ASUS Computer Inc.
ASUS RS720A-E11(KMPP-D32) Server System
3.20 GHz, AMD EPYC 74F3

SPECspeed®2017_fp_base = 211
SPECspeed®2017_fp_peak = 221

Hardware
CPU Name: AMD EPYC 74F3
Max MHz: 4000
Nominal: 3200
Enabled: 48 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: 256 MB I+D on chip per chip, 32 MB shared / 3 cores
Other: None
Memory: 1 TB (16 x 64 GB 2Rx4 PC4-3200AA-R)
Storage: 1 x 240 GB SATA SSD
Other: None

Software
OS: SUSE Linux Enterprise Server 15 SP2 (x86_64)
Kernel 5.3.18-22-default
Compiler: C/C++/Fortran: Version 3.0.0 of AOCC
Parallel: Yes
Firmware: Version 0404 released Feb-2021
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 and OS set to prefer performance at the cost of additional power usage.
ASUSTeK Computer Inc.

ASUS RS720A-E11(KMPP-D32) Server System
3.20 GHz, AMD EPYC 74F3

Test Date: May-2021
Hardware Availability: Mar-2021
Software Availability: Mar-2021

Results Table

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Threads</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
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<tr>
<td>654.roms_s</td>
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</tr>
</tbody>
</table>

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
'ulimit -l 2097152' was used to set environment locked pages in memory limit
OS set to performance mode via cpupower frequency-set -g performance
runcpu command invoked through numactl i.e.:
numactl --interleave=all runcpu <etc>
'echo 8 > /proc/sys/vm/dirty_ratio' run as root to limit dirty cache to 8% of memory.
'echo 1 > /proc/sys/vm/swappiness' run as root to limit swap usage to minimum necessary.
'echo 1 > /proc/sys/vm/zone_reclaim_mode' run as root to free node-local memory and avoid remote memory usage.
'sync; echo 3 > /proc/sys/vm/drop_caches' run as root to reset filesystem caches.
'sysctl -w kernel.randomize_va_space=0' run as root to disable address space layout randomization (ASLR) to reduce run-to-run variability.
To enable Transparent Hugepages (THP) for all allocations,
Operating System Notes (Continued)

'echo always > /sys/kernel/mm/transparent_hugepage/enabled' and
'echo always > /sys/kernel/mm/transparent_hugepage/defrag' run as root.
To enable THP only on request for peak runs of 628.pop2_s, and 638.imagick_s,
'echo madvise > /sys/kernel/mm/transparent_hugepage/enabled' run as root.
To disable THP for peak runs of 627.cam4_s, 644.nab_s, 649.fotonik3d_s, and 654.roms_s,
'echo never > /sys/kernel/mm/transparent_hugepage/enabled' run as root.

Environment Variables Notes

Environment variables set by runcpu before the start of the run:
GOMP_CPU_AFFINITY = "0-95"
LD_LIBRARY_PATH = 
"/cpu118/amd_speed_aocc300_milan_B_lib/64;/cpu118/amd_speed_aocc300_milan_B_lib/32;"
MALLOC_CONF = "retain:true"
OMP_DYNAMIC = "false"
OMP_SCHEDULE = "static"
OMP_STACKSIZE = "128M"
OMP_THREAD_LIMIT = "96"

Environment variables set by runcpu during the 619.lbm_s peak run:
GOMP_CPU_AFFINITY = "0-47"

Environment variables set by runcpu during the 644.nab_s peak run:
GOMP_CPU_AFFINITY = "0 48 1 49 2 50 3 51 4 52 5 53 6 54 7 55 8 56 9 57 10 58
11 59 12 60 13 61 14 62 15 63 16 64 17 65 18 66 19 67 20 68 21 69 22 70
23 71 24 72 25 73 26 74 27 75 28 76 29 77 30 78 31 79 32 80 33 81 34 82
35 83 36 84 37 85 38 86 39 87 40 88 41 89 42 90 43 91 44 92 45 93 46 94
47 95"

Environment variables set by runcpu during the 654.roms_s peak run:
GOMP_CPU_AFFINITY = "0-47"

General Notes

Binaries were compiled on a system with 2x AMD EPYC 7742 CPU + 1TiB Memory using OpenSUSE 15.2

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.

jemalloc: configured and built with GCC v4.8.2 in RHEL 7.4 (No options specified)
ASUSTeK Computer Inc.
ASUS RS720A-E11(KMPP-D32) Server System
3.20 GHz, AMD EPYC 74F3

