



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Dell Inc.

PowerEdge XE9785 (AMD EPYC 9965 192-Core Processor)

SPECspeed®2017_fp_base = 519

SPECspeed®2017_fp_peak = 553

CPU2017 License: 6573

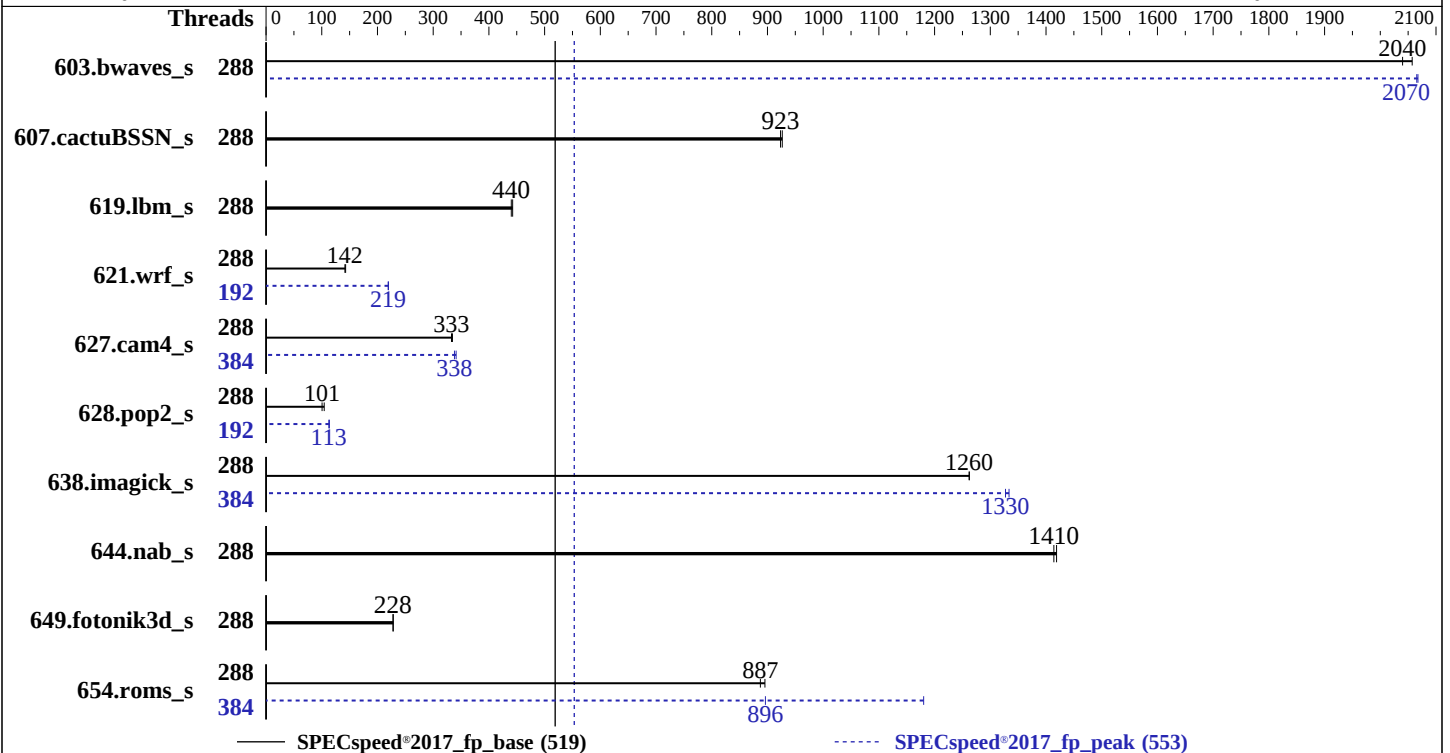
Test Sponsor: Dell Inc.

Tested by: Dell Inc.

