SPEC CPU®2026 Integer Speed Result

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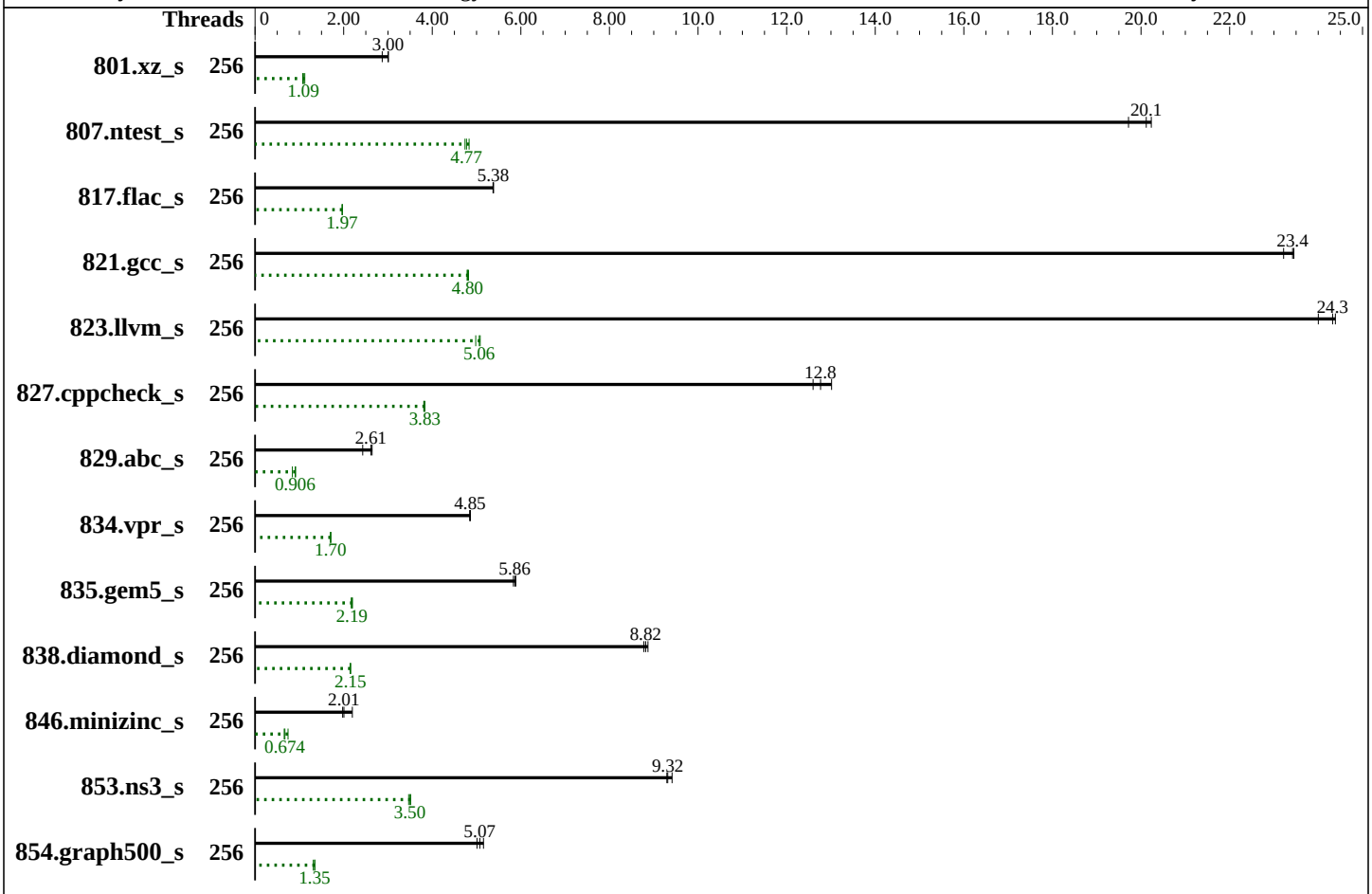
Lenovo Global Technology

ThinkSystem SR665 V3 (3.30 GHz, AMD EPYC 9575F)

SPECspeed®2026_int_base =	7.23
SPECspeed®2026_int_energy_base =	2.16
SPECspeed®2026_int_peak =	7.23
SPECspeed®2026_int_energy_peak =	2.16

CPU2026 License: 9017
Test Sponsor: Lenovo Global Technology
Tested by: Lenovo Global Technology