General Notes (Continued)

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

Platform Notes

BIOS Configuration:
DLWM Support = Disabled
SVM Mode = Disabled
NUMA nodes per socket = NPS1
APBDIS = 1
Fix SOC P-state = P0
Engine Boost = Enabled

Sysinfo program /cpu118/bin/sysinfo
Rev: r6622 of 2021-04-07 982a61ec0915b55891ef0e16acafec64d
running on localhost Thu May 6 14:22:50 2021

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 74F3 24-Core Processor
  2 "physical id"s (chips)
  96 "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 : 24
  siblings : 48
  physical 0: cores 0 1 2 4 5 6 8 9 10 12 13 14 16 17 18 20 21 22 24 25 26 28 29 30
  physical 1: cores 0 1 2 4 5 6 8 9 10 12 13 14 16 17 18 20 21 22 24 25 26 28 29 30

From lscpu from util-linux 2.33.1:
  Architecture: x86_64
  CPU op-mode(s): 32-bit, 64-bit
  Byte Order: Little Endian
  Address sizes: 48 bits physical, 48 bits virtual
  CPU(s): 96
  On-line CPU(s) list: 0-95
  Thread(s) per core: 2
  Core(s) per socket: 24
  Socket(s): 2
  NUMA node(s): 2
  Vendor ID: AuthenticAMD
  CPU family: 25

(Continued on next page)
ASUSTeK Computer Inc.
ASUS RS720A-E11(KMPP-D32) Server System 3.20 GHz, AMD EPYC 74F3

SPECspeed®2017_fp_base = 211
SPECspeed®2017_fp_peak = 221

CPU2017 License: 9016
Test Date: May-2021
Test Sponsor: ASUSTeK Computer Inc.
Hardware Availability: Mar-2021
Tested by: ASUSTeK Computer Inc.
Software Availability: Mar-2021

Platform Notes (Continued)

Model: 1
Model name: AMD EPYC 74F3 24-Core Processor
Stepping: 1
CPU MHz: 1788.019
CPU max MHz: 3200.0000
CPU min MHz: 1500.0000
BogoMIPS: 6387.92
Virtualization: AMD-V
L1d cache: 32K
L1i cache: 32K
L2 cache: 512K
L3 cache: 32768K
NUMA node0 CPU(s): 0-23,48-71
NUMA node1 CPU(s): 24-47,72-95
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 extapic cr8_legacy abm sse4a misalignsse 3dnowprefetch osw
ibs skinit wdt tce topoext perfctr_core perfctr_nb bptext perfctr_llc mwaitx cpb
cat_l3 cdpl_l3 invpcid_single hw_pstate ssbd mba ibrs ibpb stibp vmmcall fsgsbase
bm1 avx2 smep bmi2 erms invpcid cqm rdt_a rdseed adx smap clflushopt clwb sha ni
xsaves ebx xsaveopt xsave xgetbv1 xsaves cqm_llc cqm_occum_llc cqm_mmb_total cqm_mmb_local
clzero irperf xsaveopt xsaveopt vmsave_vmload vgif umip pku ospe vaes vpclmulqdq rdpid overflow_recoy 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 12 13 14 15 16 17 18 19 20 21 22 23 48 49 50 51
  node 0 size: 515865 MB
  node 0 free: 515377 MB
  node 1 cpus: 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 72
  node 1 size: 516045 MB
  node 1 free: 515370 MB
  node distances:
    node   0   1
    0: 10 32
    1: 32 10

From /proc/meminfo

(Continued on next page)
SPEC CPU®2017 Floating Point Speed Result

ASUSTeK Computer Inc.
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3.20 GHz, AMD EPYC 74F3

SPECspeed®2017_fp_base = 211
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CPU2017 License: 9016
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Test by: ASUSTeK Computer Inc.

