**Lenovo Global Technology**

ThinkSystem SR665  
2.90 GHz, AMD EPYC 7272

**CPU2017 License:** 9017  
**Test Date:** Jun-2020

**Test Sponsor:** Lenovo Global Technology  
**Hardware Availability:** Jun-2020

**Tested by:** Lenovo Global Technology  
**Software Availability:** Dec-2019

### Threads

<table>
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<th>Threads</th>
<th>SPECspeed®2017_fp_base</th>
<th>SPECspeed®2017_fp_peak</th>
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<tr>
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<td>621.wrf_s</td>
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<td>638.imagick_s</td>
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<td>649.fotonik3d_s</td>
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</tr>
<tr>
<td>654.roms_s</td>
<td>24</td>
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</tr>
</tbody>
</table>

**Software**

- **OS:** SUSE Linux Enterprise Server 12 SP5 (x86_64)  
  - Kernel 4.12.14-120-default
- **Compiler:** C/C++/Fortran: Version 2.0.0 of AOCC  
  - Parallel: Yes
- **Firmware:** Lenovo BIOS Version D8E105P 1.00 released May-2020
- **File System:** xfs
- **System State:** Run level 3 (multi-user)
- **Base Pointers:** 64-bit  
  - Peak Pointers: 64-bit
- **Other:** jemalloc: jemalloc memory allocator library v5.1.0  
  - Power Management: BIOS set to prefer performance at the cost of additional power usage

**Hardware**

- **CPU Name:** AMD EPYC 7272  
  - Max MHz: 3200  
  - Nominal: 2900  
  - Enabled: 24 cores, 2 chips, 2 threads/core  
  - Orderable: 1.2 chips
- **Cache L1:** 32 KB I + 32 KB D on chip per core  
  - L2: 512 KB I+D on chip per core  
  - L3: 64 MB I+D on chip per chip, 16 MB shared / 3 cores  
  - Other: None
- **Memory:** 1 TB (32 x 32 GB 2Rx8 PC4-3200AA-R)  
  - Storage: 1 x 960 GB SATA SSD  
  - Other: None
### Lenovo Global Technology

**ThinkSystem SR665**  
**2.90 GHz, AMD EPYC 7272**

---

**SPECspeed®2017_fp_base = 94.7**  
**SPECspeed®2017_fp_peak = 97.1**

---

#### CPU2017 License: 9017  
#### Test Sponsor: Lenovo Global Technology  
#### Tested by: Lenovo Global Technology  
#### Test Date: Jun-2020  
#### Hardware Availability: Jun-2020  
#### Software Availability: Dec-2019

---

### Results Table

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</tbody>
</table>

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### Compiler Notes

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

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### 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  
'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>

Set dirty_ratio=8 to limit dirty cache to 8% of memory  
Set swappiness=1 to swap only if necessary  
Set zone_reclaim_mode=1 to free local node memory and avoid remote memory  
sync then drop_caches=3 to reset caches before invoking runcpu

dirty_ratio, swappiness, zone_reclaim_mode and drop_caches were  
all set using privileged echo (e.g. echo 1 > /proc/sys/vm/swappiness).

Transparent huge pages set to 'always' for this run (OS default)
Lenovo Global Technology

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<table>
<thead>
<tr>
<th>CPU2017 License:</th>
<th>9017</th>
</tr>
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<td>Test Sponsor:</td>
<td>Lenovo Global Technology</td>
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<td>Jun-2020</td>
</tr>
<tr>
<td>Software Availability:</td>
<td>Dec-2019</td>
</tr>
</tbody>
</table>

**Environment Variables Notes**

Environment variables set by runcpu before the start of the run:
- `GOMP_CPU_AFFINITY = "0-47"
- `LD_LIBRARY_PATH = "/home/cpu2017-1.1.0-amd-rome-aocc200-C3/amd_speed_aocc200_rome_C_lib/64
  /home/cpu2017-1.1.0-amd-rome-aocc200-C3/amd_speed_aocc200_rome_C_lib/32
  ;"`
- `MALLOC_CONF = "retain:true"
- `OMP_DYNAMIC = "false"
- `OMP_SCHEDULE = "static"
- `OMP_STACKSIZE = "128M"
- `OMP_THREAD_LIMIT = "48"

Environment variables set by runcpu during the 607.cactuBSSN_s peak run:
- `GOMP_CPU_AFFINITY = "0-23"

