# SPEC CPU®2017 Integer Speed Result

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## Lenovo Global Technology

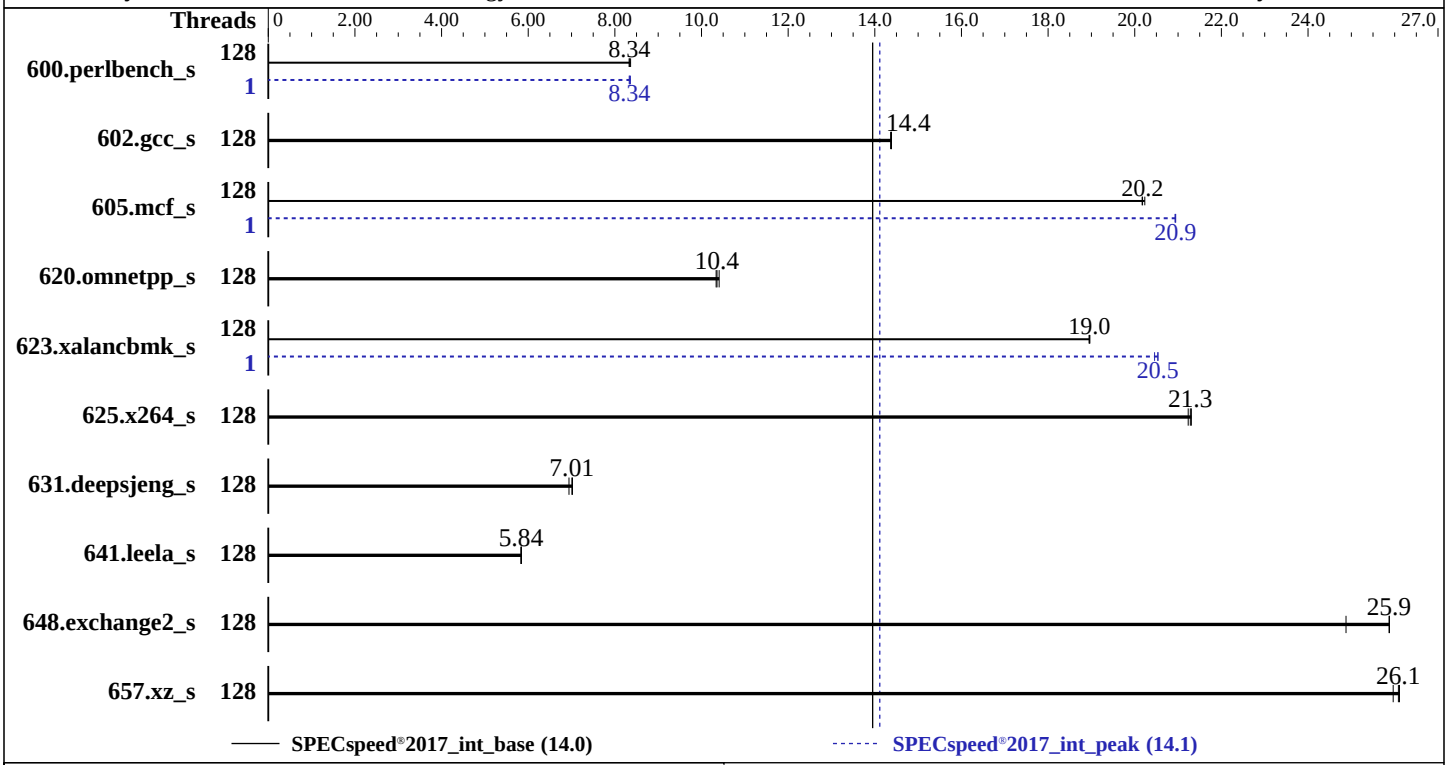
ThinkSystem SR665 V3
(2.45 GHz,AMD EPYC 9534)

