Cisco Systems
Cisco UCS B200 M6 (Intel Xeon Platinum 8368, 2.40GHz)

<table>
<thead>
<tr>
<th>SPECrate®2017_fp_base</th>
<th>446</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

**Test Date:** Jul-2021
**Hardware Availability:** Jun-2021
**Software Availability:** Mar-2021

### Hardware

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPU Name</td>
<td>Intel Xeon Platinum 8368</td>
</tr>
<tr>
<td>Max MHz</td>
<td>3400</td>
</tr>
<tr>
<td>Nominal</td>
<td>2400</td>
</tr>
<tr>
<td>Enabled</td>
<td>76 cores, 2 chips, 2 threads/core</td>
</tr>
<tr>
<td>Orderable</td>
<td>1,2 Chips</td>
</tr>
<tr>
<td>Cache L1</td>
<td>32 KB I + 48 KB D on chip per core</td>
</tr>
<tr>
<td>L2</td>
<td>1.25 MB I+D on chip per core</td>
</tr>
<tr>
<td>L3</td>
<td>57 MB I+D on chip per chip</td>
</tr>
<tr>
<td>Other</td>
<td>None</td>
</tr>
<tr>
<td>Memory</td>
<td>2 TB (32 x 64 GB 2Rx4 PC4-3200AA-R)</td>
</tr>
<tr>
<td>Storage</td>
<td>1 x 960 GB SATA SSD</td>
</tr>
<tr>
<td>Other</td>
<td>None</td>
</tr>
<tr>
<td>OS</td>
<td>SUSE Linux Enterprise Server 15 SP2 5.3.18-22-default</td>
</tr>
<tr>
<td>Compiler</td>
<td>C/C++: Version 2021.1 of Intel oneAPI DPC++/C++ Compiler Build 20201113 for Linux; Fortran: Version 2021.1 of Intel Fortran Compiler Classic Build 20201112 for Linux;</td>
</tr>
<tr>
<td>Parallel</td>
<td>No</td>
</tr>
<tr>
<td>Firmware</td>
<td>Version 4.2.1 released Jun-2021</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 V5.0.1</td>
</tr>
<tr>
<td>Power Management</td>
<td>BIOS and OS set to prefer performance at the cost of additional power usage</td>
</tr>
</tbody>
</table>

### Software

### Test Results

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>503.bwaves_r</td>
<td>152</td>
</tr>
<tr>
<td>507.cactuBSSN_r</td>
<td>152</td>
</tr>
<tr>
<td>508.namd_r</td>
<td>152</td>
</tr>
<tr>
<td>510.parest_r</td>
<td>152</td>
</tr>
<tr>
<td>511.povray_r</td>
<td>152</td>
</tr>
<tr>
<td>519.lbm_r</td>
<td>152</td>
</tr>
<tr>
<td>521.wrf_r</td>
<td>152</td>
</tr>
<tr>
<td>526.blender_r</td>
<td>152</td>
</tr>
<tr>
<td>527.cam4_r</td>
<td>152</td>
</tr>
<tr>
<td>538.imagick_r</td>
<td>152</td>
</tr>
<tr>
<td>544.nab_r</td>
<td>152</td>
</tr>
<tr>
<td>549.fotonik3d_r</td>
<td>152</td>
</tr>
<tr>
<td>554.roms_r</td>
<td>152</td>
</tr>
</tbody>
</table>

