## Cisco Systems

### Cisco UCS C125 (AMD EPYC 7552, 2.20 GHz)

<table>
<thead>
<tr>
<th>CPU2017 License:</th>
<th>9019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Sponsor:</td>
<td>Cisco Systems</td>
</tr>
<tr>
<td>Tested by:</td>
<td>Cisco Systems</td>
</tr>
<tr>
<td>CPU Name:</td>
<td>AMD EPYC 7552</td>
</tr>
<tr>
<td>Max MHz:</td>
<td>3300</td>
</tr>
<tr>
<td>Nominal:</td>
<td>2200</td>
</tr>
<tr>
<td>Enabled:</td>
<td>96 cores, 2 chips, 2 threads/core</td>
</tr>
<tr>
<td>Orderable:</td>
<td>1,2 chip</td>
</tr>
<tr>
<td>Cache L1:</td>
<td>32 KB I + 32 KB D on chip per core</td>
</tr>
<tr>
<td>L2:</td>
<td>512 KB I+D on chip per core</td>
</tr>
<tr>
<td>L3:</td>
<td>192 MB I+D on chip per chip, 16 MB shared / 4 cores</td>
</tr>
<tr>
<td>Other:</td>
<td>None</td>
</tr>
<tr>
<td>Memory:</td>
<td>2 TB (16 x 128 GB 4Rx4 PC4-3200V-L)</td>
</tr>
<tr>
<td>Storage:</td>
<td>1 x 960 GB SAS SSD</td>
</tr>
<tr>
<td>Other:</td>
<td>None</td>
</tr>
<tr>
<td>OS:</td>
<td>SUSE Linux Enterprise Server 15 SP1 x86_64 kernel version 4.12.14-195-default</td>
</tr>
<tr>
<td>Compiler:</td>
<td>C/C++/Fortran: Version 2.0.0 of AOCC</td>
</tr>
<tr>
<td>Parallel:</td>
<td>No</td>
</tr>
<tr>
<td>File System:</td>
<td>btrfs</td>
</tr>
<tr>
<td>System State:</td>
<td>Run level 3 (multi-user)</td>
</tr>
<tr>
<td>Base Pointers:</td>
<td>64-bit</td>
</tr>
<tr>
<td>Peak Pointers:</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Other:</td>
<td>jemalloc memory allocator V5.2.0</td>
</tr>
<tr>
<td>Power Management:</td>
<td>BIOS set to prefer performance at the cost of additional power usage</td>
</tr>
</tbody>
</table>

---

### SPEC CPU 2017 Floating Point Rate Result

<table>
<thead>
<tr>
<th>Spec Benchmark</th>
<th>Copy</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>503.bwaves_r</td>
<td>192</td>
<td>568</td>
</tr>
<tr>
<td>507.cactuBSSN_r</td>
<td>192</td>
<td>569</td>
</tr>
<tr>
<td>508.namd_r</td>
<td>192</td>
<td>220</td>
</tr>
<tr>
<td>510.parest_r</td>
<td>192</td>
<td>193</td>
</tr>
<tr>
<td>511.povray_r</td>
<td>192</td>
<td>630</td>
</tr>
<tr>
<td>519.lbm_r</td>
<td>192</td>
<td>152</td>
</tr>
<tr>
<td>521.wrf_r</td>
<td>192</td>
<td>318</td>
</tr>
<tr>
<td>526.blender_r</td>
<td>192</td>
<td>581</td>
</tr>
<tr>
<td>527.cam4_r</td>
<td>192</td>
<td>494</td>
</tr>
<tr>
<td>538.imagick_r</td>
<td>192</td>
<td>1720</td>
</tr>
<tr>
<td>544.nab_r</td>
<td>192</td>
<td>794</td>
</tr>
<tr>
<td>549.fotonik3d_r</td>
<td>192</td>
<td>204</td>
</tr>
<tr>
<td>554.roms_r</td>
<td>192</td>
<td>135</td>
</tr>
</tbody>
</table>

