



SPEC CPU®2017 Integer Rate Result

Copyright 2017-2023 Standard Performance Evaluation Corporation

Lenovo Global Technology

ThinkSystem SR675 V3
(2.20 GHz,AMD EPYC 9734)

SPECrate®2017_int_base = 1700

SPECrate®2017_int_peak = Not Run

CPU2017 License: 9017

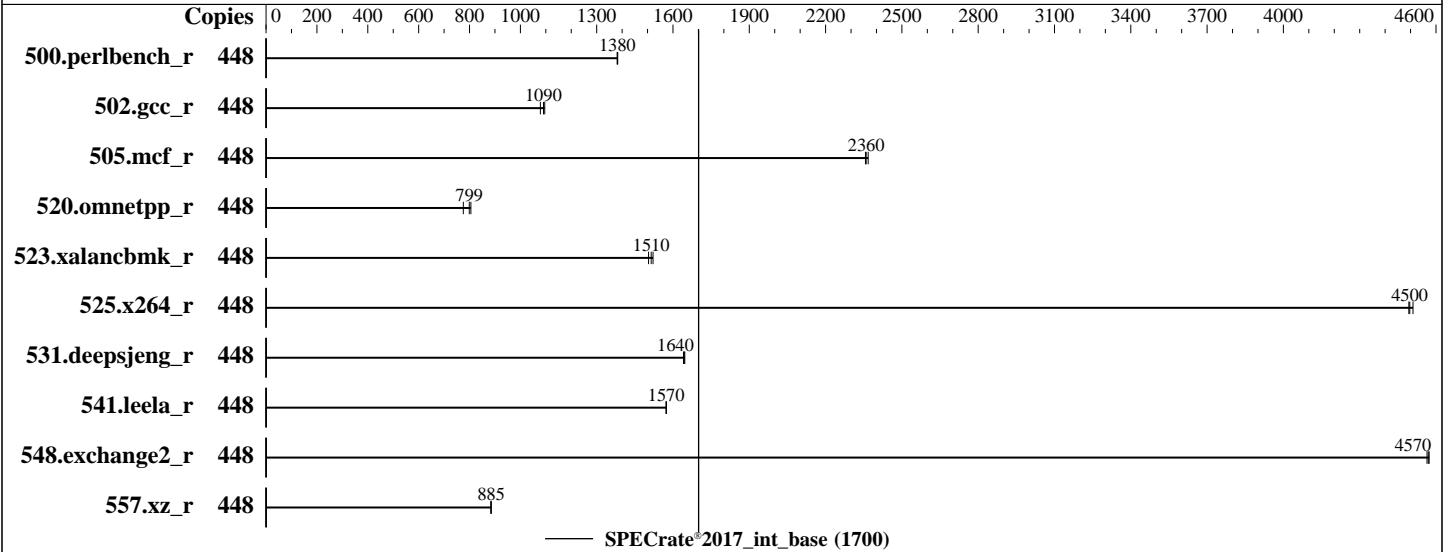
Test Sponsor: Lenovo Global Technology

Tested by: Lenovo Global Technology

Test Date: Oct-2023

Hardware Availability: Oct-2023

Software Availability: Nov-2022



Hardware

CPU Name: AMD EPYC 9734
 Max MHz: 3000
 Nominal: 2200
 Enabled: 224 cores, 2 chips, 2 threads/core
 Orderable: 1,2 chips
 Cache L1: 32 KB I + 32 KB D on chip per core
 L2: 1 MB I+D on chip per core
 L3: 256 MB I+D on chip per chip,
 16 MB shared / 7 cores
 Other: None
 Memory: 1536 GB (24 x 64 GB 2Rx4 PC5-4800B-R)
 Storage: 1 x 3.84 TB NVME SSD
 Other: None

Software

OS: SUSE Linux Enterprise Server 15 SP4
 Kernel 5.14.21-150400.22-default
 Compiler: C/C++/Fortran: Version 4.0.0 of AOCC
 Parallel: No
 Firmware: Lenovo BIOS Version QGE115H 3.10 released Sep-2023
 File System: btrfs
 System State: Run level 3 (multi-user)
 Base Pointers: 64-bit
 Peak Pointers: Not Applicable
 Other: None
 Power Management: BIOS and OS set to prefer performance at the cost of additional power usage