**SPECrate®2017_fp_base (446)**
Cisco Systems
Cisco UCS B200 M6 (Intel Xeon Platinum 8368, 2.40GHz)

Results Table

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Copies</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Copies</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>503.bwaves_r</td>
<td>152</td>
<td>2127</td>
<td>717</td>
<td>2129</td>
<td>716</td>
<td>2129</td>
<td>716</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>507.cactuBSSN_r</td>
<td>152</td>
<td>307</td>
<td>627</td>
<td>308</td>
<td>625</td>
<td>307</td>
<td>627</td>
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<td></td>
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<tr>
<td>508.namd_r</td>
<td>152</td>
<td>353</td>
<td>409</td>
<td>352</td>
<td>410</td>
<td>353</td>
<td>409</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>510.parest_r</td>
<td>152</td>
<td>1882</td>
<td>211</td>
<td>1881</td>
<td>211</td>
<td>1885</td>
<td>211</td>
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<tr>
<td>511.povray_r</td>
<td>152</td>
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<td>602</td>
<td>589</td>
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<td></td>
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</tr>
<tr>
<td>519.lbm_r</td>
<td>152</td>
<td>603</td>
<td>266</td>
<td>603</td>
<td>266</td>
<td>602</td>
<td>266</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>521.wrf_r</td>
<td>152</td>
<td>985</td>
<td>346</td>
<td>999</td>
<td>341</td>
<td>981</td>
<td>347</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>526.blender_r</td>
<td>152</td>
<td>436</td>
<td>531</td>
<td>436</td>
<td>531</td>
<td>433</td>
<td>535</td>
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</tr>
<tr>
<td>527.cam4_r</td>
<td>152</td>
<td>500</td>
<td>531</td>
<td>498</td>
<td>533</td>
<td>501</td>
<td>530</td>
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</tr>
<tr>
<td>538.imagick_r</td>
<td>152</td>
<td>274</td>
<td>1380</td>
<td>275</td>
<td>1380</td>
<td>275</td>
<td>1380</td>
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</tr>
<tr>
<td>544.nab_r</td>
<td>152</td>
<td>280</td>
<td>913</td>
<td>279</td>
<td>916</td>
<td>277</td>
<td>922</td>
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</tr>
<tr>
<td>549.fotonik3d_r</td>
<td>152</td>
<td>2578</td>
<td>230</td>
<td>2576</td>
<td>230</td>
<td>2577</td>
<td>230</td>
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<td></td>
</tr>
<tr>
<td>554.roms_r</td>
<td>152</td>
<td>1532</td>
<td>158</td>
<td>1526</td>
<td>158</td>
<td>1520</td>
<td>159</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Submit Notes
The numactl mechanism was used to bind copies to processors. The config file option 'submit' was used to generate numactl commands to bind each copy to a specific processor. For details, please see the config file.

Operating System Notes
Stack size set to unlimited using "ulimit -s unlimited"

Environment Variables Notes
Environment variables set by runcpu before the start of the run:
LD_LIBRARY_PATH = "/home/cpu2017/lib/intel64:/home/cpu2017/je5.0.1-64"
MALLOCONF = "retain:true"

General Notes
Binaries compiled on a system with 1x Intel Core i9-7940X CPU + 64GB RAM
memory using openSUSE Leap 15.2
Transparent Huge Pages enabled by default
Prior to runcpu invocation
Filesystem page cache synced and cleared with:

(Continued on next page)
Cisco Systems
Cisco UCS B200 M6 (Intel Xeon Platinum 8368, 2.40GHz)

SPECrate®2017_fp_base = 446
SPECrate®2017_fp_peak = Not Run

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

Test Date: Jul-2021
Hardware Availability: Jun-2021
Software Availability: Mar-2021

General Notes (Continued)

sync; echo 3 > /proc/sys/vm/drop_caches
runcpu command invoked through numactl i.e.: numactl --interleave=all runcpu <etc>
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 Settings:
Adjacent Cache Line Prefetcher set to Disabled
DCU Streamer Prefetch set to Disabled
UPI Link Enablement set to 1
UPI Power Management set to Enabled
Sub NUMA Clustering set to Enabled
LLC Dead Line set to Disabled
Memory Refresh Rate set to 1x Refresh
ADDDC Sparing set to Disabled
Patrol Scrub set to Disabled
Energy Efficient Turbo set to Enabled
Processor C6 Report set to Enabled
Processor C1E set to Enabled

Sysinfo program /home/cpu2017/bin/sysinfo
Rev: r6622 of 2021-04-07 982a61ec0915b55891ef0e16acafc64d
running on install Sat Jul 10 11:10:33 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 : Intel(R) Xeon(R) Platinum 8368 CPU @ 2.40GHz
  2 "physical id"s (chips)
  152 "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 : 38
siblings : 76
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