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



Hardware

CPU Name:	AMD EPYC 9575F
Max MHz:	5000
Nominal:	3300
Enabled:	128 cores, 2 chips, 2 threads/core
Orderable:	1,2 chips
Cache L1:	32 KB I + 48 KB D on chip per core
L2:	1 MB I+D on chip per core
L3:	256 MB I+D on chip per chip, 32 MB shared / 8 cores
Other:	None
Memory:	768 GB (24 x 32 GB 2Rx8 PC5-6400B-R, running at 4800)
Storage:	1 x 480 GB SATA SSD
Cooling:	Air

(Continued on next page)

Software

OS:	SUSE Linux Enterprise Server 15 SP7 Kernel 6.4.0-150700.51-default
Compiler:	C/C++: Version 5.1.0 of AOCC Fortran: Flang v22
Compiler Category:	Vendor
Firmware:	Lenovo BIOS Version KAE141G 5.81 released Jan-2026
File System:	xfs
System State:	Run level 3 (multi-user)
Base Pointers:	64-bit
Peak Pointers:	64-bit
Other:	None
Power Management:	BIOS and OS set to balance power and performance

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Hardware (Continued)

Other: None

Power

Max. Power (W): 1146.3
Idle Power (W): 131.15
Min. Temperature (C): 20.88
Elevation (m): 43
Line Standard: 220 V / 50 Hz / 1 phase / 3 wires
Provisioning: Line-powered

Power Settings

Management FW: Version 56.2 of KAX367O
Memory Mode: Normal

Power-Relevant Hardware

Power Supply: 1 x 1800 W (non-redundant)
Details: ThinkSystem 1800W 230V Platinum Hot-Swap Gen2 Power Supply v2 4P57A78362
Backplane: 8 x 2.5-inch HDD back plane
Other Storage: None
Storage Model #s: 4XB7A82259
NICs Installed: 1 x ThinkSystem Ethernet 4-port Adaptor @ 1 Gb
NICs Enabled (FW/OS): 4 / 1
NICs Connected/Speed: 1 @ 1 Gb
Other HW Model #s: 6 x Performance fans

Power Analyzer

Power Analyzer: WIN:9888
Hardware Vendor: YOKOGAWA, Inc.
Model: YokogawaWT310E
Serial Number: C3UD17023E
Input Connection: Default
Metrology Institute: CNAS
Calibration By: CEPREI Calibration and Testing Centre
Calibration Label: 1GA25011731-0005
Calibration Date: 15-Sep-2025
PTDaemon® Version: 1.11.1 (462c978e; 2024-09-07)
Setup Description: Connected to PSU1
Current Ranges Used: 5A
Voltage Range Used: 300V

Temperature Meter

Temperature Meter: WIN:9889
Hardware Vendor: Digi International, Inc.
Model: DigiWATCHPORT_H
Serial Number: W63181846
Input Connection: USB
PTDaemon Version: 1.11.1 (462c978e; 2024-09-07)
Setup Description: 50 mm in front of SUT main intake

Base Results Table

Benchmark	Threads	Seconds	Ratio	Energy (kJ)	Energy Ratio	Average Power	Maximum Power	Seconds	Ratio	Energy (kJ)	Energy Ratio	Average Power	Maximum Power	Seconds	Ratio	Energy (kJ)	Energy Ratio	Average Power	Maximum Power
801.xz_s	256	196	3.01	73.8	1.12	376	985	**197**	**3.00**	**75.8**	**1.09**	**385**	**1000**	206	2.87	77.0	1.08	374	1000
807.ntest_s	256	56.3	20.2	48.0	4.83	852	938	**56.7**	**20.1**	**48.6**	**4.77**	**858**	**955**	57.8	19.7	48.9	4.74	847	953
817.flac_s	256	323	5.37	94.3	1.97	292	563	323	5.38	94.5	1.97	293	565	**323**	**5.38**	**94.5**	**1.97**	**293**	**566**
821.gcc_s	256	88.3	23.5	88.2	4.82	1000	1040	89.2	23.2	88.8	4.79	996	1040	**88.4**	**23.4**	**88.7**	**4.80**	**1000**	**1040**
823.llvm_s	256	57.9	24.4	57.6	5.08	996	1050	**58.0**	**24.3**	**57.9**	**5.06**	**997**	**1050**	58.8	24.0	58.8	4.98	1000	1060
827.cppcheck_s	256	**87.7**	**12.8**	**63.4**	**3.83**	**723**	**1060**	88.8	12.6	63.8	3.81	718	1070	86.0	13.0	63.7	3.81	741	1070
829.abc_s	256	342	2.43	82.8	0.842	242	261	315	2.64	76.2	0.916	242	260	**318**	**2.61**	**77.0**	**0.906**	**242**	**260**

Table continues on next page. Results appear in the order in which they were run. Bold underlined text indicates a median measurement.