Test Date: Jul-2026

Hardware Availability: Mar-2026

Software Availability: Jul-2026



Hardware

CPU Name: AMD EPYC 9965
Max MHz: 3700
Nominal: 2250
Enabled: 384 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: 384 MB I+D on chip per chip, 32 MB shared / 16 cores
Other: None
Memory: 2304 GB (24 x 96 GB 2Rx4 PC5-6400B-R)
Storage: 340 GB on tmpfs
Other: CPU Cooling: Air

Software

OS: Ubuntu 24.04.3 LTS
6.8.0-134-generic
Compiler: C/C++/Fortran: Version 5.0.0 of AOCC
Parallel: Yes
Firmware: Version 1.2.4 released Feb-2026
File System: tmpfs
System State: Run level 5 (graphical multi-user)
Base Pointers: 64-bit
Peak Pointers: 64-bit
Other: None
Power Management: BIOS set to prefer performance at the cost of additional power usage.



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Dell Inc.

PowerEdge XE9785 (AMD EPYC 9965 192-Core Processor)

SPECspeed®2017_fp_base = 519

SPECspeed®2017_fp_peak = 553

CPU2017 License: 6573

Test Sponsor: Dell Inc.

Tested by: Dell Inc.

Test Date: Jul-2026

Hardware Availability: Mar-2026

Software Availability: Jul-2026

Results Table

Benchmark	Base							Peak						
	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
603.bwaves_s	288	28.7	2060	<u>28.9</u>	<u>2040</u>			288	<u>28.6</u>	<u>2070</u>	28.5	2070		
607.cactuBSSN_s	288	18.0	927	<u>18.1</u>	<u>923</u>			288	18.0	927	<u>18.1</u>	<u>923</u>		
619.lbm_s	288	<u>11.9</u>	<u>440</u>	11.8	443			288	<u>11.9</u>	<u>440</u>	11.8	443		
621.wrf_s	288	92.6	143	<u>93.4</u>	<u>142</u>			192	<u>60.4</u>	<u>219</u>	60.2	220		
627.cam4_s	288	26.5	335	<u>26.6</u>	<u>333</u>			384	26.0	341	<u>26.2</u>	<u>338</u>		
628.pop2_s	288	<u>118</u>	<u>101</u>	114	104			192	104	114	<u>105</u>	<u>113</u>		
638.imagick_s	288	<u>11.4</u>	<u>1260</u>	11.4	1260			384	<u>10.9</u>	<u>1330</u>	10.8	1330		
644.nab_s	288	12.3	1420	<u>12.4</u>	<u>1410</u>			288	12.3	1420	<u>12.4</u>	<u>1410</u>		
649.fotonik3d_s	288	<u>40.0</u>	<u>228</u>	39.9	228			288	<u>40.0</u>	<u>228</u>	39.9	228		
654.roms_s	288	17.6	895	<u>17.7</u>	<u>887</u>			384	<u>17.6</u>	<u>896</u>	13.3	1180		

SPECspeed®2017_fp_base = 519

SPECspeed®2017_fp_peak = 553

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 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Dell Inc.

PowerEdge XE9785 (AMD EPYC 9965 192-Core Processor)

SPECspeed®2017_fp_base = 519

SPECspeed®2017_fp_peak = 553

CPU2017 License: 6573

Test Sponsor: Dell Inc.

Tested by: Dell Inc.

Test Date: Jul-2026

Hardware Availability: Mar-2026

Software Availability: Jul-2026

Environment Variables Notes

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

GOMP_CPU_AFFINITY = "0-767"

LD_LIBRARY_PATH =

"/mnt/ramdisk/cpu2017-1.1.9-aocc500-znerv5_A1.4/amd_speed_aocc500_znver5_A_lib/lib:/mnt/ramdisk/cpu2017-1.1.9-aocc500-znerv5_A1.4/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 = "768"

Environment variables set by runcpu during the 603.bwaves_s peak run:

GOMP_CPU_AFFINITY =

"0-11,16-27,32-43,48-59,64-75,80-91,96-107,112-123,128-139,144-155,160-171,176-187,192-203,208-219,224-235,240-251,256-267,272-283,288-299,304-315,320-331,336-347,352-363,368-379"

Environment variables set by runcpu during the 621.wrf_s peak run:

GOMP_CPU_AFFINITY =

"0,384,1,385,2,386,3,387,4,388,5,389,6,390,7,391,8,392,9,393,10,394,11,395,12,396,13,397,14,398,15,399,16,400,17,401,18,402,19,403,20,404,21,405,22,406,23,407,24,408,25,409,26,410,27,411,28,412,29,413,30,414,31,415,32,416,33,417,34,418,35,419,36,420,37,421,38,422,39,423,40,424,41,425,42,426,43,427,44,428,45,429,46,430,47,431,48,432,49,433,50,434,51,435,52,436,53,437,54,438,55,439,56,440,57,441,58,442,59,443,60,444,61,445,62,446,63,447,64,448,65,449,66,450,67,451,68,452,69,453,70,454,71,455,72,456,73,457,74,458,75,459,76,460,77,461,78,462,79,463,80,464,81,465,82,466,83,467,84,468,85,469,86,470,87,471,88,472,89,473,90,474,91,475,92,476,93,477,94,478,95,479"

Environment variables set by runcpu during the 627.cam4_s peak run:

GOMP_CPU_AFFINITY = "0-383"

Environment variables set by runcpu during the 628.pop2_s peak run:

GOMP_CPU_AFFINITY = "0-191"

Environment variables set by runcpu during the 638.imagick_s peak run:

GOMP_CPU_AFFINITY = "0-383"

Environment variables set by runcpu during the 654.roms_s peak run:

GOMP_CPU_AFFINITY = "0-383"

General Notes

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

Platform Notes

BIOS Settings:

Virtualization Technology : Disabled

NUMA Nodes Per Socket : 1

System Profile : Custom

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

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Dell Inc.

PowerEdge XE9785 (AMD EPYC 9965 192-Core Processor)

SPECspeed®2017_fp_base = 519

SPECspeed®2017_fp_peak = 553

CPU2017 License: 6573

Test Sponsor: Dell Inc.

Tested by: Dell Inc.

Test Date: Jul-2026

Hardware Availability: Mar-2026

Software Availability: Jul-2026

Platform Notes (Continued)

Algorithm Performance Boost Disable : Enabled
ApbDis Fixed DF P-State : P0
Adaptive Allocation : Enabled
Dram Refresh Delay : Performance
DIMM Self Healing -
on Uncorrectable Memory Error : Disabled

Sysinfo program /mnt/ramdisk/cpu2017-1.1.9-aocc500-znerv5_A1.4/bin/sysinfo
Rev: r6732 of 2022-11-07 fe91c89b7ed5c36ae2c92cc097bec197
running on J8NZK54-XE9785 Thu Jul 16 21:04:32 2026

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 (255.4-1ubuntu8.16)
12. Services, from systemctl list-unit-files
13. Linux kernel boot-time arguments, from /proc/cmdline
14. cpupower frequency-info
15. sysctl
16. /sys/kernel/mm/transparent_hugepage
17. /sys/kernel/mm/transparent_hugepage/khugepaged
18. OS release
19. Disk information
20. /sys/devices/virtual/dmi/id
21. dmidecode
22. BIOS

1. uname -a
Linux J8NZK54-XE9785 6.8.0-134-generic #134-Ubuntu SMP PREEMPT_DYNAMIC Fri Jun 26 18:43:11 UTC 2026 x86_64
x86_64 x86_64 GNU/Linux

2. w
21:04:32 up 2:38, 1 user, load average: 6.59, 6.89, 3.98
USER TTY FROM LOGIN@ IDLE JCPU PCPU WHAT
root tty1 - 18:58 2:05m 2.23s 0.86s /bin/bash ./amd_speed_aocc500_znver5_A1.sh

3. Username
From environment variable \$USER: root

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

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Dell Inc.

PowerEdge XE9785 (AMD EPYC 9965 192-Core Processor)

SPECspeed®2017_fp_base = 519

SPECspeed®2017_fp_peak = 553

CPU2017 License: 6573

Test Sponsor: Dell Inc.

Tested by: Dell Inc.

