



SPEC CPU®2026 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Compal Electronics, Inc.

SR224-2A
AMD EPYC 9965

SPECspeed®2026_fp_base = 17.7

SPECspeed®2026_fp_peak = 17.9

CPU2026 License: 6857

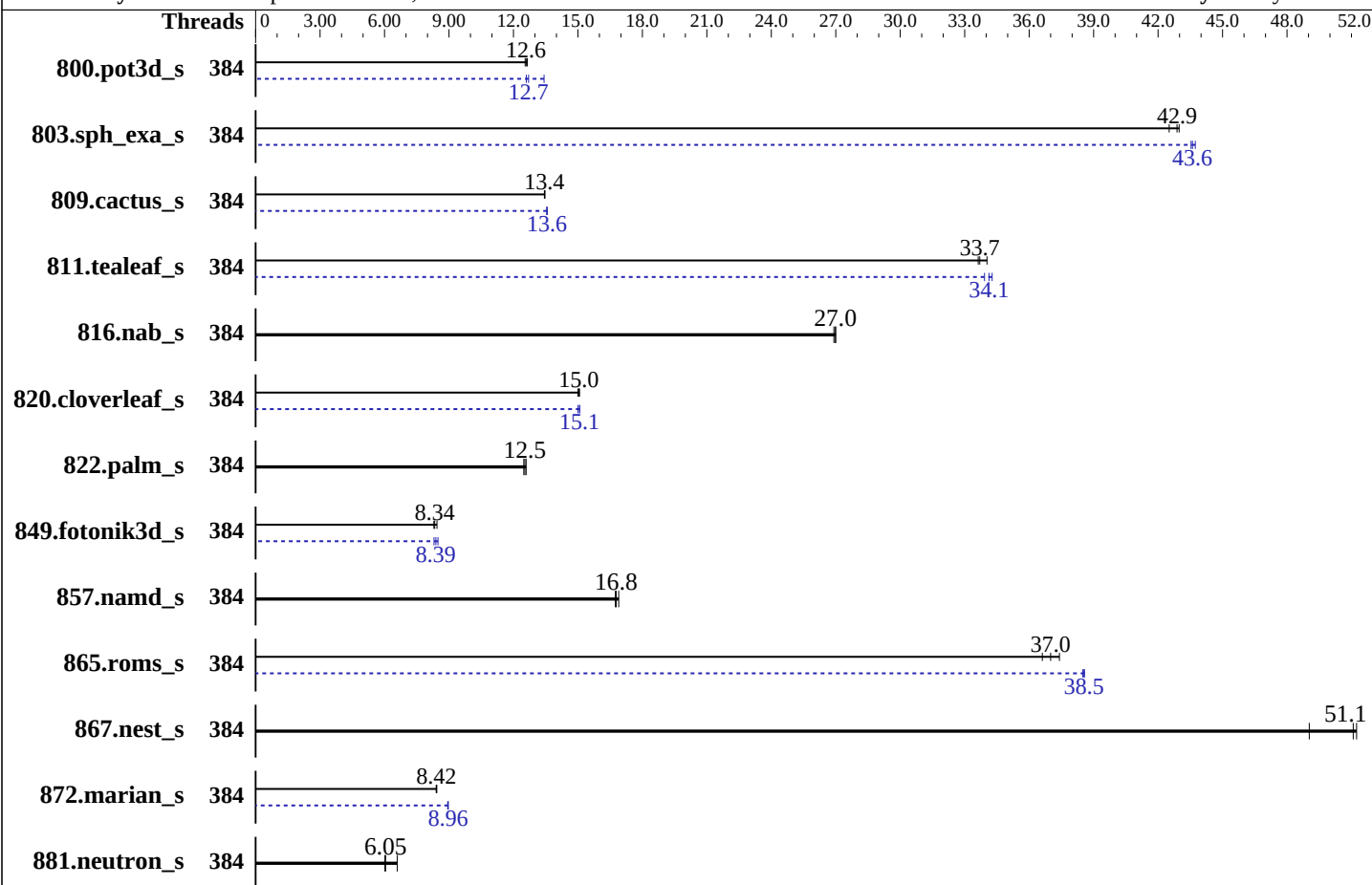
Test Sponsor: Compal Electronics, Inc.

Tested by: Compal Electronics, Inc.