(Continued on next page)
Cisco Systems
Cisco UCS B200 M6 (Intel Xeon Platinum 8368, 2.40GHz)

SPEC CPU®2017 Floating Point Rate Result

SPECrater®2017_fp_base = 446
SPECrater®2017_fp_peak = Not Run

<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>Test Date:</td>
<td>Jul-2021</td>
</tr>
<tr>
<td>Hardware Availability:</td>
<td>Jun-2021</td>
</tr>
<tr>
<td>Software Availability:</td>
<td>Mar-2021</td>
</tr>
</tbody>
</table>

Platform Notes (Continued)

25 26 27 28 29 30 31 32 33 34 35 36 37
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

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:         46 bits physical, 57 bits virtual
CPU(s):                152
On-line CPU(s) list:   0-151
Thread(s) per core:    2
Core(s) per socket:    38
Socket(s):             2
NUMA node(s):          2
Vendor ID:             GenuineIntel
CPU family:            6
Model:                 106
Model name:            Intel(R) Xeon(R) Platinum 8368 CPU @ 2.40GHz
Stepping:              6
CPU MHz:               992.705
CPU max MHz:           3400.0000
CPU min MHz:           800.0000
BogoMIPS:              4800.00
Virtualization:        VT-x
L1d cache:             48K
L1i cache:             32K
L2 cache:              1280K
L3 cache:              58368K
NUMA node0 CPU(s):     0-37,76-113
NUMA node1 CPU(s):     38-75,114-151
Flags:                 fpu vme de pse tsc msr pae mca cmov
                       pat pse36 clflush dts acpi mmx fxsr sse sse2 ss ht tm pbe syscall nx
                       pdeldgb rdtscp lm constant_tsc art arch_perfmon pebs bts rep_good
                       nopl xtopology nonstop_tsc cpuid aperffyperf pni pclmulqdq dtes64
                       monitor ds_cpl vmx smx est tm2 ssse3 sdbg fma cx16
                       xtrm pdcm pcid dca sse4_1 sse4_2 x2apic movbe popcnt tsc_deadline_timer
                       aes xsave f16c rdrand lahf_lm abm 3dnowprefetch cpuid_fault epb cat_13
                       invpcid_single ssbd mba ibrs ibpb stibp ibrs enhanced tpr_shadow
                       vmni flexpriority ept vpid ept_ad
                       fsgsbase tsc_adjust bmi1 hle avx2 smep bmi2 erms invpcid rtm
                       cqcm rdt_a avx512f
                       avx512dq rdseed adx smap avx512ifma clflushopt clwb intel_pt
                       avx512cd sha ni
                       avx512bw avx512vl xsaveopt xsavec xgetbv1 xsaves cqm_llc cqm_occup_llc
                       cqm_mbb_total
                       cqm_mbb_local wbinvd dtherm ida arat pln pts hwp hwp_act_window
                       hwp_epp
                       hwp_pkgreq avx512vbmi umip pku ospke avx512_vbmi2 gfnl vaes
                       vpclmulqdq avx512_vnni
                       avx512_bitalg tme avx512_vpopcntdq la57 rdpdi md_clear pconfig
                       flush_l1d
                       arch_capabilities

/proc/cpuinfo cache data

(Continued on next page)
Cisco Systems
Cisco UCS B200 M6 (Intel Xeon Platinum 8368, 2.40GHz)

**SPECrate®2017_fp_base = 446**
**SPECrate®2017_fp_peak = Not Run**

---

**Platform Notes (Continued)**

cache size : 58368 KB

From `numactl --hardware`
WARNING: a numacl '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 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

node 0 size: 1031768 MB
node 0 free: 1031026 MB
node 1 cpus: 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

node 1 size: 1032136 MB
node 1 free: 1031470 MB
node distances:
node  0 1
time: 10 20

From `/proc/meminfo`
MemTotal: 2113438488 kB
HugePages_Total: 0
Hugepagesize: 2048 kB

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

From `/etc/*release* /etc/*version*`
o-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 install 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