Platform Notes (Continued)

MemTotal: 1056676292 kB
HugePages_Total: 0
Hugepagesize: 2048 kB

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

From /etc/*release* /etc/*version*
   os-release:
      NAME="SLES"
      VERSION="15-SP2"
      VERSION_ID="15.2"
      PRETTY_NAME="SUSE Linux Enterprise Server 15 SP2"
      ID="sles"
      ID_LIKE="suse"
      ANSI_COLOR="0;32"
      CPE_NAME="cpe:/o:suse:sles:15:sp2"

uname -a:
   Linux localhost 5.3.18-22-default #1 SMP Wed Jun 3 12:16:43 UTC 2020 (720aeba) 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): Mitigation: Speculative Store Bypass disabled via prctl and seccomp
CVE-2018-3639 (Speculative Store Bypass): Mitigation: Speculative Store Bypass disabled via prctl and seccomp
CVE-2017-5753 (Spectre variant 1): Mitigation: usercopy/swaps barriers and __user pointer sanitization
CVE-2017-5715 (Spectre variant 2): Mitigation: Full AMD retpoline, IBPB: conditional, IBRS_FW, STIBP: always-on, RSB filling
CVE-2020-0543 (Special Register Buffer Data Sampling): Not affected
CVE-2019-11135 (TSX Asynchronous Abort): Not affected

run-level 3 May 6 09:02

SPEC is set to: /cpu118

Filesystem Type Size Used Avail Use% Mounted on
/dev/sdb4 xfs 199G 44G 156G 22% /

From /sys/devices/virtual/dmi/id

(Continued on next page)
ASUSTeK Computer Inc.  
ASUS RS720A-E11(KMPP-D32) Server System  
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SPEC CPU®2017 Floating Point Speed Result
Copyright 2017-2021 Standard Performance Evaluation Corporation

SPECspeed®2017_fp_base = 211
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CPU2017 License: 9016
Test Sponsor: ASUSTeK Computer Inc.
Test Date: May-2021
Tested by: ASUSTeK Computer Inc.
Hardware Availability: Mar-2021
Software Availability: Mar-2021

Platform Notes (Continued)
Vendor: ASUSTeK COMPUTER INC.
Product: RS720A-E11-RS12E
Product Family: Server
Serial: 123456789012

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:
16x Samsung M393A8G40AB2-CWE 64 GB 2 rank 3200
16x Unknown Unknown

BIOS:
BIOS Vendor: American Megatrends Inc.
BIOS Version: 0404
BIOS Date: 02/02/2021
BIOS Revision: 4.4

(End of data from sysinfo program)

Compiler Version Notes

C                619.lbm_s(base, peak) 638.imagick_s(base, peak) 644.nab_s(base, peak)

AMD clang version 12.0.0 (CLANG: AOCC_3.0.0-Build#78 2020_12_10) (based on LLVM Mirror.Version.12.0.0)
Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /opt/AMD/aocc-compiler-3.0.0/bin

C++, C, Fortran | 607.cactuBSSN_s(base, peak)

AMD clang version 12.0.0 (CLANG: AOCC_3.0.0-Build#78 2020_12_10) (based on LLVM Mirror.Version.12.0.0)
Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /opt/AMD/aocc-compiler-3.0.0/bin
AMD clang version 12.0.0 (CLANG: AOCC_3.0.0-Build#78 2020_12_10) (based on LLVM Mirror.Version.12.0.0)
Target: x86_64-unknown-linux-gnu
Thread model: posix

(Continued on next page)
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Compiler Version Notes (Continued)

InstalledDir: /opt/AMD/aocc-compiler-3.0.0/bin
AMD clang version 12.0.0 (CLANG: AOCC_3.0.0-Build#78 2020_12_10) (based on LLVM Mirror.Version.12.0.0)
Target: x86_64-unknown-linux-gnu
Thread model: posix

Fortran: 603.bwaves_s(base, peak) 649.fotonik3d_s(base, peak)
654.roms_s(base, peak)

AMD clang version 12.0.0 (CLANG: AOCC_3.0.0-Build#78 2020_12_10) (based on LLVM Mirror.Version.12.0.0)
Target: x86_64-unknown-linux-gnu
Thread model: posix

Fortran, C: 621.wrf_s(base, peak) 627.cam4_s(base, peak)
628.pop2_s(base, peak)

AMD clang version 12.0.0 (CLANG: AOCC_3.0.0-Build#78 2020_12_10) (based on LLVM Mirror.Version.12.0.0)
Target: x86_64-unknown-linux-gnu
Thread model: posix

Base Compiler Invocation

C benchmarks:
clang

Fortran benchmarks:
flang

Benchmarks using both Fortran and C:
flang clang

(Continued on next page)
SPEC CPU®2017 Floating Point Speed Result

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Base Compiler Invocation (Continued)
```bash
clang++ clang flang
```