Test Date: Aug-2026

Hardware Availability: Jul-2025

Software Availability: May-2026



Hardware

CPU Name: AMD EPYC 9965
Max MHz: 3700
Nominal: 2250
Enabled: 384 cores, 2 chips
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: 768 GB (24 x 32 GB 2Rx8 PC5-6400B-R)

Storage: 1 x 3.84TB M.2 NVMe SSD
Cooling: Air
Other: None

Software

OS: SUSE Linux Enterprise Server 15 SP7
kernel version 6.4.0-150700.51-default
Compiler: C/C++: Version 5.2.0 of AOCC
Fortran: Flang v22
Compiler Category: Vendor
Firmware: American Megatrends Version 10.28.00 released Jan-2026
File System: btrfs
System State: Run level 3 (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 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Compal Electronics, Inc.

SR224-2A
AMD EPYC 9965

SPECspeed®2026_fp_base = 17.7

SPECspeed®2026_fp_peak = 17.9

CPU2026 License: 6857

Test Sponsor: Compal Electronics, Inc.

Tested by: Compal Electronics, Inc.

Test Date: Aug-2026

Hardware Availability: Jul-2025

Software Availability: May-2026

Results Table

Benchmark	Base							Peak						
	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
800.pot3d_s	384	53.2	12.6	53.6	12.5	<u>53.5</u>	<u>12.6</u>	384	53.4	12.6	50.1	13.4	<u>53.0</u>	<u>12.7</u>
803.sph_exa_s	384	29.1	42.5	<u>28.9</u>	<u>42.9</u>	28.8	43.0	384	28.3	43.7	<u>28.4</u>	<u>43.6</u>	28.4	43.5
809.cactus_s	384	<u>83.4</u>	<u>13.4</u>	83.5	13.4	83.3	13.5	384	<u>82.7</u>	<u>13.6</u>	82.7	13.6	82.8	13.6
811.tealeaf_s	384	16.4	34.0	<u>16.5</u>	<u>33.7</u>	16.6	33.6	384	16.4	33.9	16.3	34.3	<u>16.3</u>	<u>34.1</u>
816.nab_s	384	<u>41.7</u>	<u>27.0</u>	41.7	27.0	41.8	26.9	384	<u>41.7</u>	<u>27.0</u>	41.7	27.0	41.8	26.9
820.cloverleaf_s	384	57.1	15.0	56.8	15.1	<u>57.0</u>	<u>15.0</u>	384	56.8	15.1	57.1	15.0	<u>56.8</u>	<u>15.1</u>
822.palm_s	384	97.5	12.6	<u>98.0</u>	<u>12.5</u>	98.4	12.5	384	97.5	12.6	<u>98.0</u>	<u>12.5</u>	98.4	12.5
849.fotonik3d_s	384	79.5	8.30	78.2	8.44	<u>79.2</u>	<u>8.34</u>	384	77.8	8.49	79.5	8.30	<u>78.7</u>	<u>8.39</u>
857.namd_s	384	<u>86.5</u>	<u>16.8</u>	86.7	16.7	85.9	16.9	384	<u>86.5</u>	<u>16.8</u>	86.7	16.7	85.9	16.9
865.roms_s	384	29.8	36.6	29.1	37.4	<u>29.5</u>	<u>37.0</u>	384	28.3	38.6	28.3	38.5	<u>28.3</u>	<u>38.5</u>
867.nest_s	384	42.2	51.2	<u>42.3</u>	<u>51.1</u>	44.0	49.0	384	42.2	51.2	<u>42.3</u>	<u>51.1</u>	44.0	49.0
872.marian_s	384	128	8.43	129	8.40	<u>129</u>	<u>8.42</u>	384	121	8.94	<u>121</u>	<u>8.96</u>	121	8.96
881.neutron_s	384	124	6.59	<u>135</u>	<u>6.05</u>	135	6.02	384	124	6.59	<u>135</u>	<u>6.05</u>	135	6.02

SPECspeed®2026_fp_base = 17.7

SPECspeed®2026_fp_peak = 17.9

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 --physcpubind=0-15 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)



SPEC CPU®2026 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Compal Electronics, Inc.

SR224-2A
AMD EPYC 9965

SPECspeed®2026_fp_base = 17.7

SPECspeed®2026_fp_peak = 17.9

CPU2026 License: 6857

Test Sponsor: Compal Electronics, Inc.