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Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
500.perlbench_r	448	516	1380	516	1380	517	1380							
502.gcc_r	448	579	1100	588	1080	582	1090							
505.mcf_r	448	307	2360	306	2370	307	2360							
520.omnetpp_r	448	736	799	730	805	758	776							
523.xalancbmk_r	448	311	1520	315	1500	312	1510							
525.x264_r	448	174	4500	174	4510	175	4490							
531.deepsjeng_r	448	313	1640	312	1640	312	1650							
541.leela_r	448	471	1570	472	1570	471	1570							
548.exchange2_r	448	257	4570	257	4570	257	4560							
557.xz_r	448	547	884	547	885	547	885							

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

Compiler Notes

The AMD64 AOCC Compiler Suite is available at
<http://developer.amd.com/amd-aocc/>

Submit Notes

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

Operating System Notes

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

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

To limit dirty cache to 8% of memory, 'sysctl -w vm.dirty_ratio=8' run as root.
To limit swap usage to minimum necessary, 'sysctl -w vm.swappiness=1' run as root.
To free node-local memory and avoid remote memory usage,
'sysctl -w vm.zone_reclaim_mode=1' run as root.
To clear filesystem caches, 'sync; sysctl -w vm.drop_caches=3' run as root.
To disable address space layout randomization (ASLR) to reduce run-to-run
variability, 'sysctl -w kernel.randomize_va_space=0' run as root.

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



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Environment Variables Notes

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

```
LD_LIBRARY_PATH =
"/home/cpu2017-1.1.9-amd-aocc400-znver4-A1.2/amd_rate_aocc400_znver4_A_lib/lib:/home/cpu2017-1.1.9-amd
-aocc400-znver4-A1.2/amd_rate_aocc400_znver4_A_lib/lib32:"
MALLOC_CONF = "retain:true"
```

General Notes

Binaries were compiled on a system with 2x AMD EPYC 9174F CPU + 1.5TiB Memory using RHEL 8.6

NA: The test sponsor attests, as of date of publication, that CVE-2017-5754 (Meltdown) is mitigated in the system as tested and documented.
Yes: The test sponsor attests, as of date of publication, that CVE-2017-5753 (Spectre variant 1) is mitigated in the system as tested and documented.
Yes: The test sponsor attests, as of date of publication, that CVE-2017-5715 (Spectre variant 2) is mitigated in the system as tested and documented.

Platform Notes

BIOS configuration:
Choose Operating Mode set to Maximum Performance and then set to Custom Mode
NUMA Nodes per Socket set to NPS4

```
Sysinfo program /home/cpu2017-1.1.9-amd-aocc400-znver4-A1.2/bin/sysinfo
Rev: r6732 of 2022-11-07 fe91c89b7ed5c36ae2c92cc097bec197
running on localhost Sat Oct 21 07:59:27 2023
```

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 249 (249.11+suse.124.g2bc0b2c447)
 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
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-

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Platform Notes (Continued)

- ```

1. uname -a
Linux localhost 5.14.21-150400.22-default #1 SMP PREEMPT_DYNAMIC Wed May 11 06:57:18 UTC 2022 (49db222)
x86_64 x86_64 x86_64 GNU/Linux

2. w
07:59:27 up 2 min, 1 user, load average: 0.54, 0.23, 0.09
USER TTY FROM LOGIN@ IDLE JCPU PCPU WHAT
root tty1 - 07:58 39.00s 1.70s 0.21s /bin/bash ./amd_rate_aocc400_znver4_A1.sh

3. Username
From environment variable $USER: root

4. ulimit -a
core file size (blocks, -c) unlimited
data seg size (kbytes, -d) unlimited
scheduling priority (-e) 0
file size (blocks, -f) unlimited
pending signals (-i) 6190527
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) 6190527
virtual memory (kbytes, -v) unlimited
file locks (-x) unlimited

5. sysinfo process ancestry
/usr/lib/systemd/systemd --switched-root --system --deserialize 30
login -- root
-bash
/bin/bash ./Run022-compliant-amd-rateint_base.sh
python3 ./run_amd_rate_aocc400_znver4_A1.py
/bin/bash ./amd_rate_aocc400_znver4_A1.sh
runcpu --config amd_rate_aocc400_znver4_A1.cfg --tune base --reportable --iterations 3 intrate
runcpu --configfile amd_rate_aocc400_znver4_A1.cfg --tune base --reportable --iterations 3 --nopower
--runmode rate --tune base --size test:train:refrate intrate --nopreenv --note-preenv --logfile
$SPEC/tmp/CPU2017.104/templogs/preenv.intrate.104.0.log --lognum 104.0 --from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /home/cpu2017-1.1.9-amd-aocc400-znver4-A1.2

6. /proc/cpuinfo
model name : AMD EPYC 9734 112-Core Processor
vendor_id : AuthenticAMD
cpu family : 25
model : 160
stepping : 1
microcode : 0xaa00115
bugs : sysret_ss_attrs spectre_v1 spectre_v2 spec_store_bypass
TLB size : 3584 4K pages
cpu cores : 112