Test Date: Jul-2026

Hardware Availability: Mar-2026

Software Availability: Jul-2026

Platform Notes (Continued)

```
stack(kbytes)      unlimited
coredump(blocks)   0
memory(kbytes)     unlimited
locked memory(kbytes) 2097152
process            9284028
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/cpu-run-main.sh speed
/bin/bash /home/DellFiles/bin/cpu-run-main.sh speed
/bin/bash /home/DellFiles/bin/AMD/cpu-run-speccpu.sh speed_all --define DL-VERS=7.0_T09 --output_format
html,pdf,txt
python3 ./run_amd_speed_aocc500_znver5_A1.py
/bin/bash ./amd_speed_aocc500_znver5_A1.sh
runcpu --config amd_speed_aocc500_znver5_A1.cfg --tune all --reportable --iterations 2 DL-VERS=7.0_T09
--output_format html,pdf,txt fpspeed
runcpu --configfile amd_speed_aocc500_znver5_A1.cfg --tune all --reportable --iterations 2 --output_format
html,pdf,txt --nopower --runmode speed --tune base:peak --size test:train:refspeed fpspeed --nopreenv
--note-preenv --logfile $SPEC/tmp/CPU2017.002/temlogs/preenv.fpspeed.002.0.log --lognum 002.0
--from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /mnt/ramdisk/cpu2017-1.1.9-aocc500-znerv5_A1.4
```

6. /proc/cpuinfo

```
model name      : AMD EPYC 9965 192-Core Processor
vendor_id       : AuthenticAMD
cpu family      : 26
model           : 17
stepping        : 0
microcode       : 0xb101058
bugs            : sysret_ss_attrs spectre_v1 spectre_v2 spec_store_bypass
TLB size        : 192 4K pages
cpu cores       : 192
siblings        : 384
2 physical ids (chips)
768 processors (hardware threads)
physical id 0:  core ids 0-191
physical id 1:  core ids 0-191
physical id 0:  apicids 0-383
physical id 1:  apicids 512-895
```

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
```

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Dell Inc.

PowerEdge XE9785 (AMD EPYC 9965 192-Core Processor)

SPECspeed®2017_fp_base = 519

SPECspeed®2017_fp_peak = 553

CPU2017 License: 6573
Test Sponsor: Dell Inc.
Tested by: Dell Inc.

Test Date: Jul-2026
Hardware Availability: Mar-2026
Software Availability: Jul-2026

Platform Notes (Continued)

CPU(s): 768
On-line CPU(s) list: 0-767
Vendor ID: AuthenticAMD
BIOS Vendor ID: AMD
Model name: AMD EPYC 9965 192-Core Processor
BIOS Model name: AMD EPYC 9965 192-Core Processor CPU @ 2.2GHz
BIOS CPU family: 107
CPU family: 26
Model: 17
Thread(s) per core: 2
Core(s) per socket: 192
Socket(s): 2
Stepping: 0
Frequency boost: enabled
CPU(s) scaling MHz: 42%
CPU max MHz: 3700.1951
CPU min MHz: 1500.0000
BogoMIPS: 4493.99
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 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 fsrm avx512_vp2intersect flush_lld debug_swap srso_user_kernel_no

L1d cache: 18 MiB (384 instances)
L1i cache: 12 MiB (384 instances)
L2 cache: 384 MiB (384 instances)
L3 cache: 768 MiB (24 instances)
NUMA node(s): 2
NUMA node0 CPU(s): 0-191,384-575
NUMA node1 CPU(s): 192-383,576-767
Vulnerability Gather data sampling: 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: 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

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Dell Inc.

PowerEdge XE9785 (AMD EPYC 9965 192-Core Processor)

SPECspeed®2017_fp_base = 519

SPECspeed®2017_fp_peak = 553

CPU2017 License: 6573

Test Sponsor: Dell Inc.

Tested by: Dell Inc.

Test Date: Jul-2026

Hardware Availability: Mar-2026

Software Availability: Jul-2026

Platform Notes (Continued)

Vulnerability Srbds: always-on; PBR SB-eIBRS Not affected; BHI Not affected
Vulnerability Tsa: Not affected
Vulnerability Tsx async abort: Not affected
Vulnerability Vmscape: Not affected

From lscpu --cache:

NAME	ONE-SIZE	ALL-SIZE	WAYS	TYPE	LEVEL	SETS	PHY-LINE	COHERENCY-SIZE
L1d	48K	18M	12	Data	1	64	1	64
L1i	32K	12M	8	Instruction	1	64	1	64
L2	1M	384M	16	Unified	2	1024	1	64
L3	32M	768M	16	Unified	3	32768	1	64

8. numactl --hardware

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