Tested by: Compal Electronics, Inc.

Test Date: Aug-2026

Hardware Availability: Jul-2025

Software Availability: May-2026

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.

To disable Transparent Hugepages (THP) for 816.nab_s,865.roms_s=peak:
'echo never > /sys/kernel/mm/transparent_hugepage/enabled' and
'echo never > /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 = "0-383"
LD_LIBRARY_PATH =
"/cpu2026/amd_speed_aocc520_znver5_A_lib/lib:/cpu2026/amd_speed_aocc520_znver5_A_lib/lib32:"
MALLOC_CONF = "retain:true"
OMP_THREAD_LIMIT = "384"

General Notes

Binaries were compiled on a system with an AMD EPYC 9754 CPU + 768 GiB Memory using Ubuntu 24.04

Platform Notes

BIOS settings:
TDP Control: Manual
TDP: 500
PPT Control: Manual
PPT: 500
NUMA Nodes Per Socket: NPS1
SMT Control : disable
Power Profile Selection : High Performance Mode
ACPI CST C2 Latency : 18
DF Cstates: Disabled
DRAM Scrub Time: Disabled
Global C-state Control: Disabled
SVM mode: Disabled
SR-IOV Support: Disabled

(Continued on next page)



SPEC CPU®2026 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Compal Electronics, Inc.

SR224-2A
AMD EPYC 9965

SPECspeed®2026_fp_base = 17.7

SPECspeed®2026_fp_peak = 17.9

CPU2026 License: 6857

Test Sponsor: Compal Electronics, Inc.

Tested by: Compal Electronics, Inc.

Test Date: Aug-2026

Hardware Availability: Jul-2025

Software Availability: May-2026

Platform Notes (Continued)

Sysinfo program /cpu2026/bin/sysinfo
Rev: 779ab21020787073335a329f3a45e2cd
running on localhost Thu Aug 20 14:48:33 2026

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

Table of contents

1. uname -srvm
2. w
3. Username
4. ulimit -a
5. sysinfo process ancestry
6. /proc/cpuinfo
7. lscpu
8. numactl --hardware
9. /proc/meminfo
10. who -r
11. Systemd service manager version: systemd 254 (254.24+suse.148.g83b9060b6e)
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 -srvm

Linux 6.4.0-150700.51-default #1 SMP PREEMPT_DYNAMIC Wed Apr 30 21:35:43 UTC 2025 (6930611) x86_64

2. w

14:48:33 up 4:42, 4 users, load average: 86.59, 55.53, 37.54
USER TTY FROM LOGIN@ IDLE JCPU PCPU WHAT
root pts/0 192.168.68.2 10:07 4:36m 6.55s 5.51s python3
./run_amd_speed_aocc520_znver5_A1.py
root pts/1 192.168.68.2 10:08 4:39m 0.04s 0.04s -bash

3. Username

(Continued on next page)



SPEC CPU®2026 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Compal Electronics, Inc.

SR224-2A
AMD EPYC 9965

SPECspeed®2026_fp_base = 17.7

SPECspeed®2026_fp_peak = 17.9

CPU2026 License: 6857

Test Sponsor: Compal Electronics, Inc.

Tested by: Compal Electronics, Inc.

Test Date: Aug-2026

Hardware Availability: Jul-2025

Software Availability: May-2026

Platform Notes (Continued)

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) 3093196
max locked memory       (kbytes, -l) 2048
max memory size         (kbytes, -m) unlimited
open files              (-n) 1024
pipe size               (512 bytes, -p) 8
POSIX message queues    (bytes, -q) 819200
real-time priority      (-r) 0
stack size              (kbytes, -s) unlimited
cpu time                (seconds, -t) unlimited
max user processes      (-u) 3093196
virtual memory          (kbytes, -v) unlimited
file locks              (-x) unlimited
```

5. sysinfo process ancestry