```

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### Platform Notes (Continued)

```
siblings : 224
2 physical ids (chips)
448 processors (hardware threads)
physical id 0: core ids
0-6,8-14,16-22,24-30,32-38,40-46,48-54,56-62,64-70,72-78,80-86,88-94,96-102,104-110,112-118,120-126
physical id 1: core ids
0-6,8-14,16-22,24-30,32-38,40-46,48-54,56-62,64-70,72-78,80-86,88-94,96-102,104-110,112-118,120-126
physical id 0: apicids
0-13,16-29,32-45,48-61,64-77,80-93,96-109,112-125,128-141,144-157,160-173,176-189,192-205,208-221,224-237,240-253
physical id 1: apicids
256-269,272-285,288-301,304-317,320-333,336-349,352-365,368-381,384-397,400-413,416-429,432-445,448-461,464-477,480-493,496-509
```

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 2.37.2:

```
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): 448
On-line CPU(s) list: 0-447
Vendor ID: AuthenticAMD
Model name: AMD EPYC 9734 112-Core Processor
CPU family: 25
Model: 160
Thread(s) per core: 2
Core(s) per socket: 112
Socket(s): 2
Stepping: 1
Frequency boost: enabled
CPU max MHz: 2999.2180
CPU min MHz: 1500.0000
BogoMIPS: 4393.16
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 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
 invpcid_single hw_pstate ssbd mba ibrs ibpb stibp vmmcall fsgsbase bmi1
 avx2 smep bmi2 erms invpcid cqm rdt_a avx512f avx512dq rdseed adx smap
 avx512ifma clflushopt clwb avx512cd sha_ni avx512bw avx512vl xsaveopt
 xsavec xgetbv1 xsaves cqm_llc cqm_occup_llc cqm_mbm_total cqm_mbm_local
 avx512_bf16 clzero irperf xsaveerptr rdpru wbnoinvd amd_ppin arat npt lbrv
 svm_lock nrip_save tsc_scale vmcb_clean flushbyasid decodeassists
 pausefilter pfthreshold avic v_vmsave_vmload vgif v_spec_ctrl avx512vbmi
 umip pku ospke avx512_vbmi2 gfni vaes vpclmulqdq avx512_vnni avx512_bitalg
 avx512_vpopcntdq la57 rdpid overflow_recov succor smca fsrm flush_l1d
Virtualization: AMD-V
L1d cache: 7 MiB (224 instances)
L1i cache: 7 MiB (224 instances)
L2 cache: 224 MiB (224 instances)
L3 cache: 512 MiB (32 instances)
NUMA node(s): 8
```

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### Platform Notes (Continued)

```

NUMA node0 CPU(s): 0-27,224-251
NUMA node1 CPU(s): 28-55,252-279
NUMA node2 CPU(s): 56-83,280-307
NUMA node3 CPU(s): 84-111,308-335
NUMA node4 CPU(s): 112-139,336-363
NUMA node5 CPU(s): 140-167,364-391
NUMA node6 CPU(s): 168-195,392-419
NUMA node7 CPU(s): 196-223,420-447
Vulnerability Itlb multihit: Not affected
Vulnerability L1tf: Not affected
Vulnerability Mds: Not affected
Vulnerability Meltdown: Not affected
Vulnerability Spec store bypass: Mitigation; Speculative Store Bypass disabled via prctl and seccomp
Vulnerability Spectre v1: Mitigation; usercopy/swapgs barriers and __user pointer sanitization
Vulnerability Spectre v2: Mitigation; Retpolines, IBPB conditional, IBRS_FW, STIBP always-on, RSB
 filling
Vulnerability Srbds: Not affected
Vulnerability Tsx async abort: Not affected

