### Software

<table>
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<tr>
<th>OS:</th>
<th>SUSE Linux Enterprise Server 15 SP4 5.14.21-150400.22-default</th>
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</tr>
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<td>File System:</td>
<td>xfs</td>
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<td>System State:</td>
<td>Run level 3 (multi-user)</td>
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<td>jemalloc memory allocator V5.0.1</td>
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<tr>
<td>Power Management:</td>
<td>BIOS set to prefer performance at the cost of additional power usage</td>
</tr>
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### Hardware

| CPU Name: | Intel Xeon Gold 6438Y+ |
| Max MHz: | 4000 |
| Nominal: | 2000 |
| Enabled: | 64 cores, 2 chips |
| Orderable: | 1.2 Chips |
| Cache L1: | 32 KB I + 48 KB D on chip per core |
| L2: | 2 MB I+D on chip per core |
| L3: | 60 MB I+D on chip per chip |
| Other: | None |
| Memory: | 1 TB (16 x 64 GB 2Rx4 PC5-4800B-R) |
| Storage: | 1 x 960 GB M.2 SSD SATA |
| Other: | None |

### SPEC CPU 2017 Floating Point Speed Result

<table>
<thead>
<tr>
<th>Thread</th>
<th>SPECspeed®2017_fp_base = 310</th>
</tr>
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<tr>
<td>603.bwaves_s 64</td>
<td></td>
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<tr>
<td>607.cactuBSSN_s 64</td>
<td></td>
</tr>
<tr>
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<td></td>
</tr>
<tr>
<td>621.wrf_s 64</td>
<td></td>
</tr>
<tr>
<td>627.cam4_s 64</td>
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</tr>
<tr>
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<td></td>
</tr>
<tr>
<td>654.roms_s 64</td>
<td></td>
</tr>
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| Software Availability: | Dec-2022 |
| Test Sponsor: | Cisco Systems |
| Hardware Availability: | Mar-2023 |
| Tested by: | Cisco Systems |
| Test Date: | Mar-2023 |
| CPU2017 License: | 9019 |

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### Hardware

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<thead>
<tr>
<th>Thread</th>
<th>SPECspeed®2017_fp_peak = 310</th>
</tr>
</thead>
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<tr>
<td>603.bwaves_s 64</td>
<td>(310)</td>
</tr>
<tr>
<td>607.cactuBSSN_s 64</td>
<td>(310)</td>
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<td>(310)</td>
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## Results Table

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<tr>
<th>Benchmark</th>
<th>Threads</th>
<th>Seconds</th>
<th>Ratio</th>
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<th>Ratio</th>
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<tr>
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<td>621.wrf_s</td>
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<td>627.cam4_s</td>
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</tr>
</tbody>
</table>

**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:
- KMP_AFFINITY = "granularity=fine,compact"
- LD_LIBRARY_PATH = "/home/cpu2017/lib/intel64:/home/cpu2017/je5.0.1-64"
- MALLOC_CONF = "retain:true"
- OMP_STACKSIZE = "192M"

---

**General Notes**

Binaries compiled on a system with 2x Intel Xeon Platinum 8280M CPU + 384GB RAM memory using Redhat Enterprise Linux 8.0
- Transparent Huge Pages enabled by default
- Prior to runcpu invocation
- Filesystem page cache synced and cleared with:
  - sync; echo 3> /proc/sys/vm/drop_caches

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.

Cisco Systems
Cisco UCS C240 M7 (Intel Xeon Gold 6438Y+, 2.00GHz) | SPECspeed®2017_fp_base = 310
| SPECspeed®2017_fp_peak = 310

CPU2017 License: 9019
Test Sponsor: Cisco Systems
Test Date: Mar-2023
Tested by: Cisco Systems
Hardware Availability: Mar-2023
Software Availability: Dec-2022

Platform Notes

BIOS Settings:
Intel Hyper-Threading Technology set to Disabled
Sub NUMA Clustering set to Disabled
LLC Dead Line set to Disabled
ADDCS Sparing set to Disabled
Processor C6 Report set to Enabled
UPI Link Enablement 1
UPI Link Power Management Enabled

Sysinfo program /home/cpu2017/bin/sysinfo
Rev: r6732 of 2022-11-07 fe91c89b7ed5c36ae2c92cc097bec197
running on srv04 Thu Jun 1 17:42:20 2023

SUT (System Under Test) info as seen by some common utilities.