```
available: 2 nodes (0-1)
node 0 cpus: 0-191,384-575
node 0 size: 1160082 MB
node 0 free: 1152651 MB
node 1 cpus: 192-383,576-767
node 1 size: 1161006 MB
node 1 free: 1156405 MB
node distances:
node  0  1
 0:  10  32
 1:  32  10
```

9. /proc/meminfo

MemTotal: 2376795076 kB

10. who -r

run-level 5 Jul 16 18:26

11. Systemd service manager version: systemd 255 (255.4-1ubuntu8.16)

Default Target Status
graphical running

12. Services, from systemctl list-unit-files

STATE	UNIT FILES
enabled	ModemManager apparmor appport blk-availability cloud-config cloud-final cloud-init cloud-init-local console-setup cron dmesg e2scrub_reap finalrd getty@ gpu-manager grub-common grub-initrd-fallback keyboard-setup lvm2-monitor multipathd networkd-dispatcher open-iscsi open-vm-tools pollinate rsyslog secureboot-db setvtrgb snapd ssh sysstat systemd-networkd systemd-networkd-wait-online systemd-pstore systemd-resolved systemd-timesyncd thermald ua-reboot-cmds ubuntu-advantage udisks2 ufw unattended-upgrades vgauth
enabled-runtime	netplan-ovs-cleanup systemd-fsck-root systemd-remount-fs
disabled	console-getty debug-shell iscsid nftables rsync serial-getty@ 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 uuuid
masked	cryptdisks cryptdisks-early hwclock multipath-tools-boot screen-cleanup sudo x11-common

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Dell Inc.

PowerEdge XE9785 (AMD EPYC 9965 192-Core Processor)

SPECspeed®2017_fp_base = 519

SPECspeed®2017_fp_peak = 553

CPU2017 License: 6573

Test Sponsor: Dell Inc.

Tested by: Dell Inc.

Test Date: Jul-2026

Hardware Availability: Mar-2026

Software Availability: Jul-2026

Platform Notes (Continued)

13. Linux kernel boot-time arguments, from /proc/cmdline
BOOT_IMAGE=/boot/vmlinuz-6.8.0-134-generic
root=UUID=73863172-b75e-41c3-86f9-7d003c2eee69
ro

14. cpupower frequency-info
analyzing CPU 450:
current policy: frequency should be within 1.50 GHz and 2.25 GHz.
The governor "schedutil" may decide which speed to use
within this range.

boost state support:
Supported: yes
Active: yes
Boost States: 0
Total States: 3
Pstate-P0: 2250MHz

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
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

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Dell Inc.

PowerEdge XE9785 (AMD EPYC 9965 192-Core Processor)

SPECspeed®2017_fp_base = 519

SPECspeed®2017_fp_peak = 553

CPU2017 License: 6573

Test Sponsor: Dell Inc.

Tested by: Dell Inc.

Test Date: Jul-2026

Hardware Availability: Mar-2026

Software Availability: Jul-2026

Platform Notes (Continued)

18. OS release

From /etc/*-release /etc/*-version
os-release Ubuntu 24.04.3 LTS

19. Disk information

SPEC is set to: /mnt/ramdisk/cpu2017-1.1.9-aocc500-znerv5_A1.4
Filesystem Type Size Used Avail Use% Mounted on
tmpfs tmpfs 340G 3.3G 337G 1% /mnt/ramdisk

20. /sys/devices/virtual/dmi/id

Vendor: Dell Inc.
Product: PowerEdge XE9785
Product Family: PowerEdge
Serial: J8NZK54

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:

22x 80AD000080AD HMC64M4M5BRB504N 96 GB 2 rank 6400
2x 80AD000080AD HMC64M4M5BRB505N 96 GB 2 rank 6400

22. BIOS

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