SPECspeed®2017_int_base = 14.0

SPECspeed®2017_int_peak = 14.1

**CPU2017 License:** 9017
**Test Sponsor:** Lenovo Global Technology
**Tested by:** Lenovo Global Technology

**Test Date:** Dec-2022
**Hardware Availability:** Feb-2023
**Software Availability:** Nov-2022




## Hardware

| | |
|---|---|
| CPU Name: | AMD EPYC 9534 |
| Max MHz: | 3700 |
| Nominal: | 2450 |
| Enabled: | 128 cores, 2 chips |
| 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, 32 MB shared / 8 cores |
| Other: | None |
| Memory: | 768 GB (24 x 32 GB 2Rx8 PC5-4800B-R) |
| Storage: | 1 x 480 GB SATA SSD |
| Other: | None |

## Software

| | |
|---|---|
| OS: | SUSE Linux Enterprise Server 15 SP4 (x86_64) Kernel 5.14.21-150400.22-default |
| Compiler: | C/C++/Fortran: Version 4.0.0 of AOCC |
| Parallel: | Yes |
| Firmware: | Lenovo BIOS Version KAE105F 1.20 released Dec-2022 |
| 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 prefer performance at the cost of additional power usage |

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## Results Table

| Benchmark | Base | | | | | | | Peak | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Threads | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio | Threads | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio |
| 600.perlbench_s | 128 | 212 | 8.36 | 213 | 8.33 | **213** | **8.34** | 1 | **213** | **8.34** | 212 | 8.36 | 213 | 8.33 |
| 602.gcc_s | 128 | **277** | **14.4** | 277 | 14.4 | 277 | 14.4 | 128 | **277** | **14.4** | 277 | 14.4 | 277 | 14.4 |
| 605.mcf_s | 128 | 233 | 20.2 | 234 | 20.2 | **234** | **20.2** | 1 | 226 | 20.9 | 225 | 20.9 | **225** | **20.9** |
| 620.omnetpp_s | 128 | 157 | 10.4 | **157** | **10.4** | 158 | 10.3 | 128 | 157 | 10.4 | **157** | **10.4** | 158 | 10.3 |
| 623.xalancbmk_s | 128 | **74.8** | **19.0** | 74.7 | 19.0 | 74.8 | 18.9 | 1 | **69.0** | **20.5** | 69.0 | 20.5 | 69.3 | 20.5 |
| 625.x264_s | 128 | **82.9** | **21.3** | 82.8 | 21.3 | 83.1 | 21.2 | 128 | **82.9** | **21.3** | 82.8 | 21.3 | 83.1 | 21.2 |
| 631.deepsjeng_s | 128 | **204** | **7.01** | 204 | 7.02 | 206 | 6.94 | 128 | **204** | **7.01** | 204 | 7.02 | 206 | 6.94 |
| 641.leela_s | 128 | 292 | 5.84 | 293 | 5.83 | **292** | **5.84** | 128 | 292 | 5.84 | 293 | 5.83 | **292** | **5.84** |
| 648.exchange2_s | 128 | 118 | 24.9 | 114 | 25.9 | **114** | **25.9** | 128 | 118 | 24.9 | 114 | 25.9 | **114** | **25.9** |
| 657.xz_s | 128 | **237** | **26.1** | 238 | 26.0 | 237 | 26.1 | 128 | **237** | **26.1** | 238 | 26.0 | 237 | 26.1 |

**SPECspeed®2017_int_base = 14.0**

**SPECspeed®2017_int_peak = 14.1**

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.
```

**(Continued on next page)**

## Operating System Notes (Continued)

```
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 = "0-127"
LD_LIBRARY_PATH =
     "/home/cpu2017-1.1.8-amd-aocc400-genoa-B1b/amd_speed_aocc400_genoa_B_lib
     /lib:"
LIBOMP_NUM_HIDDEN_HELPER_THREADS = "0"
MALLOC_CONF = "oversize_threshold:0,retain:true"
OMP_DYNAMIC = "false"
OMP_SCHEDULE = "static"
OMP_STACKSIZE = "128M"
OMP_THREAD_LIMIT = "128"

Environment variables set by runcpu during the 600.perlbench_s peak run:
GOMP_CPU_AFFINITY = "15"

Environment variables set by runcpu during the 605.mcf_s peak run:
GOMP_CPU_AFFINITY = "15"