Table of contents

1. uname -a
2. w
3. Username
4. ulimit -a
5. sysinfo process ancestry
6. /proc/cpuinfo
7. lscpu
8. numactl --hardware
9. /proc/meminfo
10. who -r
11. Systemd service manager version: systemd 249 (249.11+suse.124.g2bc0b2c447)
12. Services, from systemctl list-unit-files
13. Linux kernel boot-time arguments, from /proc/cmdline
14. cpupower frequency-info
15. sysctl
16. /sys/kernel/mm/transient_hugepage
17. /sys/kernel/mm/transparent_hugepage/transparent
18. OS release
19. Disk information
20. /sys/devices/virtual/dmi/id
21. dmidecode
22. BIOS

-----------------------------------------------

1. uname -a
Linux srv04 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

(Continued on next page)
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CPU2017 License: 9019
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Platform Notes (Continued)

2. w
   17:42:20 up 1 min, 1 user, load average: 0.27, 0.09, 0.03
   USER TTY FROM LOGIN@ IDLE JCPU PCPU WHAT
   root tty1 - 17:41 11.00s 1.04s 0.11s -bash

3. Username
   From environment variable $USER: root

4. ulimit -a
   core file size (blocks, -c) unlimited
   data seg size (kbytes, -d) unlimited
   scheduling priority (-e) 0
   file size (blocks, -f) unlimited
   pending signals (-i) 4126948
   max locked memory (kbytes, -l) 64
   max memory size (kbytes, -m) unlimited
   open files (-n) 1024
   pipe size (512 bytes, -p) 8
   POSIX message queues (bytes, -q) 819200
   real-time priority (-r) 0
   stack size (kbytes, -s) unlimited
   cpu time (seconds, -t) unlimited
   max user processes (-u) 4126948
   virtual memory (kbytes, -v) unlimited
   file locks (-x) unlimited

5. sysinfo process ancestry
   /usr/lib/systemd/systemd --switched-root --system --deserialize 30
   login -- root
   -bash
   -bash
   runcpu --define default-platform-flags -c ic2023.0-lin-sapphirerapids-speed-20221201.cfg --define cores=64
   --tune all -o all --define drop_caches fpspeed
   runcpu --define default-platform-flags --configfile ic2023.0-lin-sapphirerapids-speed-20221201.cfg --define
   cores=64 --tune all --output_format all --define drop_caches --nopower --runmode speed --tune base:peak
   --size refspeed fpspeed --nopreenv --note-preenv --logfile
   $SPEC/tmp/CP2017.159/temlogs/preenv.fpspeed.159.0.log --lognum 159.0 --from_runcpu 2
   specperl $SPEC/bin/sysinfo
   $SPEC = /home/cpu2017
   $SPEC = /home/cpu2017

6. /proc/cpuinfo

(Continued on next page)
Cisco Systems
Cisco UCS C240 M7 (Intel Xeon Gold 6438Y+, 2.00GHz)

Platform Notes (Continued)

- model name: Intel(R) Xeon(R) Gold 6438Y+
- vendor_id: GenuineIntel
- cpu family: 6
- model: 143
- stepping: 8
- microcode: 0x2b000161
- bugs: spectre_v1 spectre_v2 spec_store_bypass swapgs
- cpu cores: 32
- siblings: 32
- 2 physical ids (chips)
- 64 processors (hardware threads)
- physical id 0: core ids 0-31
- physical id 1: core ids 0-31
- physical id 0: apicids
  0, 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62
- physical id 1: apicids
- Caution: /proc/cpuinfo data regarding chips, cores, and threads is not necessarily reliable, especially for virtualized systems. Use the above data carefully.