BIOS Vendor: Dell Inc.
BIOS Version: 1.2.4
BIOS Date: 02/12/2026
BIOS Revision: 1.2

Compiler Version Notes

C | 619.lbm_s(base, peak) 638.imagick_s(base, peak) 644.nab_s(base, peak)

AMD clang version 17.0.6 (CLANG: AOCC_5.0.0-Build#1377 2024_09_24)
Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /opt/AMD/aocc/aocc-compiler-5.0.0/bin

C++, C, Fortran | 607.cactuBSSN_s(base, peak)

AMD clang version 17.0.6 (CLANG: AOCC_5.0.0-Build#1377 2024_09_24)
Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /opt/AMD/aocc/aocc-compiler-5.0.0/bin
AMD clang version 17.0.6 (CLANG: AOCC_5.0.0-Build#1377 2024_09_24)
Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /opt/AMD/aocc/aocc-compiler-5.0.0/bin
AMD clang version 17.0.6 (CLANG: AOCC_5.0.0-Build#1377 2024_09_24)

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Dell Inc.

PowerEdge XE9785 (AMD EPYC 9965 192-Core Processor)

SPECspeed®2017_fp_base = 519

SPECspeed®2017_fp_peak = 553

CPU2017 License: 6573

Test Sponsor: Dell Inc.

Tested by: Dell Inc.

Test Date: Jul-2026

Hardware Availability: Mar-2026

Software Availability: Jul-2026

Compiler Version Notes (Continued)

Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /opt/AMD/aocc/aocc-compiler-5.0.0/bin

=====
Fortran | 603.bwaves_s(base, peak) 649.fotonik3d_s(base, peak) 654.roms_s(base, peak)
=====

AMD clang version 17.0.6 (CLANG: AOCC_5.0.0-Build#1377 2024_09_24)
Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /opt/AMD/aocc/aocc-compiler-5.0.0/bin

=====
Fortran, C | 621.wrf_s(base, peak) 627.cam4_s(base, peak) 628.pop2_s(base, peak)
=====

AMD clang version 17.0.6 (CLANG: AOCC_5.0.0-Build#1377 2024_09_24)
Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /opt/AMD/aocc/aocc-compiler-5.0.0/bin
AMD clang version 17.0.6 (CLANG: AOCC_5.0.0-Build#1377 2024_09_24)
Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /opt/AMD/aocc/aocc-compiler-5.0.0/bin

Base Compiler Invocation

C benchmarks:
clang

Fortran benchmarks:
flang

Benchmarks using both Fortran and C:
flang clang

Benchmarks using Fortran, C, and C++:
clang++ clang flang

Base Portability Flags

603.bwaves_s: -DSPEC_LP64
607.cactuBSSN_s: -DSPEC_LP64
619.lbm_s: -DSPEC_LP64
621.wrf_s: -DSPEC_CASE_FLAG -Mbyteswapio -DSPEC_LP64
627.cam4_s: -DSPEC_CASE_FLAG -DSPEC_LP64

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Dell Inc.

PowerEdge XE9785 (AMD EPYC 9965 192-Core Processor)

SPECspeed®2017_fp_base = 519

SPECspeed®2017_fp_peak = 553

CPU2017 License: 6573

Test Sponsor: Dell Inc.

Tested by: Dell Inc.

Test Date: Jul-2026

Hardware Availability: Mar-2026

Software Availability: Jul-2026

Base Portability Flags (Continued)

628.pop2_s: -DSPEC_CASE_FLAG -Mbyteswapio -DSPEC_LP64
638.imagick_s: -DSPEC_LP64
644.nab_s: -DSPEC_LP64
649.fotonik3d_s: -DSPEC_LP64
654.roms_s: -DSPEC_LP64

Base Optimization Flags

C benchmarks:

-m64 -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
-fremap-arrays -fstrip-mining -fstruct-layout=7
-mllvm -inline-threshold=1000 -mllvm -reduce-array-computations=3
-mllvm -unroll-threshold=50 -zopt -mrecip=none -fopenmp=libomp -lomp
-lamdlibm -lamdalloc -lflang

Fortran benchmarks:

-m64 -Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