**SPECrate®2017_fp_base = 406**

**SPECrate®2017_fp_peak = Not Run**

---

**Copyright 2017-2020 Standard Performance Evaluation Corporation**
Results Table

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Copies</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
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<th>Ratio</th>
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<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>503.bwaves_r</td>
<td>192</td>
<td>3393</td>
<td>567</td>
<td>3392</td>
<td>568</td>
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<td>507.cactuBSSN_r</td>
<td>192</td>
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<td>570</td>
<td>427</td>
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<tr>
<td>508.namd_r</td>
<td>192</td>
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<td>419</td>
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<td>182</td>
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<tr>
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<tr>
<td>526.blender_r</td>
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<td>580</td>
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<td>527.cam4_r</td>
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<tr>
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</tr>
<tr>
<td>544.nab_r</td>
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<td>793</td>
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<td>794</td>
<td>406</td>
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</tr>
<tr>
<td>549.fotonik3d_r</td>
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</tr>
<tr>
<td>554.roms_r</td>
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<td></td>
</tr>
</tbody>
</table>

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
'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

(Continued on next page)
Cisco Systems
Cisco UCS C125 (AMD EPYC 7552, 2.20 GHz)

SPECraté®2017_fp_base = 406
SPECraté®2017_fp_peak = Not Run

CPU2017 License: 9019
Test Sponsor: Cisco Systems
Tested by: Cisco Systems

Test Date: Aug-2020
Hardware Availability: Aug-2020
Software Availability: Jun-2020

Operating System Notes (Continued)
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)

Environment Variables Notes
Environment variables set by runcpu before the start of the run:
MALLOC_CONF = "retain:true"

General Notes
Binaries were compiled on a system with 2p 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.
jemalloc: configured and built with GCC v7.3.1 in Fedora 26 w/ -Ofast -march=native
jemalloc 5.2.0 is available here:
https://github.com/jemalloc/jemalloc/releases/download/5.2.0/jemalloc-5.2.0.tar.bz2

Platform Notes
BIOS Settings:
NUMA nodes per socket set to NPS4

Sysinfo program /home/cpu2017/bin/sysinfo
Rev: r6365 of 2019-08-21 295195f888a3d7edble6e46a485a0011
running on linux-gm78 Thu Feb 14 12:03:19 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 7552 48-Core Processor
 2 "physical id"s (chips)
192 "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 : 48

(Continued on next page)
Cisco Systems

Cisco UCS C125 (AMD EPYC 7552, 2.20 GHz)

<table>
<thead>
<tr>
<th>SPECrate®2017_fp_base</th>
<th>406</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECrate®2017_fp_peak</td>
<td>Not Run</td>
</tr>
</tbody>
</table>

CPU2017 License: 9019
Test Sponsor: Cisco Systems
Tested by: Cisco Systems

Platform Notes (Continued)

siblings : 96
physical 0: cores 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47
physical 1: cores 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47

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): 192
On-line CPU(s) list: 0-191
Thread(s) per core: 2
Core(s) per socket: 48
Socket(s): 2
NUMA node(s): 2
Vendor ID: AuthenticAMD
CPU family: 23
Model: 49
Model name: AMD EPYC 7552 48-Core Processor
Stepping: 0
CPU MHz: 2195.912
BogoMIPS: 4391.82
Virtualization: AMD-V
L1d cache: 32K
L1l cache: 32K
L2 cache: 512K
L3 cache: 16384K
NUMA node0 CPU(s): 0-47,96-143
NUMA node1 CPU(s): 48-95,144-191
Flags: fpu vme de pse tsc msr pae mce cmov pat pse36 clflush mmx fxsr sse sse2 ht syscall nx mmxext fxsr_opt pdpe1gb rdtscp lm constant_tsc rep_good nopl xtopology nonstop_tsc cpuid ext_apicid aperfmperf pni pclmulqdq monitor ssse3 fma cx16 sse4_1 sse4_2 movbe popcnt aes xsave avx f16c rdrand lahf_lm cmp_legacy cr8_legacy abm sse4a misalignsse 3dnowprefetch osvw ibs skinit wdt tce topoext perfctr_core perfctr_nb bpext perfctr_l2 mwaitx cpb cat_l3 cdpl_13 hw_pstate sme ssbd sev ibrs ippb stibp vmmcall fsgsbase bmi1 avx2 smep bmi2 cqm rdt_a rdsd ax smap clflushopt clwb sha ni xsaveopt xsavec xsetbv1 xsaves cqm_llc cqm_occup_llc cqm_mbb_total cqm_mbb_local clzero irperf xsaveerptr arat npt lbrev svm_lock nrip_save tac_scale vmcb_clean flushbyasid decodeaassist pausefilter pfthreshold avic v_vmsave_vmload vgif umip rdpid overflow_recov succor smca