```
/usr/lib/systemd/systemd --switched-root --system --deserialize=42
sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups
sshd: root [priv]
sshd: root@pts/0
-bash
python3 ./run_amd_speed_aocc520_znver5_A1.py
runcpu --config amd_speed_aocc520_znver5_A1.cfg --tune all --reportable --iterations 3 fpspeed
runcpu --configfile amd_speed_aocc520_znver5_A1.cfg --tune all --reportable --iterations 3 --nopower
--runmode speed --tune base:peak --size test:train:refspeed fpspeed --nopreenv --note-preenv --logfile
$SPEC/tmp/CPU2026.002/temlogs/preenv.fpspeed.002.0.log --lognum 002.0 --from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /cpu2026
```

6. /proc/cpuinfo

```
model name      : AMD EPYC 9965 192-Core Processor
vendor_id       : AuthenticAMD
cpu family      : 26
model           : 17
stepping        : 0
microcode       : 0xb101054
bugs            : sysret_ss_attrs spectre_v1 spectre_v2 spec_store_bypass srso
TLB size        : 192 4K pages
cpu cores       : 192
```

(Continued on next page)



SPEC CPU®2026 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Compal Electronics, Inc.

SR224-2A
AMD EPYC 9965

SPECspeed®2026_fp_base = 17.7

SPECspeed®2026_fp_peak = 17.9

CPU2026 License: 6857

Test Sponsor: Compal Electronics, Inc.

Tested by: Compal Electronics, Inc.

Test Date: Aug-2026

Hardware Availability: Jul-2025

Software Availability: May-2026

Platform Notes (Continued)

siblings : 192
2 physical ids (chips)
384 processors (hardware threads)
physical id 0: core ids 0-191
physical id 1: core ids 0-191
physical id 0: apicids 0-191
physical id 1: apicids 256-447

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 2.40.4:

Architecture: x86_64
CPU op-mode(s): 32-bit, 64-bit
Address sizes: 52 bits physical, 57 bits virtual
Byte Order: Little Endian
CPU(s): 384
On-line CPU(s) list: 0-383
Vendor ID: AuthenticAMD
Model name: AMD EPYC 9965 192-Core Processor
CPU family: 26
Model: 17
Thread(s) per core: 1
Core(s) per socket: 192
Socket(s): 2
Stepping: 0
Frequency boost: enabled
CPU(s) scaling MHz: 100%
CPU max MHz: 3700.0000
CPU min MHz: 1200.0000
BogoMIPS: 4492.90

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 bpeext
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

(Continued on next page)



SPEC CPU®2026 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Compal Electronics, Inc.

SR224-2A
AMD EPYC 9965

SPECspeed®2026_fp_base = 17.7

SPECspeed®2026_fp_peak = 17.9

CPU2026 License: 6857

Test Sponsor: Compal Electronics, Inc.

Tested by: Compal Electronics, Inc.

Test Date: Aug-2026

Hardware Availability: Jul-2025

Software Availability: May-2026

Platform Notes (Continued)

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 vpc_lmuldq
avx512_vnni avx512_bitalg avx512_vpopcntdq la57 rdpid bus_lock_detect
movdiri movdir64b overflow_recov succor smca fsrm avx512_vp2intersect
flush_l1d debug_swap hv_inuse_wr_allowed srso_user_kernel_no
amd_lbr_pmc_freeze

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
NUMA node1 CPU(s): 192-383
Vulnerability Gather data sampling: Not affected
Vulnerability Itlb multihit: Not affected
Vulnerability L1tf: Not affected
Vulnerability Mds: Not affected
Vulnerability Meltdown: Not affected
Vulnerability Mmio stale data: Not affected
Vulnerability Reg file data sampling: Not affected
Vulnerability Retbleed: Not affected
Vulnerability Spec rstack overflow: 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 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	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
node 0 size: 386516 MB
node 0 free: 385106 MB
node 1 cpus: 192-383
node 1 size: 386811 MB
node 1 free: 384031 MB

(Continued on next page)



SPEC CPU®2026 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Compal Electronics, Inc.

SR224-2A
AMD EPYC 9965

SPECspeed®2026_fp_base = 17.7

SPECspeed®2026_fp_peak = 17.9

CPU2026 License: 6857

Test Sponsor: Compal Electronics, Inc.

Tested by: Compal Electronics, Inc.

Test Date: Aug-2026

Hardware Availability: Jul-2025

Software Availability: May-2026

Platform Notes (Continued)

node distances:

```
node    0    1
 0:   10   32
 1:   32   10
```

9. /proc/meminfo

MemTotal: 791887228 kB

10. who -r

run-level 3 Aug 20 10:06

11. Systemd service manager version: systemd 254 (254.24+suse.148.g83b9060b6e)

Default Target	Status
multi-user	running

12. Services, from systemctl list-unit-files

STATE	UNIT FILES
-------	------------

enabled	ModemManager NetworkManager NetworkManager-dispatcher YaST2-Firstboot YaST2-Second-Stage apparmor appstream-sync-cache auditd bluetooth chronyd cron display-manager getty@ irqbalance issue-generator kbdsettings klog lvm2-monitor nscd nvme-fc-boot-connections nvmmf-autoconnect postfix purge-kernels rollback rsyslog smartd sshd systemd-pstore wpa_supplicant
enabled-runtime	systemd-remount-fs
disabled	NetworkManager-wait-online accounts-daemon autofs autoyast-initscripts blk-availability bluetooth-mesh boot-sysctl ca-certificates chrony-wait console-getty cups cups-browsed debug-shell dnsmasq ebttables exchange-bmc-os-info firewallld fsidd gpm grub2-once haveged hwloc-dump-hwdata ipmi ipmievdev issue-add-ssh-keys kdump kdump-early kdump-notify kexec-load ksm kvm_stat lunmask man-db-create mariadb mariadb@ multipathd munge nfs nfs-blkmap nmb ntp-wait ntpd ostree-remount ostree-state-overlay@ rpcbind rpmconfigcheck rsyncd rtkit-daemon salt-minion samba-bgqd serial-getty@ slurmd smartd_generate_opts smb snmpd snmptrapd speech-dispatcherd svnserv systemd-boot-check-no-failures systemd-confext systemd-network-generator systemd-sysext systemd-time-wait-sync systemd-timesyncd udisks2 update-system-flatpaks upower vncserver@ wicked wickedd-auto4 wickedd-dhcp4 wickedd-dhcp6 wickedd-nanny wpa_supplicant@ ypbind
indirect	systemd-userdbd wickedd
masked	packagekit

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

BOOT_IMAGE=/boot/vmlinuz-6.4.0-150700.51-default
root=UUID=03f2994f-ee68-4440-b1db-7d3f781cf8b4
splash=silent
mitigations=auto

(Continued on next page)



SPEC CPU®2026 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Compal Electronics, Inc.

SR224-2A
AMD EPYC 9965

SPECspeed®2026_fp_base = 17.7

SPECspeed®2026_fp_peak = 17.9

CPU2026 License: 6857

Test Sponsor: Compal Electronics, Inc.

Tested by: Compal Electronics, Inc.

Test Date: Aug-2026

Hardware Availability: Jul-2025

Software Availability: May-2026

Platform Notes (Continued)

quiet
security=apparmor
crashkernel=380M,high
crashkernel=72M,low,
amd_pstate=passive

14. cpupower frequency-info

analyzing CPU 194:

current policy: frequency should be within 1.20 GHz and 3.70 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
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

(Continued on next page)



SPEC CPU®2026 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Compal Electronics, Inc.

SR224-2A
AMD EPYC 9965

SPECspeed®2026_fp_base = 17.7

SPECspeed®2026_fp_peak = 17.9

CPU2026 License: 6857

Test Sponsor: Compal Electronics, Inc.

Tested by: Compal Electronics, Inc.

Test Date: Aug-2026

Hardware Availability: Jul-2025

Software Availability: May-2026

Platform Notes (Continued)

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 SP7

19. Disk information

SPEC is set to: /cpu2026

Filesystem	Type	Size	Used	Avail	Use%	Mounted on
/dev/nvme0n1p2	btrfs	1.0T	69G	954G	7%	/

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

Vendor:	COMPAL
Product:	COMPAL SERVER
Product Family:	COMPAL
Serial:	7901567500001

21. dmidecode

Additional information from dmidecode 3.7 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 M321R4GA3EB2-CCPKC 32 GIB 2 rank 6400

22. BIOS

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

BIOS Vendor:	American Megatrends International, LLC.
BIOS Version:	10.28.00
BIOS Date:	01/29/2026
BIOS Revision:	5.35
Firmware Revision:	5.35



SPEC CPU®2026 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Compal Electronics, Inc.

SR224-2A
AMD EPYC 9965

SPECspeed®2026_fp_base = 17.7

SPECspeed®2026_fp_peak = 17.9

CPU2026 License: 6857

Test Sponsor: Compal Electronics, Inc.

Tested by: Compal Electronics, Inc.

Test Date: Aug-2026

Hardware Availability: Jul-2025

Software Availability: May-2026

Compiler Version Notes