7. lscpu

From lscpu from util-linux 2.37.2:
- Architecture: x86_64
- CPU op-mode(s): 32-bit, 64-bit
- Address sizes: 46 bits physical, 57 bits virtual
- Byte Order: Little Endian
- CPU(s): 64
- On-line CPU(s) list: 0-63
- Vendor ID: GenuineIntel
- Model name: Intel(R) Xeon(R) Gold 6438Y+
- CPU family: 6
- Model: 143
- Thread(s) per core: 1
- Core(s) per socket: 32
- Socket(s): 2
- Stepping: 8
- Frequency boost: enabled
- CPU max MHz: 2001.0000
- CPU min MHz: 800.0000
- BogoMIPS: 4000.00
- Flags: fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 c2fast dts acpi mmx fxsr sse sse2 ss ht tm pbe syscall nx pdpe1gb rdtscp
- lm constant_tsc art arch_perfmon pebs bts rep_good nopl xtopology nonstop_tsc cpuid aperfmperf tsc_known_freq pni pclmulqdq dtes64 mtrr pni sse2 sse3 sse4_1 sse4_2 ssse3 sse4_5 ssse3 fpxt idapic idapicpclmulm64 idapicp10 idapicx8 idapicp16 idapicp32 idapicp64 idapicp8 idapicp128 idapicp192 idapicp256 idapicp512 idapicp1024 idapicp1024b idapicp1024c idapicp1024d idapicp1024e idapicp1024f idapicp1024g idapicp1024h idapicp1024i idapicp1024j idapicp1024k idapicp1024l idapicp1024m idapicp1024n idapicp1024o idapicp1024p idapicp1024q idapicp1024r idapicp1024s idapicp1024t idapicp1024u idapicp1024v idapicp1024w idapicp1024x idapicp1024y idapicp1024z idapicp1024aa idapicp1024ab idapicp1024ac idapicp1024ad idapicp1024ae idapicp1024af idapicp1024ag idapicp1024ah idapicp1024ai idapicp1024aj idapicp1024ak idapicp1024al idapicp1024am idapicp1024an idapicp1024ao idapicp1024ap idapicp1024aq idapicp1024ar idapicp1024as idapicp1024at idapicp1024au idapicp1024av idapicp1024aw idapicp1024ax idapicp1024ay idapicp1024az idapicp1024ba idapicp1024bb idapicp1024bc idapicp1024bd idapicp1024be idapicp1024bf idapicp1024bg idapicp1024bh idapicp1024bi idapicp1024bj idapicp1024bk idapicp1024bl idapicp1024bm idapicp1024bn idapicp1024bo idapicp1024bp idapicp1024bq idapicp1024br idapicp1024bs idapicp1024bt idapicp1024bu idapicp1024bv idapicp1024bw idapicp1024bx idapicp1024by idapicp1024bz idapicp1024ca idapicp1024cb idapicp1024cc idapicp1024cd idapicp1024ce idapicp1024cf idapicp1024cg idapicp1024ch idapicp1024ci idapicp1024cj idapicp1024ck idapicp1024cl idapicp1024cm idapicp1024cn idapicp1024co idapicp1024cp idapicp1024cq idapicp1024cr idapicp1024cs idapicp1024ct idapicp1024cu idapicp1024cv idapicp1024cw idapicp1024cx idapicp1024cy idapicp1024cz

(Continued on next page)
Cisco Systems
Cisco UCS C240 M7 (Intel Xeon Gold 6438Y+, 2.00GHz)

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

SPECspeed®2017_fp_base = 310
SPECspeed®2017_fp_peak = 310

Test Date: Mar-2023
Hardware Availability: Mar-2023
Software Availability: Dec-2022

Platform Notes (Continued)

Virtualization: VT-x
L1d cache: 3 MiB (64 instances)
L1i cache: 2 MiB (64 instances)
L2 cache: 128 MiB (64 instances)
L3 cache: 120 MiB (2 instances)
NUMA node(s): 4
NUMA node0 CPU(s): 0-15
NUMA node1 CPU(s): 16-31
NUMA node2 CPU(s): 32-47
NUMA node3 CPU(s): 48-63
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/swaps barriers and __user pointer sanitization
Vulnerability Spectre v2: Mitigation; Enhanced IBRS, IBPB conditional, RSB filling
Vulnerability Srbsd: Not affected
Vulnerability Tx async abort: Not affected