Environment variables set by runcpu during the 628.pop2_s peak run:
- `GOMP_CPU_AFFINITY = "0-23"

Environment variables set by runcpu during the 638.imagick_s peak run:
- `GOMP_CPU_AFFINITY = "0-23"

Environment variables set by runcpu during the 644.nab_s peak run:
- `GOMP_CPU_AFFINITY = "0 24 1 25 2 26 3 27 4 28 5 29 6 30 7 31 8 32 9 33 10 34
  11 35 12 36 13 37 14 38 15 39 16 40 17 41 18 42 19 43 20 44 21 45 22 46
  23 47"`

Environment variables set by runcpu during the 654.roms_s peak run:
- `GOMP_CPU_AFFINITY = "0-23"

**General Notes**

Binaries were compiled on a system with 2x AMD EPYC 7601 CPU + 512GB Memory using Fedora 26

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.

Yes: The test sponsor attests, as of date of publication, that CVE-2018-3640 (Spectre variant 3a) is mitigated in the system as tested and documented.

Yes: The test sponsor attests, as of date of publication, that CVE-2018-3639 (Spectre variant 4) is mitigated in the system as tested and documented.

jemalloc: configured and built with GCC v9.1.0 in Ubuntu 19.04 with -O3 -znver2 -flto
jemalloc 5.1.0 is available here:

(Continued on next page)
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ThinkSystem SR665
2.90 GHz, AMD EPYC 7272

SPECspeed®2017_fp_base = 94.7
SPECspeed®2017_fp_peak = 97.1

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

Test Date: Jun-2020
Hardware Availability: Jun-2020
Software Availability: Dec-2019

General Notes (Continued)

https://github.com/jemalloc/jemalloc/releases/download/5.1.0/jemalloc-5.1.0.tar.bz2

Platform Notes

BIOS settings:
Choose Operating Mode set to Maximum Performance and then set it to Custom Mode
SOC P-States set to P0
Global C-state Control set to Disable

Sysinfo program /home/cpu2017-1.1.0-amd-rome-aocc200-C3/bin/sysinfo
Rev: r6365 of 2019-08-21
295195f888a3d7edb1e6e46a485a0011
running on linux-410h Thu Jul 25 19:38:30 2019

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 7272 12-Core Processor
  2 "physical id"s (chips)
  48 "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: 12
siblings: 24
physical 0: cores 0 1 2 4 5 6 8 9 10 12 13 14
physical 1: cores 0 1 2 4 5 6 8 9 10 12 13 14

From lscpu:
Architecture: x86_64
CPU op-mode(s): 32-bit, 64-bit
Byte Order: Little Endian
Address sizes: 43 bits physical, 48 bits virtual
CPU(s): 48
On-line CPU(s) list: 0-47
Thread(s) per core: 2
Core(s) per socket: 12
Socket(s): 2
NUMA node(s): 2
Vendor ID: AuthenticAMD
CPU family: 23
Model: 49
Model name: AMD EPYC 7272 12-Core Processor
Stepping: 0
CPU MHz: 2900.000

(Continued on next page)
# Lenovo Global Technology

**ThinkSystem SR665**  
2.90 GHz, AMD EPYC 7272

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**SPEC CPU®2017 Floating Point Speed Result**

**SPECspeed®2017_fp_base = 94.7**  
**SPECspeed®2017_fp_peak = 97.1**

---

## Platform Notes (Continued)

**CPU max MHz:** 2900.0000  
**CPU min MHz:** 1500.0000  
**BogoMIPS:** 5789.12  
**Virtualization:** AMD-V  
**L1d cache:** 32K  
**L1i cache:** 32K  
**L2 cache:** 512K  
**L3 cache:** 16384K  
**NUMA node0 CPU(s):** 0-11,24-35  
**NUMA node1 CPU(s):** 12-23,36-47  
**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 pni pclmulqdq monitor ssse3 fma cx16 sse4_1 sse4_2 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 bpostext perfctr_l2 mwaitx cpb cat_l3 cdp_l3 hw_pstate sme ssbd sev ibrs ibpb stibp vmmcall bmi1 avx2 smep bmi2 cqm rdt_a rdsqrd adx smap clflushopt clwb sha ni xsaveopt xsave xgetbv1 xsavec cqm_llc cqm_occup_llc cqm_mbb_total cqm_mbb_local clzero irperf xsaveerptr wbnoinvd arat npt lbv svm_lock nrrip_save tsc_scale vmcb_clean flushbyasid decodeassist pausefilter pfthreshold avic v_vmsave_vmload vgif umip rdpid overflow_recov succor smca