Environment variables set by runcpu during the 623.xalancbmk_s peak run:
GOMP_CPU_AFFINITY = "15"
```

## 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:
Operating Mode set to Maximum Performance and then set it to Custom Mode
```

**(Continued on next page)**

## Platform Notes (Continued)

```
NUMA Nodes per Socket set to NPS4
SMT Mode set to Disabled

 Sysinfo program /home/cpu2017-1.1.8-amd-aocc400-genoa-B1b/bin/sysinfo
 Rev: r6622 of 2021-04-07 982a61ec0915b55891ef0e16acafc64d
 running on localhost Mon Dec 26 08:30:53 2022

 SUT (System Under Test) info as seen by some common utilities.
 For more information on this section, see
    https://www.spec.org/cpu2017/Docs/config.html#sysinfo

 From /proc/cpuinfo
    model name : AMD EPYC 9534 64-Core Processor
       2  "physical id"s (chips)
       128 "processors"
    cores, siblings (Caution: counting these is hw and system dependent. The following
    excerpts from /proc/cpuinfo might not be reliable.  Use with caution.)
       cpu cores : 64
       siblings  : 64
       physical 0: cores 0 1 2 3 4 5 6 7 20 21 22 23 32 33 34 35 36 37 38 39 48 49 50 51
       52 53 54 55 64 65 66 67 68 69 70 71 80 81 82 83 84 85 86 87 96 97 98 99 100 101 102
       103 112 113 114 115 116 117 118 119
       physical 1: cores 0 1 2 3 4 5 6 7 20 21 22 23 32 33 34 35 36 37 38 39 48 49 50 51
       52 53 54 55 64 65 66 67 68 69 70 71 80 81 82 83 84 85 86 87 96 97 98 99 100 101 102
       103 112 113 114 115 116 117 118 119

 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):                          128
      On-line CPU(s) list:             0-127
      Vendor ID:                       AuthenticAMD
      Model name:                      AMD EPYC 9534 64-Core Processor
      CPU family:                      25
      Model:                           17
      Thread(s) per core:              1
      Core(s) per socket:              64
      Socket(s):                       2
      Stepping:                        1
      Frequency boost:                 enabled
      CPU max MHz:                     3718.0659
      CPU min MHz:                     1500.0000
      BogoMIPS:                        4892.54
      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
```

**(Continued on next page)**

## Platform Notes (Continued)

```
      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:                       4 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
      NUMA node1 CPU(s):               16-31
      NUMA node2 CPU(s):               32-47
      NUMA node3 CPU(s):               48-63
      NUMA node4 CPU(s):               64-79
      NUMA node5 CPU(s):               80-95
      NUMA node6 CPU(s):               96-111
      NUMA node7 CPU(s):               112-127
      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 disabled, 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       4M    8 Data            1    64        1             64
      L1i       32K       4M    8 Instruction     1    64        1             64
      L2         1M     128M    8 Unified         2  2048        1             64
      L3        32M     512M   16 Unified         3 32768        1             64
```

**(Continued on next page)**

## Platform Notes (Continued)

```
 /proc/cpuinfo cache data
    cache size : 1024 KB

 From numactl --hardware
 WARNING: a numactl 'node' might or might not correspond to a physical chip.
   available: 8 nodes (0-7)
   node 0 cpus: 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
   node 0 size: 96377 MB
   node 0 free: 95035 MB
   node 1 cpus: 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
   node 1 size: 96752 MB
   node 1 free: 96307 MB
   node 2 cpus: 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47
   node 2 size: 96752 MB
   node 2 free: 96498 MB
   node 3 cpus: 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63
   node 3 size: 96752 MB
   node 3 free: 96336 MB
   node 4 cpus: 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79
   node 4 size: 96717 MB
   node 4 free: 96490 MB
   node 5 cpus: 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95
   node 5 size: 96752 MB
   node 5 free: 96572 MB
   node 6 cpus: 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111
   node 6 size: 96752 MB
   node 6 free: 96574 MB
   node 7 cpus: 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127
   node 7 size: 96553 MB
   node 7 free: 96321 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

 From /proc/meminfo
    MemTotal:       791971064 kB
    HugePages_Total:       0
    Hugepagesize:       2048 kB

 /sys/devices/system/cpu/cpu*/cpufreq/scaling_governor has
```