=====
C | 811.tealeaf_s(base, peak) 816.nab_s(base, peak) 881.neutron_s(base,
| peak)
=====

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

=====
C++ | 803.sph_exa_s(base, peak) 857.namd_s(base, peak) 867.nest_s(base,
| peak) 872.marian_s(base, peak)
=====

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

=====
C++, C | 809.cactus_s(base, peak)
=====

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

=====
Fortran | 800.pot3d_s(base, peak) 820.cloverleaf_s(base, peak)
| 822.palm_s(base, peak) 849.fotonik3d_s(base, peak) 865.roms_s(base,
| peak)
=====

flang version 22.1.0-rc2 (<https://github.com/llvm/llvm-project>
a47b42eb9f9b302167b4fc413e6c92798d65dd0b)
Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /opt/llvm/llvm-22.1.0-rc2/install/bin
=====

Base Compiler Invocation

C benchmarks:
clang

(Continued on next page)



SPEC CPU®2026 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Compal Electronics, Inc.

SR224-2A
AMD EPYC 9965

SPECspeed®2026_fp_base = 17.7

SPECspeed®2026_fp_peak = 17.9

CPU2026 License: 6857

Test Sponsor: Compal Electronics, Inc.

Tested by: Compal Electronics, Inc.

Test Date: Aug-2026

Hardware Availability: Jul-2025

Software Availability: May-2026

Base Compiler Invocation (Continued)

C++ benchmarks:

clang++

Fortran benchmarks:

flang-22

Benchmarks using both C and C++:

clang++ clang

Base Portability Flags

800.pot3d_s: -DSPEC_LP64
803.sph_exa_s: -DSPEC_LP64
809.cactus_s: -DSPEC_LP64
811.tealeaf_s: -DSPEC_LP64
816.nab_s: -DSPEC_LP64
820.cloverleaf_s: -DSPEC_LP64
822.palm_s: -DSPEC_LP64
849.fotonik3d_s: -DSPEC_LP64
857.namd_s: -DSPEC_LP64
865.roms_s: -DSPEC_LP64
867.nest_s: -fno-finite-math-only -DSPEC_LP64
872.marian_s: -DSPEC_LP64
881.neutron_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 -O3 -flto -march=znver5
-fveclib=AMDLIBM -ffast-math -fremap-arrays -fstrip-mining
-fstruct-layout=7 -mllvm -inline-threshold=1000
-mllvm -reduce-array-computations=3 -mllvm -unroll-threshold=50 -zopt
-mrecip=none -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 -O3 -flto -march=znver5
-fveclib=AMDLIBM -ffast-math -mllvm -unroll-threshold=100
-mllvm -loop-unswitch-threshold=2000000
-mllvm -reduce-array-computations=3 -zopt -fopenmp -DSPEC_OPENMP

(Continued on next page)



SPEC CPU®2026 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Compal Electronics, Inc.

SR224-2A
AMD EPYC 9965

SPECspeed®2026_fp_base = 17.7

SPECspeed®2026_fp_peak = 17.9

CPU2026 License: 6857

Test Sponsor: Compal Electronics, Inc.

Tested by: Compal Electronics, Inc.

Test Date: Aug-2026

Hardware Availability: Jul-2025

Software Availability: May-2026

Base Optimization Flags (Continued)

C++ benchmarks (continued):

-pthread -lamdalloc -lamdlibm -fopenmp=libomp -lomp

Fortran benchmarks:

-m64 -std=f2018 -O3 -fltO -march=znver5 -fveclib=AMDLIBM

-ffast-math -funroll-loops -DSPEC_OPENMP -fopenmp

-fdo-concurrent-to-openmp=host -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 -O3 -fltO -march=znver5

-fveclib=AMDLIBM -ffast-math -fremap-arrays -fstrip-mining

-fstruct-layout=7 -mllvm -inline-threshold=1000

-mllvm -reduce-array-computations=3 -mllvm -unroll-threshold=50 -zopt

-mllvm -unroll-threshold=100 -mllvm -loop-unswitch-threshold=200000

-mrecip=none -fopenmp -DSPEC_OPENMP -pthread -lamdalloc -lamdlibm

-fopenmp=libomp -lomp

Base Other Flags

C benchmarks:

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

Benchmarks using both C and C++:

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

Peak Compiler Invocation

C benchmarks:

clang

C++ benchmarks:

clang++

Fortran benchmarks:

flang-22

Benchmarks using both C and C++:

clang++ clang



SPEC CPU®2026 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Compal Electronics, Inc.

SR224-2A
AMD EPYC 9965

SPECspeed®2026_fp_base = 17.7

SPECspeed®2026_fp_peak = 17.9

CPU2026 License: 6857

Test Sponsor: Compal Electronics, Inc.

Tested by: Compal Electronics, Inc.

Test Date: Aug-2026

Hardware Availability: Jul-2025

Software Availability: May-2026

Peak Portability Flags

Same as Base Portability Flags

Peak Optimization Flags

C benchmarks:

```
811.tealeaf_s: -m64 -std=c18
-Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
-Wl,-mllvm -Wl,-reduce-array-computations=3 -O3 -flto
-march=znver5 -fveclib=AMDLIBM -ffast-math
-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
```

816.nab_s: basepeak = yes

881.neutron_s: basepeak = yes

C++ benchmarks:

```
803.sph_exa_s: -m64 -std=c++17
-Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
-Wl,-mllvm -Wl,-reduce-array-computations=3
-fprofile-instr-generate(pass 1)
-fprofile-instr-use(pass 2) -O3 -flto -march=znver5
-fveclib=AMDLIBM -ffast-math
-mllvm -reduce-array-computations=3
-mllvm -unroll-threshold=100 -fopenmp -DSPEC_OPENMP
-pthread -lamdalloc -lamdlibm -fopenmp=libomp -lomp
```

857.namd_s: basepeak = yes

867.nest_s: basepeak = yes

872.marian_s: Same as 803.sph_exa_s

Fortran benchmarks:

```
800.pot3d_s: -m64 -std=f2018 -O3 -flto -march=znver5
-fveclib=AMDLIBM -ffast-math -funroll-loops
-DSPEC_OPENMP -fopenmp -fdo-concurrent-to-openmp=host
-lamdalloc -lamdlibm -fopenmp=libomp -lomp
```

(Continued on next page)



SPEC CPU®2026 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

Compal Electronics, Inc.

SR224-2A
AMD EPYC 9965

SPECspeed®2026_fp_base = 17.7

SPECspeed®2026_fp_peak = 17.9

CPU2026 License: 6857

Test Sponsor: Compal Electronics, Inc.

Tested by: Compal Electronics, Inc.

Test Date: Aug-2026

Hardware Availability: Jul-2025

Software Availability: May-2026

Peak Optimization Flags (Continued)

820.cloverleaf_s: Same as 800.pot3d_s

822.palm_s: basepeak = yes

849.fotonik3d_s: Same as 800.pot3d_s

865.roms_s: Same as 800.pot3d_s

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 -O3 -flto -march=znver5
-fveclib=AMDLIBM -ffast-math -fremap-arrays -fstrip-mining
-fstruct-layout=7 -mllvm -inline-threshold=1000
-mllvm -reduce-array-computations=3 -mllvm -unroll-threshold=50
-mllvm -unroll-threshold=100 -fopenmp -DSPEC_OPENMP -pthread
-lamdalloc -lamdlibm -fopenmp=libomp -lomp

Peak Other Flags

C benchmarks (except as noted below):

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

811.tealeaf_s: -Wno-return-type

Benchmarks using both C and C++:

-Wno-return-type

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

http://www.spec.org/cpu2026/results/flags/Compal-Platform-Flags-Linux-AMD_V1.9.html

<http://www.spec.org/cpu2026/results/flags/aocc-flags.2026-10-07.html>

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

http://www.spec.org/cpu2026/results/flags/Compal-Platform-Flags-Linux-AMD_V1.9.xml

<http://www.spec.org/cpu2026/results/flags/aocc-flags.2026-10-07.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 v1.0.1 on 2026-08-20 02:48:32-0400.

Report generated on 2026-10-07 10:41:50 by CPU2026 PDF formatter (unknown).

Originally published on 2026-10-06.