Base Portability Flags

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Flags</th>
</tr>
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<tbody>
<tr>
<td>603.bwaves_s</td>
<td>-DSPEC_LP64</td>
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<td>-DSPEC_CASE_FLAG -Mbyteswapio -DSPEC_LP64</td>
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</tr>
<tr>
<td>654.roms_s</td>
<td>-DSPEC_LP64</td>
</tr>
</tbody>
</table>

Base Optimization Flags

C benchmarks:
```bash
-m64 -mno-adx -mno-sse4a -W1,-mlllvm -W1,-region-vectorize
-W1,-mlllvm -W1,-function-specialize
-W1,-mlllvm -W1,-align-all-nofallthru-blocks=6
-W1,-mlllvm -W1,-reduce-array-computations=3 -O3 -march=znver3
-fveclib=AMDLIBM -ffast-math -flto -fstruct-layout=5
-mlllvm -unroll-threshold=50 -mlllvm -inline-threshold=1000
-freemap-arrays -mlllvm -function-specialize -flv-function-specialization
-mlllvm -enable-gvn-hoist -mlllvm -global-vectorize-slp=true
-mlllvm -enable-licm-vrp -mlllvm -reduce-array-computations=3 -z muldefs
-DSPEC_OPENMP -fopenmp -fopenmp=libomp -lomp -lamlibm -ljemalloc
-llang -llangrti
```

Fortran benchmarks:
```bash
-m64 -mno-adx -mno-sse4a -W1,-mlllvm -W1,-enable-X86-prefetching
-W1,-mlllvm -W1,-enable-licm-vrp -W1,-mlllvm -W1,-region-vectorize
-W1,-mlllvm -W1,-function-specialize
-W1,-mlllvm -W1,-align-all-nofallthru-blocks=6
-W1,-mlllvm -W1,-reduce-array-computations=3 -Hz,1,0x1 -O3
-march=znver3 -fveclib=AMDLIBM -ffast-math -Mrecursive
-mlllvm -fuse-tile-inner-loop -funroll-loops
-mlllvm -extra-vectorizer-passes -mlllvm -lsr-in-nested-loop
-mlllvm -enable-licm-vrp -mlllvm -reduce-array-computations=3
-mlllvm -global-vectorize-slp=true -z muldefs -DSPEC_OPENMP -fopenmp
```

(Continued on next page)
Base Optimization Flags (Continued)

Fortran benchmarks (continued):
- -fopenmp=libomp -lomp -lamdlibm -ljemalloc -lflang -lflangrti

Benchmarks using both Fortran and C:
- -m64 -mno-adx -mno-sse4a -W1, -mlllvm -W1, -function-specialize
- -W1, -mlllvm -W1, -enable-lcm-vrp -W1, -mlllvm -W1, -region-vectorize
- -W1, -mlllvm -W1, -function-specialize
- -W1, -mlllvm -W1, -align-all-nofallthru-blocks=6
- -W1, -mlllvm -W1, -reduce-array-computations=3 -03 -march=znver3
- -fveclib=AMDLIBM -ffast-math -flto -fstruct-layout=5
- -mlllvm -unroll-threshold=50 -mlllvm -inline-threshold=1000
- -fremap-arrays -mlllvm -function-specialize -flv-function-specialization
- -mlllvm -enable-gvn-hoist -mlllvm -global-vectorize-slp=true
- -mlllvm -enable-lcm-vrp -mlllvm -reduce-array-computations=3 -Hz,1,0x1
- -Mrecursive -mlllvm -fuse-tile-inner-loop -funroll-loops
- -mlllvm -extra-vectorizer-passes -mlllvm -lsr-in-nested-loop -z muldefs
- -DSPEC_OPENMP -fopenmp -fopenmp=libomp -lomp -lamdlibm -ljemalloc
- -lflang -lflangrti

Benchmarks using Fortran, C, and C++:
- -m64 -mno-adx -mno-sse4a -std=c++98
- -W1, -mlllvm -W1, -x86-use-vzeroupper=false
- -W1, -mlllvm -W1, -region-vectorize -W1, -mlllvm -W1, -function-specialize
- -W1, -mlllvm -W1, -align-all-nofallthru-blocks=6
- -W1, -mlllvm -W1, -reduce-array-computations=3 -03 -march=znver3
- -fveclib=AMDLIBM -ffast-math -flto -fstruct-layout=5
- -mlllvm -unroll-threshold=50 -mlllvm -inline-threshold=1000
- -fremap-arrays -mlllvm -function-specialize -flv-function-specialization
- -mlllvm -enable-gvn-hoist -mlllvm -global-vectorize-slp=true
- -mlllvm -enable-lcm-vrp -mlllvm -reduce-array-computations=3
- -mlllvm -enable-partial-unswitch -mlllvm -unroll-threshold=100
- -finline-aggressive -mlllvm -loop-unswitch-threshold=200000
- -mlllvm -reroll-loops -mlllvm -aggressive-loop-unswitch
- -mlllvm -extra-vectorizer-passes -mlllvm -convert-pow-exp-to-int=false
- -Hz,1,0x1 -Mrecursive -mlllvm -fuse-tile-inner-loop -funroll-loops
- -mlllvm -lsr-in-nested-loop -z muldefs -DSPEC_OPENMP -fopenmp
- -fopenmp=libomp -lomp -lamdlibm -ljemalloc -lflang -lflangrti