/proc/cpuinfo cache data  
**cache size :** 512 KB

From numactl --hardware  
**WARNING:** a numactl 'node' might or might not correspond to a physical chip.  
**available:** 2 nodes (0-1)  
**node 0 cpus:** 0 1 2 3 4 5 6 7 8 9 10 11 24 25 26 27 28 29 30 31 32 33 34 35  
**node 0 size:** 515885 MB  
**node 0 free:** 515495 MB  
**node 1 cpus:** 12 13 14 15 16 17 18 19 20 21 22 23 36 37 38 39 40 41 42 43 44 45 46 47  
**node 1 size:** 516059 MB  
**node 1 free:** 515528 MB  
**node distances:**  
**node 0 1**  
0:  10  32  
1:  32  10

From /proc/meminfo  
**MemTotal:** 1056711748 kB  
**HugePages_Total:** 0  
**Hugepagesize:** 2048 kB

From /etc/*release* /etc/*version*  
SuSE-release:

(Continued on next page)
Lenovo Global Technology

ThinkSystem SR665
2.90 GHz, AMD EPYC 7272

---

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**SPECspeed**

- **SPECspeed®2017_fp_base = 94.7**
- **SPECspeed®2017_fp_peak = 97.1**

---

**Platform Notes (Continued)**

SUSE Linux Enterprise Server 12 (x86_64)
VERSION = 12
PATCHLEVEL = 5

# This file is deprecated and will be removed in a future service pack or release.
# Please check /etc/os-release for details about this release.

```
os-release:
NAME="SLES"
VERSION="12-SP5"
VERSION_ID="12.5"
PRETTY_NAME="SUSE Linux Enterprise Server 12 SP5"
ID="sles"
ANSI_COLOR="0;32"
CPE_NAME="cpe:/o:suse:sles:12:sp5"
```

uname -a:
Linux linux-4l0h 4.12.14-120-default #1 SMP Thu Nov 7 16:39:09 UTC 2019 (fd9dc36)
x86_64 x86_64 x86_64 GNU/Linux

Kernel self-reported vulnerability status:

- `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: Full AMD retpoline, IBPB: conditional, IBRS_FW, STIBP: conditional, RSB filling
- `tsx_async_abort:` Not affected

run-level 3 Jul 25 19:26

SPEC is set to: /home/cpu2017-1.1.0-amd-rome-aocc200-C3

Filesystem Type Size Used Avail Use% Mounted on
/dev/sda2 xfs 893G 35G 858G 4% /

From /sys/devices/virtual/dmi/id
BIOS: Lenovo D8E105P-1.00 05/08/2020
Vendor: Lenovo
Product: ThinkSystem SR665 MB
Product Family: ThinkSystem
Serial: 1234567890

Additional information from dmidecode follows. WARNING: Use caution when you interpret

(Continued on next page)
### Platform Notes (Continued)

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:

32x Samsung M393A4G43AB3-CWE 32 kB 2 rank 3200

(End of data from sysinfo program)

### Compiler Version Notes

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<thead>
<tr>
<th>Language</th>
<th>Compiler Version</th>
<th>Target</th>
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<td>x86_64-unknown-linux-gnu</td>
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<tr>
<td></td>
<td>AOCC.LLVM.2.0.0.B191.2019_07_19 clang version 8.0.0 (CLANG: Jenkins AOCC_2_0_0-Build#191) (based on LLVM AOCC.LLVM.2.0.0.B191.2019_07_19)</td>
<td>x86_64-unknown-linux-gnu</td>
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<tr>
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<td>InstalledDir: /sppo/dev/compilers/aocc-compiler-2.0.0/bin</td>
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<tr>
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<td>C++, C, Fortran</td>
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SPEC CPU®2017 Floating Point Speed Result
Copyright 2017-2020 Standard Performance Evaluation Corporation

Lenovo Global Technology

SPECSpeed®2017_fp_base = 94.7
SPECSpeed®2017_fp_peak = 97.1

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

Compiler Version Notes (Continued)

AOCC_2.0.0-Build#191 (based on LLVM AOCC.LLVM.2.0.0.B191.2019_07_19)
Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /sppo/dev/compilers/aocc-compiler-2.0.0/bin

