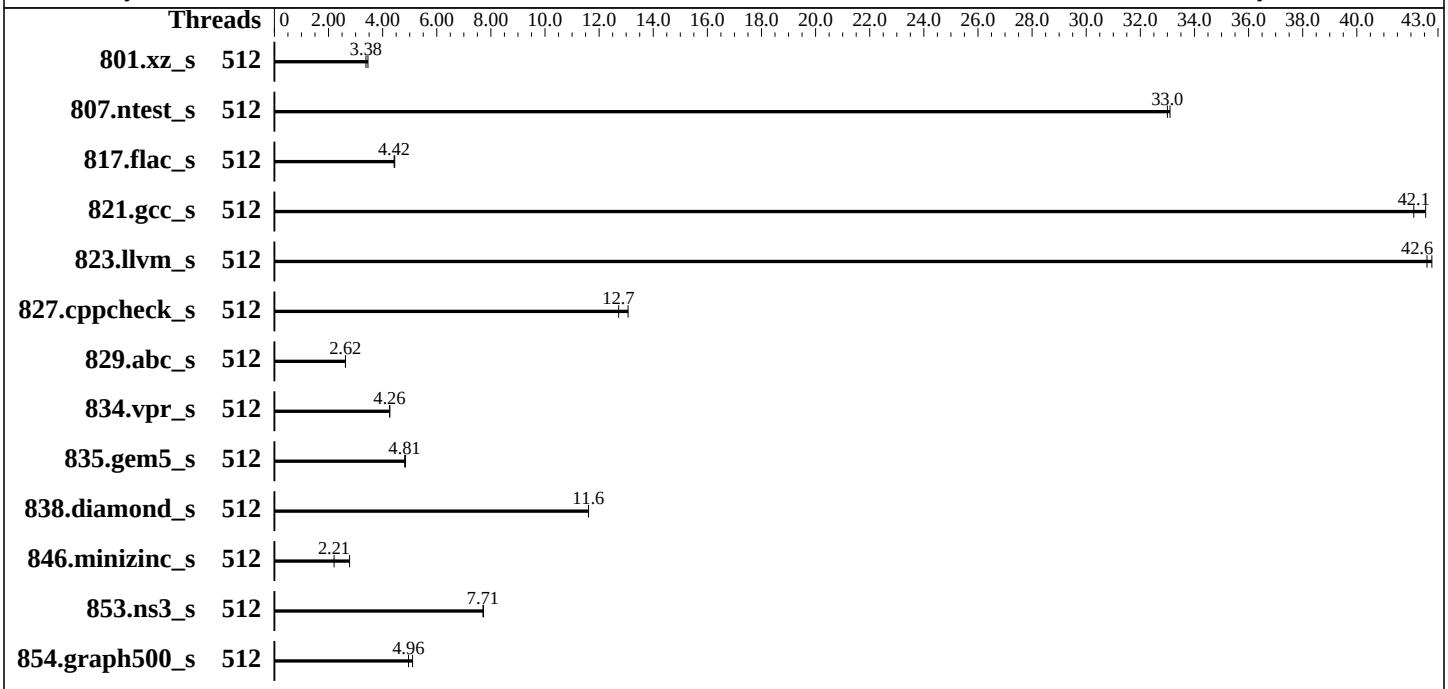
PowerEdge M7725 (AMD EPYC 9755 128-Core Processor)

SPECspeed®2026_int_base = 8.05

SPECspeed®2026_int_peak = 8.05

CPU2026 License: 6573
Test Sponsor: Dell Inc.
Tested by: Dell Inc.

Test Date: Feb-2026
Hardware Availability: Jan-2025
Software Availability: Jan-2026



Hardware

CPU Name:	AMD EPYC 9755
Max MHz:	4100
Nominal:	2700
Enabled:	256 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:	512 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:	250 GB on tmpfs
Cooling:	DLC
Other:	None

Software

OS:	Ubuntu 24.04.1 LTS 6.8.0-57-generic
Compiler:	C/C++: Version 5.1.0 of AOCC Fortran: Flang v22
Compiler Category:	Vendor
Firmware:	Version 1.5.3 released Oct-2025
File System:	tmpfs
System State:	Run level 5 (graphical multi-user)
Base Pointers:	64-bit
Peak Pointers:	64-bit
Other:	None
Power Management:	BIOS and OS set to prefer performance at the cost of additional power usage.