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Base Results Table (Continued)

Benchmark	Threads	Seconds	Ratio	Energy (kJ)	Energy Ratio	Average Power	Maximum Power	Seconds	Ratio	Energy (kJ)	Energy Ratio	Average Power	Maximum Power	Seconds	Ratio	Energy (kJ)	Energy Ratio	Average Power	Maximum Power
834.vpr_s	256	197	4.85	47.0	1.71	239	249	196	4.86	46.9	1.71	239	249	**197**	**4.85**	**47.0**	**1.70**	**239**	**250**
835.gem5_s	256	**194**	**5.86**	**44.2**	**2.19**	**228**	**233**	194	5.89	44.0	2.20	227	231	195	5.83	44.6	2.17	228	232
838.diamond_s	256	114	8.78	93.2	2.15	817	978	113	8.87	92.9	2.16	823	976	**114**	**8.82**	**92.9**	**2.15**	**818**	**983**
846.minizinc_s	256	305	2.20	84.3	0.744	276	303	**334**	**2.01**	**93.1**	**0.674**	**279**	**296**	339	1.98	95.4	0.658	281	300
853.ns3_s	256	**124**	**9.32**	**28.4**	**3.50**	**229**	**231**	124	9.30	28.6	3.47	231	234	122	9.41	28.2	3.51	230	234
854.graph500_s	256	**120**	**5.07**	**96.5**	**1.35**	**801**	**1140**	122	5.01	98.8	1.31	810	1140	118	5.16	96.2	1.35	812	1150

SPECspeed®2026_int_base = 7.23

SPECspeed®2026_int_energy_base = 2.16

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

Peak Results Table

Benchmark	Threads	Seconds	Ratio	Energy (kJ)	Energy Ratio	Average Power	Maximum Power	Seconds	Ratio	Energy (kJ)	Energy Ratio	Average Power	Maximum Power	Seconds	Ratio	Energy (kJ)	Energy Ratio	Average Power	Maximum Power
801.xz_s	256	196	3.01	73.8	1.12	376	985	**197**	**3.00**	**75.8**	**1.09**	**385**	**1000**	206	2.87	77.0	1.08	374	1000
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SPECspeed®2026_int_peak = 7.23

SPECspeed®2026_int_energy_peak = 2.16

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,
'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 = "0-255"
LD_LIBRARY_PATH =
     "/home/cpu2026-0.902.0-amd_aocc510_znver5_A1/amd_speed_aocc510_flang22_z
     nver5_A_lib/lib:/home/cpu2026-0.902.0-amd_aocc510_znver5_A1/amd_speed_ao
     cc510_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
```

Platform Notes

```
BIOS configuration:
Choose Operating Mode set to Custom Mode
Power Profile Selection set to Balanced Memory Performance Mode
NUMA Nodes per Socket set to NPS4
Memory Speed set to Minimum

 Sysinfo program /home/cpu2026-0.902.0-amd_aocc510_znver5_A1/bin/sysinfo
 Rev: 069f95da7e7f5d81b2ce48a82150e54f
```

(Continued on next page)

Platform Notes (Continued)

```
running on localhost Sat Feb  7 16:14:32 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
   16:14:32 up 3 min,  1 user,  load average: 0.15, 0.32, 0.16
  USER     TTY      FROM             LOGIN@   IDLE   JCPU   PCPU WHAT