Base Compiler Invocation

C benchmarks:
clang

Fortran benchmarks:
flang

Benchmarks using both Fortran and C:
flang clang

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

Base Portability Flags

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

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## Lenovo Global Technology

**ThinkSystem SR665**  
2.90 GHz, AMD EPYC 7272

### SPECspeed®2017_fp_base = 94.7

### SPECspeed®2017_fp_peak = 97.1

#### CPU2017 License: 9017

**Test Date:** Jun-2020  
**Hardware Availability:** Jun-2020

**Test Sponsor:** Lenovo Global Technology  
**Tested by:** Lenovo Global Technology  
**Software Availability:** Dec-2019

#### Base Portability Flags (Continued)

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

#### Base Optimization Flags

**C benchmarks:**
- `-flto -Wl,-mllvm -Wl,-function-specialize`  
- `-Wl,-mllvm -Wl,-region-vectorize -Wl,-mllvm -Wl,-vector-library=LIBMVEC`  
- `-Wl,-mllvm -Wl,-reduce-array-computations=3 -O3 -ffast-math`  
- `-march=znver2 -fstruct-layout=3 -mllvm -unroll-threshold=50`  
- `-fremap-arrays -mllvm -function-specialize -mllvm -enable-gvn-hoist`  
- `-mllvm -reduce-array-computations=3 -mllvm -global-vectorize-slp`  
- `-mllvm -vector-library=LIBMVEC -mllvm -inline-threshold=1000`  
- `-fv-function-specialization -z muldefs -DSPEC_OPENMP -fopenmp`  
- `-fopenmp=libomp -lomp -lpthread -ldl -lmvec -lamdlibm -ljemalloc -lflang

**Fortran benchmarks:**
- `-flto -Wl,-mllvm -Wl,-function-specialize`  
- `-Wl,-mllvm -Wl,-region-vectorize -Wl,-mllvm -Wl,-vector-library=LIBMVEC`  
- `-Wl,-mllvm -Wl,-reduce-array-computations=3 -O3 -march=znver2`  

**Benchmarks using both Fortran and C:**
- `-flto -Wl,-mllvm -Wl,-function-specialize`  
- `-Wl,-mllvm -Wl,-region-vectorize -Wl,-mllvm -Wl,-vector-library=LIBMVEC`  
- `-Wl,-mllvm -Wl,-reduce-array-computations=3 -O3 -ffast-math`  
- `-march=znver2 -fstruct-layout=3 -mllvm -unroll-threshold=50`  
- `-fremap-arrays -mllvm -function-specialize -mllvm -enable-gvn-hoist`  
- `-mllvm -reduce-array-computations=3 -mllvm -global-vectorize-slp`  
- `-mllvm -vector-library=LIBMVEC -mllvm -inline-threshold=1000`  

**Benchmarks using Fortran, C, and C++:**
- `-std=c++98 -flto -Wl,-mllvm -Wl,-function-specialize`  
- `-Wl,-mllvm -Wl,-region-vectorize -Wl,-mllvm -Wl,-vector-library=LIBMVEC`  
- `-Wl,-mllvm -Wl,-reduce-array-computations=3`

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## Base Optimization Flags (Continued)

Benchmarks using Fortran, C, and C++ (continued):
- `-Wl,-mllvm -Wl,-suppress-fmas -O3 -ffast-math -march=znver2`
- `-fstruct-layout=3 -mllvm -unroll-threshold=50 -fremap-arrays`
- `-mllvm -function-specialize -mllvm -enable-gvn-hoist`
- `-mllvm -reduce-array-computations=3 -mllvm -global-vectorize-slp`
- `-mllvm -vector-library=LIBMVEC -mllvm -inline-threshold=1000`
- `-flv-function-specialization -mllvm -loop-unswitch-threshold=200000`
- `-mllvm -unroll-threshold=100 -mllvm -enable-partial-unswitch`
- `-funroll-loops -Mrecursive -z muldefs -Kieee -fno-finite-math-only`
- `-DSPEC_OPENMP -fopenmp -fopenmp=libomp -lomp -lpthread -ldl -lmvec -llamdlibm -ljemalloc -lflang`

## Base Other Flags

C benchmarks:
- `-Wno-return-type`

Fortran benchmarks:
- `-Wno-return-type`

Benchmarks using both Fortran and C:
- `-Wno-return-type`

Benchmarks using Fortran, C, and C++:
- `-Wno-return-type`

## Peak Compiler Invocation

C benchmarks:
- `clang`

Fortran benchmarks:
- `flang`

Benchmarks using both Fortran and C:
- `flang clang`

Benchmarks using Fortran, C, and C++:
- `clang++ clang flang`
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Peak Portability Flags