SPEC CPU®2026 Integer Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Dell Inc.

PowerEdge M7725 (AMD EPYC 9755 128-Core Processor)

SPECspeed®2026_int_base = 8.05

SPECspeed®2026_int_peak = 8.05

CPU2026 License: 6573
Test Sponsor: Dell Inc.
Tested by: Dell Inc.

Test Date: Feb-2026
Hardware Availability: Jan-2025
Software Availability: Jan-2026

Results Table

Benchmark	Base							Peak						
	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
801.xz_s	512	**175**	**3.38**	171	3.46			512	**175**	**3.38**	171	3.46		
807.ntest_s	512	34.4	33.1	**34.5**	**33.0**			512	34.4	33.1	**34.5**	**33.0**		
817.flac_s	512	**393**	**4.42**	391	4.45			512	**393**	**4.42**	391	4.45		
821.gcc_s	512	48.7	42.5	**49.2**	**42.1**			512	48.7	42.5	**49.2**	**42.1**		
823.llvm_s	512	33.0	42.8	**33.1**	**42.6**			512	33.0	42.8	**33.1**	**42.6**		
827.cppcheck_s	512	85.6	13.1	**88.0**	**12.7**			512	85.6	13.1	**88.0**	**12.7**		
829.abc_s	512	316	2.63	**317**	**2.62**			512	316	2.63	**317**	**2.62**		
834.vpr_s	512	**224**	**4.26**	224	4.27			512	**224**	**4.26**	224	4.27		
835.gem5_s	512	**237**	**4.81**	235	4.85			512	**237**	**4.81**	235	4.85		
838.diamond_s	512	**86.3**	**11.6**	86.2	11.6			512	**86.3**	**11.6**	86.2	11.6		
846.minizinc_s	512	241	2.78	**304**	**2.21**			512	241	2.78	**304**	**2.21**		
853.ns3_s	512	149	7.73	**150**	**7.71**			512	149	7.73	**150**	**7.71**		
854.graph500_s	512	120	5.11	**123**	**4.96**			512	120	5.11	**123**	**4.96**		

SPECspeed®2026_int_base = 8.05

SPECspeed®2026_int_peak = 8.05

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

Compiler Notes

```
The AMD64 AOCC Compiler Suite is available at
http://developer.amd.com/amd-aocc/
Flang v22 is available at
https://flang.llvm.org/
```

Submit Notes

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

Operating System Notes

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

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

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

(Continued on next page)

Operating System Notes (Continued)

```
'sysctl -w vm.zone_reclaim_mode=1' run as root.
To clear filesystem caches, 'sync; sysctl -w vm.drop_caches=3' run as root.
To disable address space layout randomization (ASLR) to reduce run-to-run
variability, 'sysctl -w kernel.randomize_va_space=0' run as root.
To enable Transparent Hugepages (THP) for all allocations,
'echo always > /sys/kernel/mm/transparent_hugepage/enabled' and
'echo always > /sys/kernel/mm/transparent_hugepage/defrag' run as root.
```

Environment Variables Notes

```
Environment variables set by runcpu before the start of the run:
GOMP_CPU_AFFINITY = "0-511"
LD_LIBRARY_PATH =
     "/mnt/ramdisk/cpu2026rc2/amd_speed_aocc510_flang22_znver5_A_lib/lib:/mnt
     /ramdisk/cpu2026rc2/amd_speed_aocc510_flang22_znver5_A_lib/lib32:"
MALLOC_CONF = "retain:true"
```

General Notes

```
Binaries were compiled on a system with an AMD EPYC 9754 CPU + 768 GiB Memory using Ubuntu 24.04
Benchmark run from a 250 GB ramdisk created with the cmd: "mount -t tmpfs -o size=250G tmpfs /mnt/ramdisk"
```

Platform Notes

```
 BIOS Settings:
            Virtualization Technology : Disabled
                NUMA Nodes Per Socket : 4

                        System Profile : Custom
                  CPU Power Management : Maximum Performance
                               C-States : Disabled
                   Memory Patrol Scrub : Disabled
    PCI ASPM L1 Link Power Management : Disabled
      Periodic Directory Rinse Tuning : Blended
                   Determinism Control : Manual
                    Determinism Slider : Power Determinism
                        Optimizer Mode : Enabled
  Algorithm Performance Boost Disable : Enabled
              ApbDis Fixed DF P-State : P0
                  Adaptive Allocation : Enabled
                   Dram Refresh Delay : Performance
```