(Continued on next page)
Cisco Systems
Cisco UCS B200 M6 (Intel Xeon Platinum 8368, 2.40GHz)

SPECrate®2017_fp_base = 446
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CPU2017 License: 9019
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Test Date: Jul-2021
Hardware Availability: Jun-2021
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Platform Notes (Continued)

CVE-2018-3620 (L1 Terminal Fault): Not affected
Microarchitectural Data Sampling: Not affected
CVE-2017-5754 (Meltdown): Mitigation: Speculative Store Bypass disabled via prct1 and seccomp
CVE-2018-3639 (Speculative Store Bypass): Mitigation: usercopy/swaps barriers and __user pointer sanitization
CVE-2017-5753 (Spectre variant 1):
CVE-2017-5715 (Spectre variant 2):
CVE-2020-0543 (Special Register Buffer Data Sampling): Not affected
CVE-2019-11135 (TSX Asynchronous Abort): Not affected

run-level 3 Jul 10 11:06
SPEC is set to: /home/cpu2017
Filesystem Type Size Used Avail Use% Mounted on
/dev/sda2 btrfs 892G 15G 876G 2% /home

From /sys/devices/virtual/dmi/id
Vendor: Cisco Systems Inc
Product: UCSB-B200-M6
Serial: FCH24097578

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:
32x 0xCE00 M393A8G40AB2-CWE 64 GB 2 rank 3200

BIOS:
BIOS Vendor: Cisco Systems, Inc.
BIOS Version: B200M6.4.2.1.41.0625210158
BIOS Date: 06/25/2021
BIOS Revision: 5.22

(End of data from sysinfo program)

Compiler Version Notes
==============================================================================
| C |
|-------------------------------|-------------------------------|-------------------------------|
| 519.lbm_r(base) 538.imagick_r(base) 544.nab_r(base) |
-------------------------------|-------------------------------|-------------------------------|
Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64,
Cisco Systems
Cisco UCS B200 M6 (Intel Xeon Platinum 8368, 2.40GHz)

SPECrater®\textsuperscript{2017} fp\textsubscript{base} = \textbf{446}
SPECrater®\textsuperscript{2017} fp\textsubscript{peak} = \textbf{Not Run}

CPU\textsuperscript{2017} License: 9019
Test Sponsor: Cisco Systems
Tested by: Cisco Systems

Compiler Version Notes (Continued)

Copyright (C) 1985-2020 Intel Corporation. All rights reserved.

==============================================================================
C++             | 508.namd\_r(base) 510.parest\_r(base)
Intel\((R)\) oneAPI DPC++/C++ Compiler for applications running on Intel\((R)\) 64,
Version 2021.1 Build 20201113
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.

==============================================================================
C++, C          | 511.povray\_r(base) 526.blender\_r(base)
Intel\((R)\) oneAPI DPC++/C++ Compiler for applications running on Intel\((R)\) 64,
Version 2021.1 Build 20201113
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.

==============================================================================
C++, C, Fortran | 507.cactuBSSN\_r(base)
Intel\((R)\) oneAPI DPC++/C++ Compiler for applications running on Intel\((R)\) 64,
Version 2021.1 Build 20201113
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.
Intel\((R)\) Fortran Intel\((R)\) 64 Compiler Classic for applications running on
Intel\((R)\) 64, Version 2021.1 Build 20201112\_000000
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.

==============================================================================
Fortran         | 503.bwaves\_r(base) 549.fotonik3d\_r(base) 554.roms\_r(base)
Intel\((R)\) Fortran Intel\((R)\) 64 Compiler Classic for applications running on
Intel\((R)\) 64, Version 2021.1 Build 20201112\_000000
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.

==============================================================================
Fortran, C      | 521.wrf\_r(base) 527.cam4\_r(base)

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

Intel(R) Fortran Intel(R) 64 Compiler Classic for applications running on
   Intel(R) 64, Version 2021.1 Build 20201112_000000
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.
Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64,
   Version 2021.1 Build 20201113
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.