```

From lscpu --cache:

| NAME | ONE-SIZE | ALL-SIZE | WAYS | TYPE          | LEVEL | SETS  | PHY-LINE | COHERENCY-SIZE |
|------|----------|----------|------|---------------|-------|-------|----------|----------------|
| L1d  | 32K      |          | 7M   | 8 Data        | 1     | 64    | 1        | 64             |
| L1i  | 32K      |          | 7M   | 8 Instruction | 1     | 64    | 1        | 64             |
| L2   | 1M       | 224M     |      | 8 Unified     | 2     | 2048  | 1        | 64             |
| L3   | 16M      | 512M     | 16   | Unified       | 3     | 16384 | 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: 0-27,224-251
node 0 size: 193259 MB
node 0 free: 190556 MB
node 1 cpus: 28-55,252-279
node 1 size: 193519 MB
node 1 free: 193062 MB
node 2 cpus: 56-83,280-307
node 2 size: 193519 MB
node 2 free: 193014 MB
node 3 cpus: 84-111,308-335
node 3 size: 193519 MB
node 3 free: 193044 MB
node 4 cpus: 112-139,336-363
node 4 size: 193519 MB
node 4 free: 193035 MB
node 5 cpus: 140-167,364-391
node 5 size: 193519 MB
node 5 free: 192735 MB
node 6 cpus: 168-195,392-419
node 6 size: 193485 MB
node 6 free: 192958 MB
node 7 cpus: 196-223,420-447
node 7 size: 193311 MB
node 7 free: 192832 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

```

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### Platform Notes (Continued)

```

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: 1584800348 kB

```

```

10. who -r
 run-level 3 Oct 21 07:58

```

```

11. Systemd service manager version: systemd 249 (249.11+suse.124.g2bc0b2c447)
 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@ haveged irqbalance
 issue-generator kbdsettings klog lvm2-monitor nscd nvme-fc-boot-connections postfix
 purge-kernels rollback rsyslog smartd sshd 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 ebttables exchange-bmc-os-info
 firewallld gpm grub2-once haveged-switch-root hwloc-dump-hwdata ipmi ipmievd
 issue-add-ssh-keys kexec-load lunmask man-db-create multipathd nfs nfs-blkmap ntp-wait
 ntpd nvme-fc-autoconnect rdisc rpcbind rpmconfigcheck rsyncd serial-getty@
 smartd_generate_opts snmpd snmptrapd svnserve systemd-boot-check-no-failures
 systemd-network-generator systemd-sysext systemd-time-wait-sync systemd-timesyncd
 indirect wickedd

```

```

13. Linux kernel boot-time arguments, from /proc/cmdline
 BOOT_IMAGE=/boot/vmlinuz-5.14.21-150400.22-default
 root=UUID=57007a51-1b8d-4733-95f6-d7d0c84f41c9
 splash=silent
 quiet
 security=apparmor
 mitigations=auto

```

```

14. cpupower frequency-info
 analyzing CPU 0:
 current policy: frequency should be within 1.50 GHz and 2.20 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

```

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### Platform Notes (Continued)

```

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 SP4

```

```

19. Disk information
SPEC is set to: /home/cpu2017-1.1.9-amd-aocc400-znver4-A1.2
Filesystem Type Size Used Avail Use% Mounted on
/dev/nvme0n1p2 btrfs 3.5T 187G 3.4T 6% /home

```

```

20. /sys/devices/virtual/dmi/id
Vendor: Lenovo
Product: ThinkSystem SR675 V3 System Board
Product Family: ThinkSystem
Serial: None

```

```

21. dmidecode
Additional information from dmidecode 3.2 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 SK Hynix HMC94MEBRA123N 64 GB 2 rank 4800

```

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## Platform Notes (Continued)

-----  
22. BIOS  
(This section combines info from /sys/devices and dmidecode.)  
BIOS Vendor: Lenovo  
BIOS Version: QGE115H-3.10  
BIOS Date: 09/07/2023  
BIOS Revision: 3.10  
Firmware Revision: 3.10

## Compiler Version Notes

=====  
C | 500.perlbench\_r(base) 502.gcc\_r(base) 505.mcf\_r(base) 525.x264\_r(base) 557.xz\_r(base)

-----  
AMD clang version 14.0.6 (CLANG: AOCC\_4.0.0-Build#434 2022\_10\_28) (based on LLVM Mirror.Version.14.0.6)  
Target: x86\_64-unknown-linux-gnu  
Thread model: posix  
InstalledDir: /opt/AMD/aocc/aocc-compiler-4.0.0/bin

=====  
C++ | 520.omnetpp\_r(base) 523.xalancbmk\_r(base) 531.deepsjeng\_r(base) 541.leela\_r(base)

-----  
AMD clang version 14.0.6 (CLANG: AOCC\_4.0.0-Build#434 2022\_10\_28) (based on LLVM Mirror.Version.14.0.6)  
Target: x86\_64-unknown-linux-gnu  
Thread model: posix  
InstalledDir: /opt/AMD/aocc/aocc-compiler-4.0.0/bin

=====  
Fortran | 548.exchange2\_r(base)

-----  
AMD clang version 14.0.6 (CLANG: AOCC\_4.0.0-Build#434 2022\_10\_28) (based on LLVM Mirror.Version.14.0.6)  
Target: x86\_64-unknown-linux-gnu  
Thread model: posix  
InstalledDir: /opt/AMD/aocc/aocc-compiler-4.0.0/bin

## Base Compiler Invocation

C benchmarks:  
clang

C++ benchmarks:  
clang++

Fortran benchmarks:  
flang



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## Base Portability Flags