Base Other Flags

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

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

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

Benchmarks using both Fortran and C:
- Wno-unused-command-line-argument -Wno-return-type

Benchmarks using Fortran, C, and C++:
- Wno-unused-command-line-argument -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

Peak Portability Flags
Same as Base Portability Flags

Peak Optimization Flags

C benchmarks:

619.lbm_s: -m64 -mno-adx -mno-sse4a
-Wl,-mllvm -Wl,-function-specialize
-Wl,-mllvm -Wl,-align-all-nofallthru-blocks=6
-Wl,-mllvm -Wl,-reduce-array-computations=3 -Ofast
-march=znver3 -fveclib=AMDLIBM -ffast-math -flto
-fstruct-layout=5 -mllvm -unroll-threshold=50
-fremap-arrays -flv-function-specialization
-mllvm -inline-threshold=1000 -mllvm -enable-gvn-hoist
-mllvm -global-vectorize-slp=true

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

619.libm_s (continued):
-mlib -function-specialize -mlib -enable-licm-vrp
-mlib -reduce-array-computations=3 -DSPEC_OPENMP -fopenmp
-fopenmp=libomp -lomp -lfdlibm -ljemalloc -lflag

638.imagick_s: basepeak = yes

644.nab_s: -m64 -mno-adx -mno-sse4a -Wl,-mlib -Wl,-region-vectorize
-mlib -function-specialize -Ofast -march=znver3
-ffast-math -flto -fstruct-layout=5
-mlib -unroll-threshold=50 -fremap-arrays
-fvcc-ffast-math -ffast-math -flto -fstruct-layout=5
-mlib -enable-gvn-hoist -mlib -global-vectorize-slp=true
-mlib -function-specialize -mlib -enable-licm-vrp
-mlib -reduce-array-computations=3 -DSPEC_OPENMP -fopenmp
-fopenmp=libomp -lomp -lfdlibm -ljemalloc -lflag

Fortran benchmarks:

603.bwaves_s: basepeak = yes

649.fotonik3d_s: basepeak = yes

654.roms_s: -m64 -mno-adx -mno-sse4a -Wl,-mlib -Wl,-region-vectorize
-mlib -function-specialize -Ofast -march=znver3
-ffast-math -flto -fstruct-layout=5
-mlib -unroll-threshold=50 -fremap-arrays
-fvcc-ffast-math -ffast-math -flto -fstruct-layout=5
-mlib -enable-gvn-hoist -mlib -global-vectorize-slp=true
-mlib -function-specialize -mlib -enable-licm-vrp
-mlib -reduce-array-computations=3 -DSPEC_OPENMP -fopenmp
-fopenmp=libomp -lomp -lfdlibm -ljemalloc -lflag

Benchmarks using both Fortran and C:

621.wrf_s: basepeak = yes

627.cam4_s: basepeak = yes

628.pop2_s: basepeak = yes

Benchmarks using Fortran, C, and C++:
ASUSTeK Computer Inc.
ASUS RS720A-E11(KMPP-D32) Server System
3.20 GHz, AMD EPYC 74F3

SPECspeed®2017_fp_base = 211
SPECspeed®2017_fp_peak = 221

Peak Optimization Flags (Continued)

607.cactuBSSN_s: basepeak = yes

Peak Other Flags

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

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

Benchmarks using both Fortran and C:
-Wno-unused-command-line-argument -Wno-return-type

Benchmarks using Fortran, C, and C++:
-Wno-unused-command-line-argument -Wno-return-type

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

You can also download the XML flags sources by saving the following links:
http://www.spec.org/cpu2017/flags/ASUSTekPlatform-Settings-AMD-Milan-V1.3.xml