(Continued on next page)

Platform Notes (Continued)

```
Sysinfo program /mnt/ramdisk/cpu2026rc2/bin/sysinfo
Rev: 069f95da7e7f5d81b2ce48a82150e54f
running on M772501-M7725 Sat Feb  7 19:53:08 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 255 (255.4-1ubuntu8.4)
12. Failed units, from systemctl list-units --state=failed
13. Services, from systemctl list-unit-files
14. Linux kernel boot-time arguments, from /proc/cmdline
15. cpupower frequency-info
16. tuned-adm active
17. sysctl
18. /sys/kernel/mm/transparent_hugepage
19. /sys/kernel/mm/transparent_hugepage/khugepaged
20. OS release
21. Disk information
22. /sys/devices/virtual/dmi/id
23. dmidecode
24. BIOS
------------------------------------------------------------

------------------------------------------------------------
1. uname -srvm
  Linux 6.8.0-57-generic #59-Ubuntu SMP PREEMPT_DYNAMIC Sat Mar 15 17:40:59 UTC 2025 x86_64

------------------------------------------------------------
2. w
   19:53:08 up  4:29,  1 user,  load average: 0.18, 1.90, 37.80
  USER     TTY      FROM             LOGIN@   IDLE   JCPU   PCPU  WHAT
  root     tty1     -                15:24   36.00s  2.19s  1.04s /bin/bash
  ./amd_speed_aocc510_flang22_znver5_A1.sh

------------------------------------------------------------
```

(Continued on next page)

Platform Notes (Continued)

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

 ------------------------------------------------------------
 4. ulimit -a
   time(seconds)        unlimited
   file(blocks)         unlimited
   data(kbytes)         unlimited
   stack(kbytes)        unlimited
   coredump(blocks)     0
   memory(kbytes)       unlimited
   locked memory(kbytes) 2097152
   process              6188457
   nofiles              1024
   vmemory(kbytes)      unlimited
   locks                unlimited
   rtprio               0

 ------------------------------------------------------------
 5. sysinfo process ancestry
  /sbin/init
  /bin/login -p --
  -bash
  /bin/bash /home/DellFiles/bin/DELL_speed.sh
  /bin/bash /home/DellFiles/bin/dell-run-main.sh speed
  /bin/bash /home/DellFiles/bin/dell-run-main.sh speed
  /bin/bash /home/DellFiles/bin/AMD/dell-run-speccpu.sh speed --define DL-VERS=7.0_T01 --output_format
     html,pdf,txt
  python3 ./run_amd_speed_aocc510_flang22_znver5_A1.py
  /bin/bash ./amd_speed_aocc510_flang22_znver5_A1.sh
  runcpu --config amd_speed_aocc510_flang22_znver5_A1.cfg --tune base --reportable --iterations 2 --define
     DL-VERS=7.0_T01 --output_format html,pdf,txt intspeed
  runcpu --configfile amd_speed_aocc510_flang22_znver5_A1.cfg --tune base --reportable --iterations 2 --define
    DL-VERS=7.0_T01 --output_format html,pdf,txt --nopower --runmode speed --tune base --size
     test:train:refspeed intspeed --nopreenv --note-preenv --logfile
     $SPEC/tmp/CPU2026.001/templogs/preenv.intspeed.001.0.log --lognum 001.0 --from_runcpu 2
  specperl $SPEC/bin/sysinfo
 $SPEC = /mnt/ramdisk/cpu2026rc2

 ------------------------------------------------------------
 6. /proc/cpuinfo
     model name      : AMD EPYC 9755 128-Core Processor
     vendor_id       : AuthenticAMD
     cpu family      : 26
     model           : 2
     stepping        : 1
     microcode       : 0xb00215a
```

(Continued on next page)

Platform Notes (Continued)

```
     bugs            : sysret_ss_attrs spectre_v1 spectre_v2 spec_store_bypass
     TLB size        : 192 4K pages
     cpu cores       : 128
     siblings        : 256
     2 physical ids (chips)
     512 processors (hardware threads)
     physical id 0: core ids 0-127
     physical id 1: core ids 0-127
     physical id 0: apicids 0-255
     physical id 1: apicids 256-511
   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):                               512
   On-line CPU(s) list:                  0-511
   Vendor ID:                            AuthenticAMD
   BIOS Vendor ID:                       AMD
   Model name:                           AMD EPYC 9755 128-Core Processor
   BIOS Model name:                    AMD EPYC 9755 128-Core Processor                CPU @ 2.7GHz
   BIOS CPU family:                      107
   CPU family:                           26
   Model:                                2
   Thread(s) per core:                   2
   Core(s) per socket:                   128
   Socket(s):                            2
   Stepping:                             1
   BogoMIPS:                             5392.14
   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 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
```


(Continued on next page)

Platform Notes (Continued)