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

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

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Platform Notes (Continued)

```
 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) 3093826
   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) 3093826
   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@notty
  /bin/bash ./02.remote_local_SPECcpu_1.02.sh
  /bin/bash ./Run032-compliant-amd-speedint_base.sh
  python3 ./run_amd_speed_aocc510_flang22_znver5_A1.py
  /bin/bash ./amd_speed_aocc510_flang22_znver5_A1.sh
  runcpu --power --config amd_speed_aocc510_flang22_znver5_A1.cfg --tune base --reportable --iterations 3
    intspeed
  runcpu --power --configfile amd_speed_aocc510_flang22_znver5_A1.cfg --tune base --reportable --iterations 3
    --runmode speed --tune base --size test:train:refspeed intspeed --nopreenv --note-preenv --logfile
    $SPEC/tmp/CPU2026.005/templogs/preenv.intspeed.005.0.log --lognum 005.0 --from_runcpu 2
  specperl $SPEC/bin/sysinfo
 $SPEC = /home/cpu2026-0.902.0-amd_aocc510_znver5_A1

 ------------------------------------------------------------
 6. /proc/cpuinfo
     model name      : AMD EPYC 9575F 64-Core Processor
     vendor_id       : AuthenticAMD
     cpu family      : 26
     model           : 2
     stepping        : 1
     microcode       : 0xb002152
     bugs            : sysret_ss_attrs spectre_v1 spectre_v2 spec_store_bypass srso
```

(Continued on next page)

Platform Notes (Continued)

```
     TLB size        : 192 4K pages
     cpu cores       : 64
     siblings        : 128
     2 physical ids (chips)
     256 processors (hardware threads)
     physical id 0: core ids 0-63
     physical id 1: core ids 0-63
     physical id 0: apicids 0-127
     physical id 1: apicids 128-255
   Caution: /proc/cpuinfo data regarding chips, cores, and threads is not necessarily reliable, especially for
    virtualized systems.  Use the above data carefully.

 ------------------------------------------------------------
 7. lscpu

 From lscpu from util-linux 2.40.4:
   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):                               256
   On-line CPU(s) list:                  0-255
   Vendor ID:                            AuthenticAMD
   Model name:                           AMD EPYC 9575F 64-Core Processor
   CPU family:                           26
   Model:                                2
   Thread(s) per core:                   2
   Core(s) per socket:                   64
   Socket(s):                            2
   Stepping:                             1
   Frequency boost:                      enabled
   CPU(s) scaling MHz:                   46%
   CPU max MHz:                          3300.0000
   CPU min MHz:                          1500.0000
   BogoMIPS:                             6589.93
   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 tsc_adjust bmi1 avx2
                                   smep bmi2 erms invpcid cqm rdt_a avx512f avx512dq rdseed adx smap
```

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Platform Notes (Continued)

```
                                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_l1d debug_swap hv_inuse_wr_allowed srso_user_kernel_no
                                           amd_lbr_pmc_freeze
  Virtualization:                          AMD-V
  L1d cache:                               6 MiB (128 instances)
  L1i cache:                               4 MiB (128 instances)
  L2 cache:                                128 MiB (128 instances)
  L3 cache:                                512 MiB (16 instances)
  NUMA node(s):                            8
  NUMA node0 CPU(s):                       0-15,128-143
  NUMA node1 CPU(s):                       16-31,144-159
  NUMA node2 CPU(s):                       32-47,160-175
  NUMA node3 CPU(s):                       48-63,176-191
  NUMA node4 CPU(s):                       64-79,192-207
  NUMA node5 CPU(s):                       80-95,208-223
  NUMA node6 CPU(s):                       96-111,224-239
  NUMA node7 CPU(s):                       112-127,240-255
  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
                                        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       6M   12 Data            1    64        1             64
      L1i       32K       4M    8 Instruction     1    64        1             64
```

(Continued on next page)

Platform Notes (Continued)

```
     L2          1M     128M   16 Unified          2  1024        1              64
     L3         32M     512M   16 Unified          3 32768        1              64

------------------------------------------------------------
8. numactl --hardware
NOTE: a numactl 'node' might or might not correspond to a physical chip.
  available: 8 nodes (0-7)
  node 0 cpus: 0-15,128-143
  node 0 size: 96342 MB
  node 0 free: 95918 MB
  node 1 cpus: 16-31,144-159
  node 1 size: 96759 MB
  node 1 free: 96396 MB
  node 2 cpus: 32-47,160-175
  node 2 size: 96759 MB
  node 2 free: 96338 MB
  node 3 cpus: 48-63,176-191
  node 3 size: 96759 MB
  node 3 free: 96379 MB
  node 4 cpus: 64-79,192-207
  node 4 size: 96759 MB
  node 4 free: 96381 MB
  node 5 cpus: 80-95,208-223
  node 5 size: 96759 MB
  node 5 free: 96415 MB
  node 6 cpus: 96-111,224-239
  node 6 size: 96720 MB
  node 6 free: 96261 MB
  node 7 cpus: 112-127,240-255
  node 7 size: 96623 MB
  node 7 free: 96297 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:       792046988 kB
```

(Continued on next page)