-Wl,-mllvm -Wl,-reduce-array-computations=3
-Wl,-mllvm -Wl,-enable-X86-prefetching -DSPEC_OPENMP -O3 -march=znver5
-fveclib=AMDLIBM -ffast-math -fopenmp -flto -funroll-loops
-mllvm -lsr-in-nested-loop -mllvm -reduce-array-computations=3
-Mrecursive -zopt -fopenmp=libomp -lomp -lamdlibm -lamdalloc
-lflang

Benchmarks using both Fortran and C:

-m64 -Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
-Wl,-mllvm -Wl,-reduce-array-computations=3
-Wl,-mllvm -Wl,-enable-X86-prefetching -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 -funroll-loops
-mllvm -lsr-in-nested-loop -Mrecursive -mrecip=none -fopenmp=libomp
-lomp -lamdlibm -lamdalloc -lflang

Benchmarks using Fortran, C, and C++:

-m64 -std=c++14 -Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
-Wl,-mllvm -Wl,-reduce-array-computations=3
-Wl,-mllvm -Wl,-x86-use-vzeroupper=false -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

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Dell Inc.

PowerEdge XE9785 (AMD EPYC 9965 192-Core Processor)

SPECspeed®2017_fp_base = 519

SPECspeed®2017_fp_peak = 553

CPU2017 License: 6573

Test Sponsor: Dell Inc.

Tested by: Dell Inc.

Test Date: Jul-2026

Hardware Availability: Mar-2026

Software Availability: Jul-2026

Base Optimization Flags (Continued)

Benchmarks using Fortran, C, and C++ (continued):

-mllvm -unroll-threshold=50 -zopt
-mllvm -loop-unswitch-threshold=2000000 -mllvm -unroll-threshold=100
-funroll-loops -mllvm -lsr-in-nested-loop -Mrecursive -mrecip=none
-fopenmp=libomp -lomp -lamdlibm -lamdalloc -lflang

Base Other Flags

C benchmarks:

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

Fortran benchmarks:

-Wno-unused-command-line-argument

Benchmarks using both Fortran and C:

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

Benchmarks using Fortran, C, and C++:

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

Peak Compiler Invocation

C benchmarks:

clang

Fortran benchmarks:

flang

Benchmarks using both Fortran and C:

flang clang

Benchmarks using Fortran, C, and C++:

clang++ clang flang

Peak Portability Flags

Same as Base Portability Flags



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Dell Inc.

PowerEdge XE9785 (AMD EPYC 9965 192-Core Processor)

SPECspeed®2017_fp_base = 519

SPECspeed®2017_fp_peak = 553

CPU2017 License: 6573

Test Sponsor: Dell Inc.

Tested by: Dell Inc.

Test Date: Jul-2026

Hardware Availability: Mar-2026

Software Availability: Jul-2026

Peak Optimization Flags

C benchmarks:

619.lbm_s: basepeak = yes

638.imagick_s: -m64 -Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
-Wl,-mllvm -Wl,-reduce-array-computations=3 -Ofast
-march=znver5 -fveclib=AMDLIBM -ffast-math -fopenmp
-flto -DSPEC_OPENMP -fremap-arrays -fstrip-mining
-fstruct-layout=9 -mllvm -inline-threshold=1000
-mllvm -reduce-array-computations=3
-mllvm -unroll-threshold=50 -zopt -fopenmp=libomp -lomp
-lamdlibm -lamdalloc -lflang

644.nab_s: basepeak = yes

Fortran benchmarks:

603.bwaves_s: -m64 -Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
-Wl,-mllvm -Wl,-reduce-array-computations=3
-Wl,-mllvm -Wl,-enable-X86-prefetching -DSPEC_OPENMP
-Ofast -march=znver5 -fveclib=AMDLIBM -ffast-math