From numactl --hardware WARNING: a numactl 'node' might or might not correspond to a

(Continued on next page)
Cisco Systems

Cisco UCS C125 (AMD EPYC 7552, 2.20 GHz)

CPU2017 License: 9019
Test Sponsor: Cisco Systems
Tested by: Cisco Systems

SPECrater 2017 fp_base = 406
SPECrater 2017 fp_peak = Not Run

Test Date: Aug-2020
Hardware Availability: Aug-2020
Software Availability: Jun-2020

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 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143
node 0 size: 1027903 MB
node 0 free: 1026911 MB
node 1 cpus: 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147
node 1 size: 1032169 MB
node 1 free: 1031356 MB
node distances:
node 0 1
0: 10 32
1: 32 10

From /proc/meminfo
MemTotal: 2109514264 kB
HugePages_Total: 0
Hugepagesize: 2048 kB

From /etc/*release*/etc/*version*
os-release:
NAME="SLES"
VERSION="15-SP1"
VERSION_ID="15.1"
PRETTY_NAME="SUSE Linux Enterprise Server 15 SP1"
ID="sles"
ID_LIKE="suse"
ANSI_COLOR="0;32"
CPE_NAME="cpe:/o:suse:sles:15:sp1"

uname -a:
Linux linux-gm78 4.12.14-195-default #1 SMP Tue May 7 10:55:11 UTC 2019 (8fba516)
x86_64 x86_64 x86_64 GNU/Linux

Kernel self-reported vulnerability status:
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: __user pointer sanitization

(Continued on next page)
Platform Notes (Continued)

CVE-2017-5715 (Spectre variant 2):  
Mitigation: Full AMD retpoline, IBPB: conditional, IBRS_FW, STIBP: conditional, RSB filling

run-level 3 Feb 14 06:21

SPEC is set to: /home/cpu2017

<table>
<thead>
<tr>
<th>Filesystem</th>
<th>Type</th>
<th>Size</th>
<th>Used</th>
<th>Avail</th>
<th>Use%</th>
<th>Mounted on</th>
</tr>
</thead>
<tbody>
<tr>
<td>/dev/sda3</td>
<td>btrfs</td>
<td>843G</td>
<td>37G</td>
<td>806G</td>
<td>5%</td>
<td>/home</td>
</tr>
</tbody>
</table>

From /sys/devices/virtual/dmi/id

BIOS: Cisco Systems, Inc. C125.4.1.2c.0.0.0629200447 06/29/2020
Vendor: Cisco Systems Inc
Product: UCSC-C125
Serial: WZP24201UC5

Additional information from dmidecode 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 0xCE00 M386AAG40AM3-CWE 128 kB 4 rank 3200

(End of data from sysinfo program)

Compiler Version Notes

---
C      | 519.lbm_r(base) 538.imagick_r(base) 544.nab_r(base)
---
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)
Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /opt/aocc-compiler-2.0.0/bin
---
C++    | 508.namd_r(base) 510.parest_r(base)
---
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)
Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /opt/aocc-compiler-2.0.0/bin

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Cisco Systems
Cisco UCS C125 (AMD EPYC 7552, 2.20 GHz)

SPECrate®2017_fp_base = 406
SPECrate®2017_fp_peak = Not Run

Compiler Version Notes (Continued)

C++, C  |  511.povray_r(base) 526.blender_r(base)

AOCC.LLVM.2.0.0.B191.2019_07_19 clang version 8.0.0 (CLANG: Jenkins
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Target: x86_64-unknown-linux-gnu
Thread model: posix
InstalledDir: /opt/aocc-compiler-2.0.0/bin