From lscpu --cache:

NAME ONE-SIZE ALL-SIZE WAYS TYPE LEVEL SETS PHY-LINE COHERENCY-SIZE
L1d 48K 3M 12 Data 1 64 1 64
L1i 32K 2M 8 Instruction 1 64 1 64
L2 2M 128M 16 Unified 2 2048 1 64
L3 60M 120M 15 Unified 3 65536 1 64

8. numactl --hardware
NOTE: a numactl 'node' might or might not correspond to a physical chip.
  available: 4 nodes (0-3)
  node 0 cpus: 0-15
  node 0 size: 258008 MB
  node 0 free: 256750 MB

(Continued on next page)
Cisco Systems
Cisco UCS C240 M7 (Intel Xeon Gold 6438Y+, 2.00GHz)

SPECspeed®2017_fp_base = 310
SPECspeed®2017_fp_peak = 310

Platform Notes (Continued)

node 1 cpus: 16-31
node 1 size: 257694 MB
node 1 free: 257047 MB
node 2 cpus: 32-47
node 2 size: 258043 MB
node 2 free: 257484 MB
node 3 cpus: 48-63
node 3 size: 258014 MB
node 3 free: 257469 MB
node distances:
node 0 1 2 3
0: 10 20 20 20
1: 20 10 20 20
2: 20 20 10 20
3: 20 20 20 10

9. /proc/meminfo
   MemTotal: 1056523424 kB

10. who -r
    run-level 3 Jun 1 17:41

11. Systemd service manager version: systemd 249 (249.11+suse.124.g2bc0b2c447)
    Default Target Status
    multi-user running

12. Services, from systemctl list-unit-files
    STATE UNIT FILES
    enabled apparmor auditd cron getty@ haveged irqbalance issue-generator kbdsettings klog
           lvm2-monitor nsd postfix purge-kernels rollback rsyslog smartd sshd wicked wickedd-auto4
           wickedd-dhcp4 wickedd-dhcp6 wickedd-nanny
    enabled-runtime systemd-remount-fs
    disabled autosfs blk-availability boot-sysctl ca-certificates chrony-wait chronyd console-getty cups
           cups-browsed debug-shell ebtables exchange-bmc-os-info firewalld gpm grub2-once
           haveged-switch-root ipmi ipmielvd issue-add-ssh-keys kexec-load lvmmask man-db-create
           multipathd nfs nfs-blkmap rdisc rpcbind rpmconfigcheck rsyncd serial-getty@
           smartd_generate_opts snmpd smntrpapv svnserve systemd-boot-check-no-failures
           systemd-network-generator systemd-sysext systemd-time-wait-sync systemd-timesyncd
           wickedd

13. Linux kernel boot-time arguments, from /proc/cmdline
    BOOT_IMAGE=/boot/vmlinuz-5.14.21-150400.22-default

(Continued on next page)
Cisco Systems
Cisco UCS C240 M7 (Intel Xeon Gold 6438Y+, 2.00GHz)

SPECspeed®2017_fp_base = 310
SPECspeed®2017_fp_peak = 310

Platform Notes (Continued)

root=UUID=82136e43-7b14-445e-80c8-a54855d5e2c7
splash=silent
mitigations=auto
quiet
security=apparmor

14. cpupower frequency-info
   analyzing CPU 0:
   current policy: frequency should be within 800 MHz and 2.00 GHz.
The governor "performance" may decide which speed to use within this range.
   boost state support:
      Supported: yes
      Active: yes

15. sysctl
   kernel.numa_balancing  1
   kernel.randomize_va_space  0
   vm.compaction_proactiveness  20
   vm.dirty_background_bytes  0
   vm.dirty_background_ratio  10
   vm.dirty_bytes  0
   vm.dirty_expire_centisecs  3000
   vm.dirty_ratio  8
   vm.dirty_writeback_centisecs  500
   vm.dirtytime_expire_seconds  43200
   vm.extfrag_threshold  500
   vm.min_unmapped_ratio  1
   vm.nr_hugepages  0
   vm.nr_hugepages_mempolicy  0
   vm.nr_overcommit_hugepages  0
   vm.swappiness  1
   vm.watermark_boost_factor  15000
   vm.watermark_scale_factor  10
   vm.zone_reclaim_mode  1