Platform Notes (Continued)

```
------------------------------------------------------------
10. who -r
  run-level 3 Feb 7 16:11

------------------------------------------------------------
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          YaST2-Firstboot YaST2-Second-Stage apparmor auditd cron getty@ irqbalance issue-generator
                   kbdsettings klog lvm2-monitor nscd postfix purge-kernels rollback rsyslog smartd sshd
                   systemd-pstore wicked wickedd-auto4 wickedd-dhcp4 wickedd-dhcp6 wickedd-nanny
  enabled-runtime  systemd-remount-fs
  disabled         autofs autoyast-initscripts blk-availability boot-sysctl ca-certificates chrony-wait
                   chronyd console-getty cups cups-browsed debug-shell ebtables exchange-bmc-os-info
                   firewalld fsidd gpm grub2-once haveged hwloc-dump-hwdata ipmi ipmievd issue-add-ssh-keys
                   kexec-load lunmask man-db-create multipathd nfs nfs-blkmap rpcbind rpmconfigcheck rsyncd
                   serial-getty@ smartd_generate_opts snmpd snmptrapd systemd-boot-check-no-failures
                   systemd-confext systemd-network-generator systemd-sysext systemd-time-wait-sync
                   systemd-timesyncd
  generated        ntp_sync
  indirect         systemd-userdbd wickedd

------------------------------------------------------------
13. Linux kernel boot-time arguments, from /proc/cmdline
  BOOT_IMAGE=/boot/vmlinuz-6.4.0-150700.51-default
  root=UUID=6b4a02b3-a7c2-4def-af3d-b12e11842422
  splash=silent
  mitigations=auto
  quiet
  security=apparmor

------------------------------------------------------------
14. cpupower frequency-info
  analyzing CPU 52:
    current policy: frequency should be within 1.50 GHz and 3.30 GHz.
                    The governor "ondemand" may decide which speed to use
                    within this range.
    boost state support:
      Supported: yes
      Active: yes
```

(Continued on next page)

Platform Notes (Continued)

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

------------------------------------------------------------
18. OS release
  From /etc/*-release /etc/*-version
  os-release SUSE Linux Enterprise Server 15 SP7
```

(Continued on next page)

Platform Notes (Continued)

```
------------------------------------------------------------
19. Disk information
SPEC is set to: /home/cpu2026-0.902.0-amd_aocc510_znver5_A1
  Filesystem     Type  Size  Used Avail Use% Mounted on
  /dev/sda3      xfs   444G  134G  310G  31% /

------------------------------------------------------------
20. /sys/devices/virtual/dmi/id
    Vendor:          Lenovo
    Product:         ThinkSystem SR665 V3
    Product Family: ThinkSystem
    Serial:          1234567890

------------------------------------------------------------
21. dmidecode
  Additional information from dmidecode 3.6 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:
     10x Samsung M321R4GA3PB2-CCPEC 32 GB 2 rank 6400, configured at 4800
     5x Samsung M321R4GA3PB2-CCPKC 32 GB 2 rank 6400, configured at 4800
     9x Samsung M321R4GA3PB2-CCPPC 32 GB 2 rank 6400, configured at 4800


------------------------------------------------------------
22. BIOS
(This section combines info from /sys/devices and dmidecode.)
   BIOS Vendor:       Lenovo
   BIOS Version:      KAE141G-5.81
   BIOS Date:         01/22/2026
   BIOS Revision:     5.81
   Firmware Revision: 56.20
```

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

(Continued on next page)

Base Portability Flags (Continued)

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
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`

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`

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Lenovo Global Technology
ThinkSystem SR665 V3 (3.30 GHz, AMD EPYC 9575F)

SPECspeed®2026_int_base =	7.23
SPECspeed®2026_int_energy_base =	2.16
SPECspeed®2026_int_peak =	7.23
SPECspeed®2026_int_energy_peak =	2.16

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Hardware Availability: Jul-2025
Software Availability: Jan-2026

The flags files that were used to format this result can be browsed at
http://www.spec.org/cpu2026/results/flags/Lenovo-Platform-SPECcpu-Flags-V1.2-Turin-M.html
http://www.spec.org/cpu2026/results/flags/aocc-flags.html

You can also download the XML flags sources by saving the following links:
http://www.spec.org/cpu2026/results/flags/Lenovo-Platform-SPECcpu-Flags-V1.2-Turin-M.xml
http://www.spec.org/cpu2026/results/flags/aocc-flags.xml

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