Same as Base Portability Flags

Peak Optimization Flags

C benchmarks:

619.lbm_s: basepeak = yes

638.imagick_s: -flto -Wl,-mlllvm -Wl,-function-specialize
-Wl,-mlllvm -Wl,-region-vectorize
-Wl,-mlllvm -Wl,-vector-library=LIBMVEC
-Wl,-mlllvm -Wl,-reduce-array-computations=3 -Ofast
-march=znver2 -mno-sse4a -fstruct-layout=5
-mlllvm -vectorize-memory-aggressively
-mlllvm -function-specialize -mlllvm -enable-gvn-hoist
-mlllvm -unroll-threshold=50 -fremap-arrays
-mlllvm -vector-library=LIBMVEC
-mlllvm -reduce-array-computations=3
-mlllvm -global-vectorize-slp -mlllvm -inline-threshold=1000
-mlllvm -function-specialization -DSPEC_OPENMP -fopenmp
-lmvec -lamdlibm -fopenmp=libomp -lomp -lpthread -ldl
-ljemalloc -lflang

644.nab_s: Same as 638.imagick_s

Fortran benchmarks:

603.bwaves_s: basepeak = yes

649.fotonik3d_s: basepeak = yes

654.roms_s: -flto -Wl,-mlllvm -Wl,-function-specialize
-Wl,-mlllvm -Wl,-region-vectorize
-Wl,-mlllvm -Wl,-vector-library=LIBMVEC
-Wl,-mlllvm -Wl,-reduce-array-computations=3
-Wl,-mlllvm -Wl,-enable-X86-prefetching -O3 -march=znver2
-ffunroll-loops -funroll-loops -mrecursive -mlllvm -vector-library=LIBMVEC
-Kieee -fno-finite-math-only -DSPEC_OPENMP -fopenmp
-fopenmp=libomp -lomp -lpthread -ldl -lmvec -lamdlibm
-ljemalloc -lflang

Benchmarks using both Fortran and C:

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Peak Optimization Flags (Continued)

621.wrf_s: basepeak = yes
627.cam4_s: basepeak = yes
628.pop2_s: -fлож -Wl,-mlvms -Wl,-function-specialize
-Wl,-mlvms -Wl,-region-vectorize
-Wl,-mlvms -Wl,-vector-library=LIBMVEC
-march=znver2 -mno-sse4a -fstruct-layout=5
-mlvms -vectorize-memory-aggressively
-mlvms -function-specialize -mlvms -enable-gvn-hoist
-mlvms -unroll-threshold=50 -fremap-arrays
-mlvms -vector-library=LIBMVEC
-mlvms -reduce-array-computations=3
-mlvms -global-vectorize-slp -mlvms -inline-threshold=1000
-mlvms -vectorize-memory-aggressively
-mlvms -function-specialize -mlvms -enable-gvn-hoist
-mlvms -unroll-threshold=50 -fremap-arrays
-mlvms -function-specialize -mlvms -enable-gvn-hoist
-mlvms -unroll-threshold=100 -fremap-arrays
-mlvms -vector-library=LIBMVEC -mlvms -reduce-array-computations=3
-mlvms -function-specialize -mlvms -enable-gvn-hoist
-mlvms -unroll-threshold=100 -fremap-arrays
-mlvms -function-specialize -mlvms -enable-gvn-hoist

Benchmarks using Fortran, C, and C++:
-std=c++98 -fлож -Wl,-mlvms -Wl,-function-specialize
-Wl,-mlvms -Wl,-region-vectorize
-Wl,-mlvms -Wl,-vector-library=LIBMVEC
-march=znver2 -mno-sse4a -fstruct-layout=5
-mlvms -vectorize-memory-aggressively
-mlvms -function-specialize -mlvms -enable-gvn-hoist
-mlvms -unroll-threshold=100 -fremap-arrays
-mlvms -function-specialize -mlvms -enable-gvn-hoist

Peak Other Flags

C benchmarks:
-Wno-return-type

Fortran benchmarks:
-Wno-return-type

(Continued on next page)
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Peak Other Flags (Continued)

Benchmarks using both Fortran and C:
-Wno-return-type

Benchmarks using Fortran, C, and C++:
-Wno-return-type

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-Rome2P-K.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-Rome2P-K.xml

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