16. /sys/kernel/mm/transparent_hugepage
   defrag [always] defer defer+madvise madvise never
   enabled [always] madvise never
   hpage_pmd_size  2097152
   shmem_enabled always within_size advise [never] deny force

17. /sys/kernel/mm/transparent_hugepage/khugepaged

(Continued on next page)
Cisco Systems
Cisco UCS C240 M7 (Intel Xeon Gold 6438Y+, 2.00GHz)

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

SPECspeed®2017_fp_base = 310
SPECspeed®2017_fp_peak = 310

Test Date: Mar-2023
Hardware Availability: Mar-2023
Software Availability: Dec-2022

Platform Notes (Continued)

alloc_sleep_millisecs 60000
defrag 1
max_ptes_none 511
max_ptes_shared 256
max_ptes_swap 64
pages_to_scan 4096
scan_sleep_millisecs 10000

18. OS release
   From /etc/*-release /etc/*-version
   os-release SUSE Linux Enterprise Server 15 SP4

19. Disk information
   SPEC is set to: /home/cpu2017
   Filesystem Type Size Used Avail Use% Mounted on
   /dev/sdb3 xfs 436G 13G 424G 3% /

20. /sys/devices/virtual/dmi/id
   Vendor: Cisco Systems Inc
   Product: UCSC-C240-M7SX
   Serial: WZP26360KC7

21. dmidecode
   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 0xCE00 M321R8GA0BB0-CQKDG 64 GB 2 rank 4800

22. BIOS
   (This section combines info from /sys/devices and dmidecode.)
   BIOS Vendor: Cisco Systems, Inc.
   BIOS Version: C240M7.4.3.1a.0.0201231701
   BIOS Date: 02/01/2023
   BIOS Revision: 5.29
   The system clock was reset to a future date before running the test and the exact test date is updated
## Cisco Systems

Cisco UCS C240 M7 (Intel Xeon Gold 6438Y+, 2.00GHz)

<table>
<thead>
<tr>
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**Test Date:** Mar-2023  
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**Software Availability:** Dec-2022

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### Compiler Version Notes

<table>
<thead>
<tr>
<th>Language</th>
<th>Binaries Tested</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>C</strong></td>
<td>619.lbm_s(base, peak) 638.imagick_s(base, peak) 644.nab_s(base, peak)</td>
</tr>
<tr>
<td><strong>C++, C, Fortran</strong></td>
<td>607.cactuBSSN_s(base, peak)</td>
</tr>
<tr>
<td><strong>Fortran</strong></td>
<td>603.bwaves_s(base, peak) 649.fotonik3d_s(base, peak) 654.roms_s(base, peak)</td>
</tr>
<tr>
<td><strong>Fortran, C</strong></td>
<td>621.wrf_s(base, peak) 627.cam4_s(base, peak) 628.pop2_s(base, peak)</td>
</tr>
</tbody>
</table>

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Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2023.0.0 Build 20221201  
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Intel(R) Fortran Compiler for applications running on Intel(R) 64, Version 2023.0.0 Build 20221201  
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**Cisco Systems**
Cisco UCS C240 M7 (Intel Xeon Gold 6438Y+, 2.00GHz)

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**CPU2017 License:** 9019  
**Test Sponsor:** Cisco Systems  
**Tested by:** Cisco Systems  
**Test Date:** Mar-2023  
**Hardware Availability:** Mar-2023  
**Software Availability:** Dec-2022