```
                                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 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 avx512_vpopcntdq la57 rdpid bus_lock_detect
                              movdiri movdir64b overflow_recov succor smca avx512_vp2intersect
                                     flush_l1d debug_swap
  L1d cache:                         12 MiB (256 instances)
  L1i cache:                         8 MiB (256 instances)
  L2 cache:                          256 MiB (256 instances)
  L3 cache:                          1 GiB (32 instances)
  NUMA node(s):                      8
  NUMA node0 CPU(s):                 0-31,256-287
  NUMA node1 CPU(s):                 32-63,288-319
  NUMA node2 CPU(s):                 64-95,320-351
  NUMA node3 CPU(s):                 96-127,352-383
  NUMA node4 CPU(s):                 128-159,384-415
  NUMA node5 CPU(s):                 160-191,416-447
  NUMA node6 CPU(s):                 192-223,448-479
  NUMA node7 CPU(s):                 224-255,480-511
  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      12M   12 Data            1    64        1             64
     L1i       32K       8M    8 Instruction     1    64        1             64
     L2         1M     256M   16 Unified         2  1024        1             64
     L3        32M       1G   16 Unified         3 32768        1             64

------------------------------------------------------------
8. numactl --hardware
NOTE: a numactl 'node' might or might not correspond to a physical chip.
```

(Continued on next page)

Platform Notes (Continued)

```
   available: 8 nodes (0-7)
   node 0 cpus: 0-31,256-287
   node 0 size: 192684 MB
   node 0 free: 191454 MB
   node 1 cpus: 32-63,288-319
   node 1 size: 193510 MB
   node 1 free: 192134 MB
   node 2 cpus: 64-95,320-351
   node 2 size: 193510 MB
   node 2 free: 192949 MB
   node 3 cpus: 96-127,352-383
   node 3 size: 193494 MB
   node 3 free: 192873 MB
   node 4 cpus: 128-159,384-415
   node 4 size: 193510 MB
   node 4 free: 192853 MB
   node 5 cpus: 160-191,416-447
   node 5 size: 193510 MB
   node 5 free: 192819 MB
   node 6 cpus: 192-223,448-479
   node 6 size: 193510 MB
   node 6 free: 181469 MB
   node 7 cpus: 224-255,480-511
   node 7 size: 193459 MB
   node 7 free: 192633 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:       1584321444 kB

------------------------------------------------------------
10. who -r
  run-level 5 Feb 7 15:23

------------------------------------------------------------
11. Systemd service manager version: systemd 255 (255.4-1ubuntu8.4)
  Default Target  Status
```

(Continued on next page)

Platform Notes (Continued)

```
  graphical       degraded

------------------------------------------------------------
12. Failed units, from systemctl list-units --state=failed
    UNIT                   LOAD   ACTIVE SUB    DESCRIPTION
  * cxl-monitor.service    loaded failed failed CXL Monitor Daemon
  * fwupd-refresh.service loaded failed failed Refresh fwupd metadata and update motd
  Legend: LOAD   -> Reflects whether the unit definition was properly loaded.
          ACTIVE -> The high-level unit activation state, i.e. generalization of SUB.
          SUB    -> The low-level unit activation state, values depend on unit type.
  2 loaded units listed.