**(Continued on next page)**

## Platform Notes (Continued)

```
    performance

  From /etc/*release* /etc/*version*
     os-release:
        NAME="SLES"
        VERSION="15-SP4"
        VERSION_ID="15.4"
        PRETTY_NAME="SUSE Linux Enterprise Server 15 SP4"
        ID="sles"
        ID_LIKE="suse"
        ANSI_COLOR="0;32"
        CPE_NAME="cpe:/o:suse:sles:15:sp4"

  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

  Kernel self-reported vulnerability status:

  CVE-2018-12207 (iTLB Multihit):                        Not affected
  CVE-2018-3620 (L1 Terminal Fault):                     Not affected
  Microarchitectural Data Sampling:                      Not affected
  CVE-2017-5754 (Meltdown):                              Not affected
  CVE-2018-3639 (Speculative Store Bypass):              Mitigation: Speculative Store
                                                         Bypass disabled via prctl and
                                                         seccomp
  CVE-2017-5753 (Spectre variant 1):                     Mitigation: usercopy/swapgs
                                                         barriers and __user pointer
                                                         sanitization
  CVE-2017-5715 (Spectre variant 2):                     Mitigation: Retpolines, IBPB:
                                                         conditional, IBRS_FW, STIBP:
                                                         disabled, RSB filling
  CVE-2020-0543 (Special Register Buffer Data Sampling): Not affected
  CVE-2019-11135 (TSX Asynchronous Abort):               Not affected

  run-level 3 Dec 26 05:07

  SPEC is set to: /home/cpu2017-1.1.8-amd-aocc400-genoa-B1b
     Filesystem     Type  Size  Used Avail Use% Mounted on
     /dev/sda2      xfs   446G   31G  415G   7% /

  From /sys/devices/virtual/dmi/id
      Vendor:         Lenovo
      Product:        ThinkSystem SR665 V3 MB,Genoa,Kauai,DDR5,Kauai,2U
      Product Family: ThinkSystem
      Serial:         1234567890
```

**(Continued on next page)**

## Platform Notes (Continued)

```
 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:
     5x SK Hynix HMCG88AEBRA115N 32 GB 2 rank 4800
     19x SK Hynix HMCG88AEBRA168N 32 GB 2 rank 4800

 BIOS:
    BIOS Vendor:       Lenovo
    BIOS Version:      KAE105F-1.20
    BIOS Date:         12/01/2022
    BIOS Revision:     1.20
    Firmware Revision: 1.20

 (End of data from sysinfo program)
```

## Compiler Version Notes

```
==============================================================================
C       | 600.perlbench_s(base, peak) 602.gcc_s(base, peak) 605.mcf_s(base,
        | peak) 625.x264_s(base, peak) 657.xz_s(base, peak)
------------------------------------------------------------------------------
AMD clang version 14.0.6 (CLANG: AOCC_4.0.0-Build#389 2022_10_07) (based on
  LLVM Mirror.Version.14.0.6)
Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /opt/AMD/aocc/aocc-compiler-rel-4.0-3206-389/bin
------------------------------------------------------------------------------

==============================================================================
C++     | 620.omnetpp_s(base, peak) 623.xalancbmk_s(base, peak)
        | 631.deepsjeng_s(base, peak) 641.leela_s(base, peak)
------------------------------------------------------------------------------
AMD clang version 14.0.6 (CLANG: AOCC_4.0.0-Build#389 2022_10_07) (based on
  LLVM Mirror.Version.14.0.6)
Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /opt/AMD/aocc/aocc-compiler-rel-4.0-3206-389/bin
------------------------------------------------------------------------------

==============================================================================
Fortran | 648.exchange2_s(base, peak)
------------------------------------------------------------------------------
AMD clang version 14.0.6 (CLANG: AOCC_4.0.0-Build#389 2022_10_07) (based on
  LLVM Mirror.Version.14.0.6)
```

**(Continued on next page)**

## Compiler Version Notes (Continued)

```
Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /opt/AMD/aocc/aocc-compiler-rel-4.0-3206-389/bin
------------------------------------------------------------------------------
```