### Base Compiler Invocation

C benchmarks:  
```bash
icx
```

Fortran benchmarks:  
```bash
ifx
```

Benchmarks using both Fortran and C:  
```bash
ifx icx
```

Benchmarks using Fortran, C, and C++:  
```bash
icpx icx ifx
```

### Base Portability Flags

```bash
603.bwaves_s: -DSPEC_LP64
607.caactuBSSN_s: -DSPEC_LP64
619.lbm_s: -DSPEC_LP64
621.wrf_s: -DSPEC_LP64 -DSPEC_CASE_FLAG -convert big_endian
627.cam4_s: -DSPEC_LP64 -DSPEC_CASE_FLAG
628.pop2_s: -DSPEC_LP64 -DSPEC_CASE_FLAG -convert big_endian
-assume byterecl
638.imagick_s: -DSPEC_LP64
644.nab_s: -DSPEC_LP64
649.fotonik3d_s: -DSPEC_LP64
654.roms_s: -DSPEC_LP64
```

### Base Optimization Flags

C benchmarks:
```bash
-m64 -std=c11 -W1,-z,muldefs -xsapphirerapids -Ofast -ffast-math
-flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4 -fiopenmp
-DSPEC_OPENMP -Wno-implicit-int -mprefer-vector-width=512
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

Fortran benchmarks:
```bash
-m64 -W1,-z,muldefs -DSPEC_OPENMP -xsapphirerapids -Ofast
-ffast-math -flto -mfpmath=sse -funroll-loops
-qopt-mem-layout-trans=4 -fiopenmp -nostandard-realloc-lhs
-align array32byte -auto -L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

Benchmarks using both Fortran and C:
```bash
-m64 -std=c11 -W1,-z,muldefs -xsapphirerapids -Ofast -ffast-math
```
Cisco Systems  
Cisco UCS C240 M7 (Intel Xeon Gold 6438Y+, 2.00GHz)  

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<td>Software Availability:</td>
<td>Dec-2022</td>
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</table>

**Specspeed®2017_fp_base = 310**

**Specspeed®2017_fp_peak = 310**

### Base Optimization Flags (Continued)

- **Benchmarks using both Fortran and C (continued):**
  - `-flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4 -fiopenmp`
  - `-DSPEC_OPENMP -Wno-implicit-int -mprefer-vector-width=512`
  - `-nogram-dalloc-lhs -align array32byte -auto`
  - `-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc`

- **Benchmarks using Fortran, C, and C++:**
  - `-m64 -std=c++14 -std=c11 -Wl,-z,muldefs -xsapphirerapids -Ofast`
  - `-ffast-math -flto -mfpmath=sse -funroll-loops`
  - `-qopt-mem-layout-trans=4 -fiopenmp -DSPEC_OPENMP -Wno-implicit-int`
  - `-mprefer-vector-width=512 -nogram-dalloc-lhs -align array32byte`
  - `-auto -L/usr/local/jemalloc64-5.0.1/lib -ljemalloc`

### Peak Compiler Invocation

- **C benchmarks:**  
  - `icx`

- **Fortran benchmarks:**  
  - `ifx`

- **Benchmarks using both Fortran and C:**  
  - `ifx icx`

- **Benchmarks using Fortran, C, and C++:**  
  - `icpx icx ifx`

### Peak Portability Flags

Same as Base Portability Flags

### Peak Optimization Flags

- **C benchmarks:**
  1. `619.lbm_s: basepeak = yes`
  2. `638.imagick_s: basepeak = yes`

(Continued on next page)
Cisco Systems
Cisco UCS C240 M7 (Intel Xeon Gold 6438Y+, 2.00GHz)  

| SPECspeed®2017_fp_base = 310 |
| SPECspeed®2017_fp_peak = 310 |

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

Test Date: Mar-2023  
Hardware Availability: Mar-2023  
Software Availability: Dec-2022

Peak Optimization Flags (Continued)

644.nab_s: basepeak = yes

Fortran benchmarks:


649.fotonik3d_s: basepeak = yes

654.roms_s: basepeak = yes

Benchmarks using both Fortran and C:

621.wrf_s: basepeak = yes


628.pop2_s: basepeak = yes

Benchmarks using Fortran, C, and C++:

607.cactuBSSN_s: basepeak = yes

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

http://www.spec.org/cpu2017/flags/Intel-ic2023-official-linux64.html

You can also download the XML flags sources by saving the following links:

http://www.spec.org/cpu2017/flags/Intel-ic2023-official-linux64.xml