-fopenmp -fscalar-transform -fvector-transform
-mllvm -reduce-array-computations=3 -Mrecursive
-fopenmp=libomp -lomp -lamdlibm -lamdalloc -lflang

649.fotonik3d_s: basepeak = yes

654.roms_s: Same as 603.bwaves_s

Benchmarks using both Fortran and C:

621.wrf_s: -m64 -Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
-Wl,-mllvm -Wl,-reduce-array-computations=3
-Wl,-mllvm -Wl,-enable-X86-prefetching -Ofast
-march=znver5 -fveclib=AMDLIBM -ffast-math -fopenmp
-flto -DSPEC_OPENMP -fremap-arrays -fstrip-mining
-fstruct-layout=9 -mllvm -inline-threshold=1000
-mllvm -reduce-array-computations=3
-mllvm -unroll-threshold=50 -zopt -funroll-loops
-mllvm -lsr-in-nested-loop -Mrecursive -fopenmp=libomp
-lomp -lamdlibm -lamdalloc -lflang

627.cam4_s: -m64 -Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
-Wl,-mllvm -Wl,-reduce-array-computations=3
-Wl,-mllvm -Wl,-enable-X86-prefetching -Ofast
-march=znver5 -fveclib=AMDLIBM -ffast-math -fopenmp

(Continued on next page)



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Dell Inc.

PowerEdge XE9785 (AMD EPYC 9965 192-Core Processor)

SPECspeed®2017_fp_base = 519

SPECspeed®2017_fp_peak = 553

CPU2017 License: 6573

Test Sponsor: Dell Inc.

Tested by: Dell Inc.

Test Date: Jul-2026

Hardware Availability: Mar-2026

Software Availability: Jul-2026

Peak Optimization Flags (Continued)

627.cam4_s (continued):

-flto -DSPEC_OPENMP -fremap-arrays -fstrip-mining
-fstruct-layout=9 -mllvm -inline-threshold=1000
-mllvm -reduce-array-computations=3
-mllvm -unroll-threshold=50 -zopt -Mrecursive
-mrecip=none -fopenmp=libomp -lomp -lamdlibm -lamdalloc
-lflang

628.pop2_s: -m64 -Wl, -mllvm -Wl, -align-all-nofallthru-blocks=6

-Wl, -mllvm -Wl, -reduce-array-computations=3
-Wl, -mllvm -Wl, -enable-X86-prefetching -Ofast
-march=znver5 -fveclib=AMDLIBM -ffast-math -fopenmp
-flto -DSPEC_OPENMP -fremap-arrays -fstrip-mining
-fstruct-layout=9 -mllvm -inline-threshold=1000
-mllvm -reduce-array-computations=3
-mllvm -unroll-threshold=50 -zopt -fscalar-transform
-fvector-transform -Mrecursive -fopenmp=libomp -lomp
-lamdlibm -lamdalloc -lflang

Benchmarks using Fortran, C, and C++:

607.cactuBSSN_s: basepeak = yes

Peak Other Flags

C benchmarks:

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

Fortran benchmarks:

-Wno-unused-command-line-argument

Benchmarks using both Fortran and C:

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

Benchmarks using Fortran, C, and C++:

-Wno-return-type -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/Dell-Platform-Flags-PowerEdge-AMD-EPYC-v1.8.html>



SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

Dell Inc.

PowerEdge XE9785 (AMD EPYC 9965 192-Core Processor)

SPECspeed®2017_fp_base = 519

SPECspeed®2017_fp_peak = 553

CPU2017 License: 6573

Test Sponsor: Dell Inc.

Tested by: Dell Inc.

Test Date: Jul-2026

Hardware Availability: Mar-2026

Software Availability: Jul-2026

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/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®2017 v1.1.9 on 2026-07-16 17:04:32-0400.

Report generated on 2026-08-11 18:22:18 by CPU2017 PDF formatter v6716.

Originally published on 2026-08-11.