## Base Compiler Invocation

C benchmarks:
clang

C++ benchmarks:
clang++

Fortran benchmarks:
flang

## Base Portability Flags

600.perlbench_s: -DSPEC_LINUX_X64 -DSPEC_LP64
602.gcc_s: -DSPEC_LP64
605.mcf_s: -DSPEC_LP64
620.omnetpp_s: -DSPEC_LP64
623.xalancbmk_s: -DSPEC_LINUX -DSPEC_LP64
625.x264_s: -DSPEC_LP64
631.deepsjeng_s: -DSPEC_LP64
641.leela_s: -DSPEC_LP64
648.exchange2_s: -DSPEC_LP64
657.xz_s: -DSPEC_LP64

## Base Optimization Flags

C benchmarks:
-m64 -Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
-Wl,-mllvm -Wl,-reduce-array-computations=3
-Wl,-allow-multiple-definition -O3 -march=znver4 -fveclib=AMDLIBM
-ffast-math -fopenmp -flto -fstruct-layout=7
-mllvm -unroll-threshold=50 -mllvm -inline-threshold=1000
-fremap-arrays -fstrip-mining -mllvm -reduce-array-computations=3
-DSPEC_OPENMP -zopt -fopenmp=libomp -lomp -lamdlibm -lflang
-lamdalloc

**(Continued on next page)**

## Base Optimization Flags (Continued)

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

Fortran benchmarks:
-m64 -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 -O3 -march=znver4 -fveclib=AMDLIBM
-ffast-math -fopenmp -flto -mllvm -optimize-strided-mem-cost
-mllvm -unroll-aggressive -mllvm -unroll-threshold=150 -fopenmp=libomp
-lomp -lamdlibm -lflang -lamdalloc

## Base Other Flags

C benchmarks:
-Wno-return-type -Wno-unused-command-line-argument

C++ benchmarks:
-Wno-unused-command-line-argument

Fortran benchmarks:
-Wno-unused-command-line-argument

## Peak Compiler Invocation

C benchmarks:
clang

C++ benchmarks:
clang++

Fortran benchmarks:
flang

## Peak Portability Flags

Same as Base Portability Flags

## Peak Optimization Flags

C benchmarks:

600.perlbench_s: -m64 -Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
-Wl,-mllvm -Wl,-reduce-array-computations=3
-Wl,-allow-multiple-definition -Ofast -march=znver4
-fveclib=AMDLIBM -ffast-math -fopenmp -flto
-fstruct-layout=9 -mllvm -unroll-threshold=50
-fremap-arrays -fstrip-mining
-mllvm -inline-threshold=1000
-mllvm -reduce-array-computations=3 -DSPEC_OPENMP -zopt
-fopenmp=libomp -lomp -lamdlibm -lamdalloc -lflang

602.gcc_s: basepeak = yes

605.mcf_s: Same as 600.perlbench_s

625.x264_s: basepeak = yes

657.xz_s: basepeak = yes

C++ benchmarks:

620.omnetpp_s: basepeak = yes

623.xalancbmk_s: -m64 -Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
-Wl,-mllvm -Wl,-reduce-array-computations=3
-Wl,-mllvm -Wl,-do-block-reorder=aggressive -Ofast
-march=znver4 -fveclib=AMDLIBM -ffast-math -fopenmp
-flto -finline-aggressive -mllvm -unroll-threshold=100
-mllvm -reduce-array-computations=3 -DSPEC_OPENMP -zopt
-mllvm -do-block-reorder=aggressive
-fvirtual-function-elimination -fvisibility=hidden
-fopenmp=libomp -lomp -lamdlibm -lamdalloc-ext -lflang

631.deepsjeng_s: basepeak = yes

641.leela_s: basepeak = yes

Fortran benchmarks:

**(Continued on next page)**

## Peak Optimization Flags (Continued)

648.exchange2_s: `basepeak = yes`

## Peak Other Flags

C benchmarks:
`-Wno-return-type -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-O.html`
`http://www.spec.org/cpu2017/flags/aocc400-flags.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-O.xml`
`http://www.spec.org/cpu2017/flags/aocc400-flags.xml`


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