```

500.perlbench_r: -DSPEC_LINUX_X64 -DSPEC_LP64
502.gcc_r: -DSPEC_LP64
505.mcf_r: -DSPEC_LP64
520.omnetpp_r: -DSPEC_LP64
523.xalancbmk_r: -DSPEC_LINUX -DSPEC_LP64
525.x264_r: -DSPEC_LP64
531.deepsjeng_r: -DSPEC_LP64
541.leela_r: -DSPEC_LP64
548.exchange2_r: -DSPEC_LP64
557.xz_r: -DSPEC_LP64

```

## Base Optimization Flags

### C benchmarks:

```

-m64 -flto -Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
-Wl,-mllvm -Wl,-reduce-array-computations=3
-Wl,-mllvm -Wl,-ldist-scalar-expand -fenable-aggressive-gather
-z muldefs -O3 -march=znver4 -fveclib=AMDLIBM -ffast-math
-fstruct-layout=7 -mllvm -unroll-threshold=50
-mllvm -inline-threshold=1000 -fremap-arrays -fstrip-mining
-mllvm -reduce-array-computations=3 -zopt -lamdlibm -lflang
-lamdalloc

```

### C++ benchmarks:

```

-m64 -flto -Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
-Wl,-mllvm -Wl,-reduce-array-computations=3 -z muldefs -O3
-march=znver4 -fveclib=AMDLIBM -ffast-math
-mllvm -unroll-threshold=100 -finline-aggressive
-mllvm -loop-unswitch-threshold=200000
-mllvm -reduce-array-computations=3 -zopt
-fvirtual-function-elimination -fvisibility=hidden -lamdlibm -lflang
-lamdalloc-ext

```

### Fortran benchmarks:

```

-m64 -flto -Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
-Wl,-mllvm -Wl,-reduce-array-computations=3
-Wl,-mllvm -Wl,-inline-recursion=4 -Wl,-mllvm -Wl,-lsr-in-nested-loop
-Wl,-mllvm -Wl,-enable-iv-split -z muldefs -O3 -march=znver4
-fveclib=AMDLIBM -ffast-math -fepilog-vectorization-of-inductions
-mllvm -optimize-strided-mem-cost -floop-transform
-mllvm -unroll-aggressive -mllvm -unroll-threshold=500 -lamdlibm
-lflang -lamdalloc

```



# SPEC CPU®2017 Integer Rate Result

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## Lenovo Global Technology

ThinkSystem SR675 V3  
(2.20 GHz,AMD EPYC 9734)

SPECrate®2017\_int\_base = 1700

SPECrate®2017\_int\_peak = Not Run

**CPU2017 License:** 9017

**Test Sponsor:** Lenovo Global Technology

**Tested by:** Lenovo Global Technology

**Test Date:** Oct-2023

**Hardware Availability:** Oct-2023

**Software Availability:** Nov-2022

## Base Other Flags

C benchmarks:

-Wno-unused-command-line-argument

C++ benchmarks:

-Wno-unused-command-line-argument

Fortran benchmarks:

-Wno-unused-command-line-argument

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

<http://www.spec.org/cpu2017/flags/Lenovo-Platform-SPECcpu2017-Flags-V1.2-Genoa-T.html>

<http://www.spec.org/cpu2017/flags/aocc400-flags.2023-09-13.html>

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

<http://www.spec.org/cpu2017/flags/Lenovo-Platform-SPECcpu2017-Flags-V1.2-Genoa-T.xml>

<http://www.spec.org/cpu2017/flags/aocc400-flags.2023-09-13.xml>

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

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