------------------------------------------------------------
13. Services, from systemctl list-unit-files
  STATE            UNIT FILES
  enabled          ModemManager apparmor apport blk-availability cloud-config cloud-final cloud-init
                   cloud-init-local console-setup cron cxl-monitor dmesg e2scrub_reap finalrd getty@
                   gpu-manager grub-common grub-initrd-fallback keyboard-setup lm-sensors lvm2-monitor
                   multipathd networkd-dispatcher open-iscsi open-vm-tools pollinate rsyslog secureboot-db
                   setvtrgb sysstat systemd-networkd systemd-networkd-wait-online systemd-pstore
                   systemd-resolved systemd-timesyncd thermald tuned ua-reboot-cmds ubuntu-advantage udisks2
                   ufw vgauth
  enabled-runtime  netplan-ovs-cleanup systemd-fsck-root systemd-remount-fs
  disabled         console-getty debug-shell 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
  indirect         systemd-sysupdate systemd-sysupdate-reboot uuidd
  masked           cryptdisks cryptdisks-early hwclock multipath-tools-boot screen-cleanup sudo x11-common

------------------------------------------------------------
14. Linux kernel boot-time arguments, from /proc/cmdline
  BOOT_IMAGE=/vmlinuz-6.8.0-57-generic
  root=/dev/mapper/ubuntu--vg-ubuntu--lv
  ro

------------------------------------------------------------
15. cpupower frequency-info
  analyzing CPU 501:
    Unable to determine current policy
    boost state support:
      Supported: yes
      Active: yes
      Boost States: 0
      Total States: 3
```

(Continued on next page)

Platform Notes (Continued)

```
      Pstate-P0:  2700MHz

------------------------------------------------------------
16. tuned-adm active
  Current active profile: throughput-performance

------------------------------------------------------------
17. 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

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

------------------------------------------------------------
19. /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

------------------------------------------------------------
20. OS release
```

(Continued on next page)

Platform Notes (Continued)

```
   From /etc/*-release /etc/*-version
   os-release Ubuntu 24.04.1 LTS

 ------------------------------------------------------------
 21. Disk information
 SPEC is set to: /mnt/ramdisk/cpu2026rc2
   Filesystem     Type   Size  Used Avail Use% Mounted on
   tmpfs          tmpfs  250G   11G  240G   5% /mnt/ramdisk

 ------------------------------------------------------------
 22. /sys/devices/virtual/dmi/id
     Vendor:         Dell Inc.
     Product:        PowerEdge M7725
     Product Family: PowerEdge
     Serial:         M772501

 ------------------------------------------------------------
 23. 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:
      1x 80CE000080CE M321R8GA0PB1-CCPQC 64 GB 2 rank 6400
      23x 80CE000080CE M321R8GA0PB2-CCPKC 64 GB 2 rank 6400


 ------------------------------------------------------------
 24. BIOS
 (This section combines info from /sys/devices and dmidecode.)
    BIOS Vendor:       Dell Inc.
    BIOS Version:      1.5.3
    BIOS Date:         10/29/2025
    BIOS Revision:     1.5
```

Compiler Version Notes

```
==============================================================================
C      | 854.graph500_s(base)
------------------------------------------------------------------------------
AMD clang version 17.0.6 (CLANG: AOCC_5.1.0-Build#1994 2025_12_23)
Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /opt/AMD/aocc/aocc-compiler-5.1.0/bin
------------------------------------------------------------------------------
```

(Continued on next page)

Compiler Version Notes (Continued)

```
==============================================================================
C++    | 807.ntest_s(base) 827.cppcheck_s(base) 853.ns3_s(base)
------------------------------------------------------------------------------
AMD clang version 17.0.6 (CLANG: AOCC_5.1.0-Build#1994 2025_12_23)
Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /opt/AMD/aocc/aocc-compiler-5.1.0/bin
------------------------------------------------------------------------------