C++, C, Fortran  |  507.cactuBSSN_r(base)

AOCC.LLVM.2.0.0.B191.2019_07_19 clang version 8.0.0 (CLANG: Jenkins
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Thread model: posix
InstalledDir: /opt/aocc-compiler-2.0.0/bin

Fortran  |  503.bwaves_r(base) 549.fotonik3d_r(base) 554.roms_r(base)

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)
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SPECrater®2017_fp_base = 406
SPECrater®2017_fp_peak = Not Run

Compiler Version Notes (Continued)
Fortran, C      | 521.wrf_r(base) 527.cam4_r(base)
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AOCC.LLVM.2.0.0.B191.2019_07_19 clang version 8.0.0 (CLANG: Jenkins
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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: /opt/aocc-compiler-2.0.0/bin
------------------------------------------------------------------------------
Base Compiler Invocation
C benchmarks:
clang
C++ benchmarks:
clang++
Fortran benchmarks:
flang
Benchmarks using both Fortran and C:
flang clang
Benchmarks using both C and C++:
clang++ clang
Benchmarks using Fortran, C, and C++:
clang++ clang flang

Base Portability Flags
503.bwaves_r: -DSPEC_LP64
507.cactuBSSN_r: -DSPEC_LP64
508.namd_r: -DSPEC_LP64
510.parest_r: -DSPEC_LP64
511.povray_r: -DSPEC_LP64
519.lbm_r: -DSPEC_LP64
521.wrf_r: -DSPEC_CASE_FLAG -Mbyteswapio -DSPEC_LP64

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Cisco Systems

Cisco UCS C125 (AMD EPYC 7552, 2.20 GHz)

SPECrater®2017_fp_base = 406
SPECrater®2017_fp_peak = Not Run

CPU2017 License: 9019
Test Sponsor: Cisco Systems
Tested by: Cisco Systems

Test Date: Aug-2020
Hardware Availability: Aug-2020
Software Availability: Jun-2020

Base Portability Flags (Continued)

526.blender_r: -funsigned-char -D__BOOL_DEFINED -DSPEC_LP64
527.cam4_r: -DSPEC_CASE_FLAG -DSPEC_LP64
538.imagick_r: -DSPEC_LP64
544.nab_r: -DSPEC_LP64
549.fotonik3d_r: -DSPEC_LP64
554.roms_r: -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
- flv-function-specialization -z muldefs -lmvec -lamdlibm -ljemalloc
- lflang

C++ benchmarks:
- 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
- Wl,-mllvm -Wl,-suppress-fmas -O3 -ffast-math -march=znver2
- mllvm -loop-unswitch-threshold=200000 -mllvm -vector-library=LIBMVEC
- mllvm -unroll-threshold=100 -flv-function-specialization
- mllvm -enable-partial-unswitch -z muldefs -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 -ffast-math
- funroll-loops -Mrecursive -mllvm -vector-library=LIBMVEC -z muldefs
- Kieee -fno-finite-math-only -lmvec -lamdlibm -ljemalloc -lflang

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

(Continued on next page)
Cisco Systems
Cisco UCS C125 (AMD EPYC 7552, 2.20 GHz)

CPU2017 License: 9019
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SPECrate®2017_fp_base = 406
SPECrate®2017_fp_peak = Not Run

Base Optimization Flags (Continued)

Benchmarks using both Fortran and C (continued):
- mllvm -vector-library=LIBMVEC -mllvm -inline-threshold=1000
- flv-function-specialization -funroll-loops -Mrecursive -z muldefs
- Kieee -fno-finite-math-only -lmvec -lamdlibm -ljemalloc -lflang

Benchmarks using both 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
- 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 -z muldefs
- lmvec -lamdlibm -ljemalloc -lflang

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
- 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
- lmvec -lamdlibm -ljemalloc -lflang

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:
## Cisco Systems

### Cisco UCS C125 (AMD EPYC 7552, 2.20 GHz)

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Test Date: Aug-2020  
Hardware Availability: Aug-2020  
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