Base Compiler Invocation

C benchmarks:
icx

C++ benchmarks:
icpx

Fortran benchmarks:
ifort

Benchmarks using both Fortran and C:
ifort icx

Benchmarks using both C and C++:
icpx icx

Benchmarks using Fortran, C, and C++:
icpx icx ifort

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.ibm_r: -DSPEC_LP64
521.wrf_r: -DSPEC_LP64 -DSPEC_CASE_FLAG -convert big_endian
526.blender_r: -DSPEC_LP64 -DSPEC_LINUX -funsigned-char
527.cam4_r: -DSPEC_LP64 -DSPEC_CASE_FLAG
538.imagick_r: -DSPEC_LP64
544.nab_r: -DSPEC_LP64
549.fotonik3d_r: -DSPEC_LP64

(Continued on next page)
Cisco Systems
Cisco UCS B200 M6 (Intel Xeon Platinum 8368, 2.40GHz)

SPECratenos_run
SPECratenos_run

CPU2017 License: 9019
Test Sponsor: Cisco Systems
Test Date: Jul-2021

Tested by: Cisco Systems
Hardware Availability: Jun-2021
Software Availability: Mar-2021

Base Portability Flags (Continued)

554.roms_r: -DSPEC_LP64

Base Optimization Flags

C benchmarks:
- w -std=c11 -m64 -Wl,-z,muldefs -xCORE-AVX512 -Ofast -ffast-math
- flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4
- mbranches-within-32B-boundaries -ljemalloc
- L/usr/local/jemalloc64-5.0.1/lib

C++ benchmarks:
- w -m64 -Wl,-z,muldefs -xCORE-AVX512 -Ofast -ffast-math -flto
- mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4
- mbranches-within-32B-boundaries -ljemalloc
- L/usr/local/jemalloc64-5.0.1/lib

Fortran benchmarks:
- w -m64 -Wl,-z,muldefs -xCORE-AVX512 -O3 -ipo -no-prec-div
- qopt-prefetch -ffinite-math-only
- qopt-multiple-gather-scatter-by-shuffles -qopt-mem-layout-trans=4
- nostandard-realloc-lhs -align array32byte -auto
- mbranches-within-32B-boundaries -ljemalloc
- L/usr/local/jemalloc64-5.0.1/lib

Benchmarks using both Fortran and C:
- w -m64 -std=c11 -Wl,-z,muldefs -xCORE-AVX512 -Ofast -ffast-math
- flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4 -O3 -ipo
- no-prec-div -qopt-prefetch -ffinite-math-only
- qopt-multiple-gather-scatter-by-shuffles
- mbranches-within-32B-boundaries -nostandard-realloc-lhs
- align array32byte -auto -ljemalloc -L/usr/local/jemalloc64-5.0.1/lib

Benchmarks using both C and C++:
- w -m64 -std=c11 -Wl,-z,muldefs -xCORE-AVX512 -Ofast -ffast-math
- flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4
- mbranches-within-32B-boundaries -ljemalloc
- L/usr/local/jemalloc64-5.0.1/lib

Benchmarks using Fortran, C, and C++:
- w -m64 -std=c11 -Wl,-z,muldefs -xCORE-AVX512 -Ofast -ffast-math
- flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4 -O3
- no-prec-div -qopt-prefetch -ffinite-math-only
- qopt-multiple-gather-scatter-by-shuffles
- mbranches-within-32B-boundaries -nostandard-realloc-lhs

(Continued on next page)
Cisco Systems
Cisco UCS B200 M6 (Intel Xeon Platinum 8368, 2.40GHz)

SPECrate®2017_fp_base = 446
SPECrate®2017_fp_peak = Not Run

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Base Optimization Flags (Continued)

Benchmarks using Fortran, C, and C++ (continued):
-align array32byte -auto -ljemalloc -L/usr/local/jemalloc64-5.0.1/lib

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/Intel-ic2021-official-linux64_revA.xml
http://www.spec.org/cpu2017/flags/Cisco-Platform-Settings-V1.0-ICX-revF.xml

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For questions about this result, please contact the tester. For other inquiries, please contact info@spec.org.

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