==============================================================================
C++, C | 801.xz_s(base) 817.flac_s(base) 821.gcc_s(base) 823.llvm_s(base)
       | 829.abc_s(base) 834.vpr_s(base) 835.gem5_s(base) 838.diamond_s(base)
       | 846.minizinc_s(base)
------------------------------------------------------------------------------
AMD clang version 17.0.6 (CLANG: AOCC_5.1.0-Build#1994 2025_12_23)
Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /opt/AMD/aocc/aocc-compiler-5.1.0/bin
------------------------------------------------------------------------------
```

Base Compiler Invocation

C benchmarks:
clang

C++ benchmarks:
clang++

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

Base Portability Flags

801.xz_s: -DSPEC_LP64
807.ntest_s: -DSPEC_LP64
817.flac_s: -DSPEC_LP64
821.gcc_s: -DSPEC_LP64
823.llvm_s: -DSPEC_LP64
827.cppcheck_s: -DSPEC_LP64
829.abc_s: -DSPEC_LP64
834.vpr_s: -fno-finite-math-only -DSPEC_LP64
835.gem5_s: -fno-finite-math-only -DSPEC_LP64
838.diamond_s: -DSPEC_LP64

(Continued on next page)

Base Portability Flags (Continued)

846.minizinc_s: `-DSPEC_LP64`
853.ns3_s: `-fno-finite-math-only -DSPEC_LP64`
854.graph500_s: `-DSPEC_LP64`

Base Optimization Flags

C benchmarks:
```
-m64 -std=c18 -Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
-Wl,-mllvm -Wl,-reduce-array-computations=3
-Wl,-allow-multiple-definition -Wl,-mllvm -Wl,-extra-inliner -O3 -flto
-march=znver5 -fveclib=AMDLIBM -ffast-math -zopt -fremap-arrays
-fstrip-mining -fstruct-layout=7 -mllvm -inline-threshold=1000
-mllvm -reduce-array-computations=3 -mllvm -unroll-threshold=50
-fopenmp -DSPEC_OPENMP -lamdalloc -lamdlibm -fopenmp=libomp -lomp
```

C++ benchmarks:
```
-m64 -std=c++17 -Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
-Wl,-mllvm -Wl,-reduce-array-computations=3
-Wl,-mllvm -Wl,-x86-use-vzeroupper=false -O3 -flto -march=znver5
-fveclib=AMDLIBM -ffast-math -zopt -mllvm -unroll-threshold=100
-mllvm -loop-unswitch-threshold=200000
-mllvm -reduce-array-computations=3 -fopenmp -DSPEC_OPENMP
-fvirtual-function-elimination -fvisibility=hidden -lamdalloc
-lamdlibm -fopenmp=libomp -lomp
```

Benchmarks using both C and C++:
```
-m64 -std=c++17 -std=c18 -Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
-Wl,-mllvm -Wl,-reduce-array-computations=3
-Wl,-mllvm -Wl,-x86-use-vzeroupper=false -O3 -flto -march=znver5
-fveclib=AMDLIBM -ffast-math -zopt -fremap-arrays -fstrip-mining
-fstruct-layout=7 -mllvm -inline-threshold=1000
-mllvm -reduce-array-computations=3 -mllvm -unroll-threshold=50
-mllvm -unroll-threshold=100 -mllvm -loop-unswitch-threshold=200000
-fopenmp -DSPEC_OPENMP -fvirtual-function-elimination
-fvisibility=hidden -lamdalloc -lamdlibm -fopenmp=libomp -lomp
```

Base Other Flags

C benchmarks:
```
-Wno-return-type
```

(Continued on next page)

Base Other Flags (Continued)

Benchmarks using both C and C++:
`-Wno-return-type`

Peak Optimization Flags

C benchmarks:

854.graph500_s: `basepeak = yes`

C++ benchmarks:

807.ntest_s: `basepeak = yes`

827.cppcheck_s: `basepeak = yes`

853.ns3_s: `basepeak = yes`

Benchmarks using both C and C++:

801.xz_s: `basepeak = yes`

817.flac_s: `basepeak = yes`

821.gcc_s: `basepeak = yes`

823.llvm_s: `basepeak = yes`

829.abc_s: `basepeak = yes`

834.vpr_s: `basepeak = yes`

835.gem5_s: `basepeak = yes`

838.diamond_s: `basepeak = yes`

846.minizinc_s: `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.html`
`http://www.spec.org/cpu2026/results/flags/Dell-Platform-Flags-PowerEdge-AMD-EPYC-v1.8.html`

Copyright 2026 Standard Performance Evaluation Corporation

CPU2026 License: 6573
Test Sponsor: Dell Inc.
Tested by: Dell Inc.

Test Date: Feb-2026
Hardware Availability: Jan-2025
Software Availability: Jan-2026

You can also download the XML flags sources by saving the following links:
http://www.spec.org/cpu2026/results/flags/aocc-flags.xml
http://www.spec.org/cpu2026/results/flags/Dell-Platform-Flags-PowerEdge-AMD-EPYC-v1.8.xml

SPEC CPU and SPECspeed are registered trademarks of the Standard Performance Evaluation Corporation. All other brand and product names appearing in this result are trademarks or registered trademarks of their respective holders.

For questions about this result, please contact the tester. For other inquiries, please contact info@spec.org.

Tested with SPEC CPU®2026 v0.902.0 on 2026-02-07 20:53:08-0500.
Report generated on 2026-05-04 23:28:21 by CPU2026 PS formatter (86729d3b).
Originally published on 2026-05-05.