



# SPEC CPU®2017 Integer Speed Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

## Cisco Systems

Cisco UCS X210c M8 (Intel Xeon 6527P 3.00 GHz processor)

SPECspeed®2017\_int\_base = 13.7

SPECspeed®2017\_int\_peak = 13.9

CPU2017 License: 9019

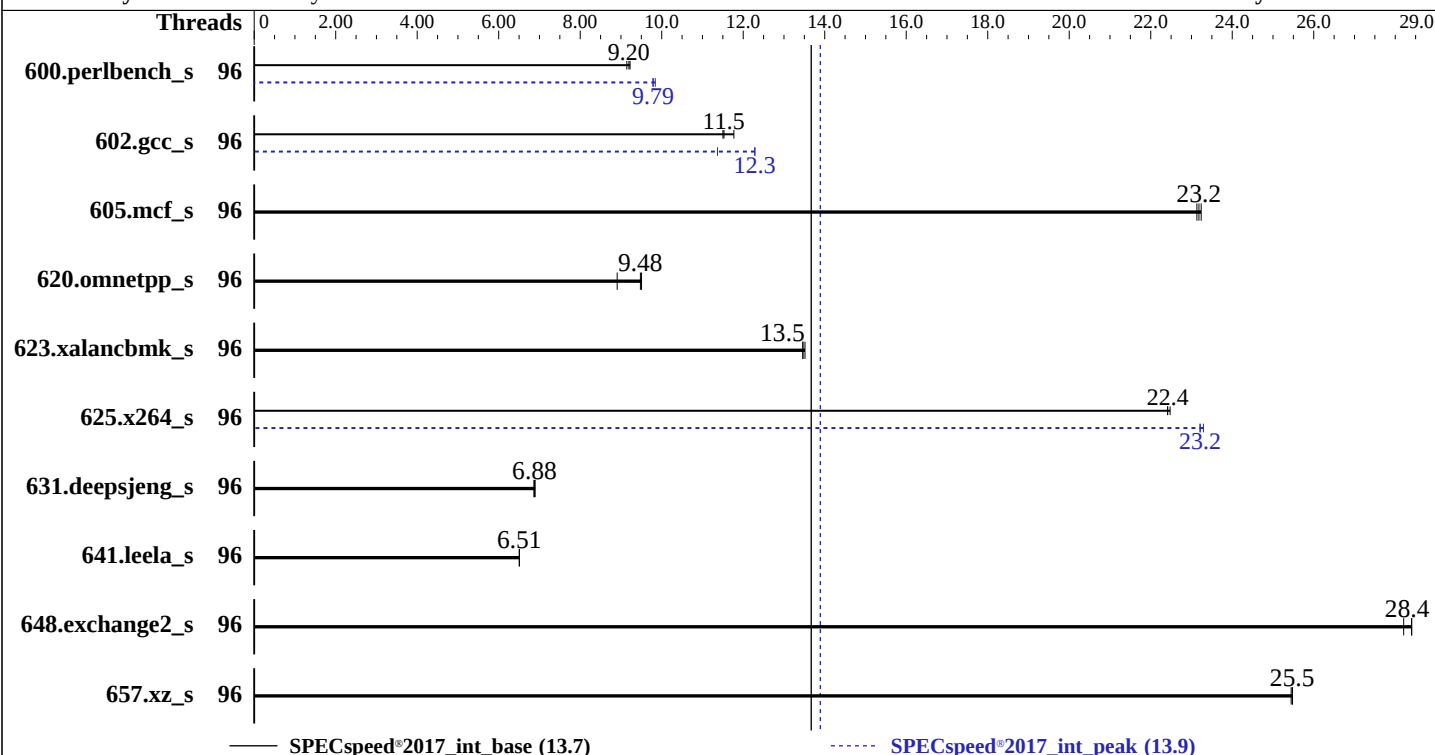
Test Sponsor: Cisco Systems

Tested by: Cisco Systems

Test Date: Aug-2025

Hardware Availability: Feb-2025

Software Availability: Jun-2024



### Hardware

CPU Name: Intel Xeon 6527P  
Max MHz: 4200  
Nominal: 3000  
Enabled: 48 cores, 2 chips, 2 threads/core  
Orderable: 1,2 chips  
Cache L1: 64 KB I + 48 KB D on chip per core  
L2: 2 MB I+D on chip per core  
L3: 144 MB I+D on chip per chip  
Other: None  
Memory: 1 TB (16 x 64 GB 2Rx4 PC5-6400B-R)  
Storage: 1 x 960 GB SSD  
Other: CPU Cooling: Air

### Software

OS: SUSE Linux Enterprise Server 15 SP6  
6.4.0-150600.21-default  
Compiler: C/C++: Version 2024.1 of Intel oneAPI DPC++/C++ Compiler for Linux;  
Fortran: Version 2024.1 of Intel Fortran Compiler for Linux;  
Parallel: Yes  
Firmware: Version 6.0.1a released Jul-2025  
File System: btrfs  
System State: Run level 3 (multi-user)  
Base Pointers: 64-bit  
Peak Pointers: 64-bit  
Other: jemalloc memory allocator V5.0.1  
Power Management: BIOS and OS set to prefer performance at the cost of additional power usage



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## Results Table

| Benchmark       | Base    |                   |                    |                   |                    |                    |                    | Peak    |                   |                    |                    |                    |                   |                    |
|-----------------|---------|-------------------|--------------------|-------------------|--------------------|--------------------|--------------------|---------|-------------------|--------------------|--------------------|--------------------|-------------------|--------------------|
|                 | Threads | Seconds           | Ratio              | Seconds           | Ratio              | Seconds            | Ratio              | Threads | Seconds           | Ratio              | Seconds            | Ratio              | Seconds           | Ratio              |
| 600.perlbench_s | 96      | 194               | 9.14               | <b><u>193</u></b> | <b><u>9.20</u></b> | 192                | 9.22               | 96      | 181               | 9.79               | <b><u>181</u></b>  | <b><u>9.79</u></b> | 180               | 9.84               |
| 602.gcc_s       | 96      | <b><u>345</u></b> | <b><u>11.5</u></b> | 338               | 11.8               | 346                | 11.5               | 96      | <b><u>324</u></b> | <b><u>12.3</u></b> | 350                | 11.4               | 324               | 12.3               |
| 605.mcf_s       | 96      | <b><u>204</u></b> | <b><u>23.2</u></b> | 204               | 23.1               | 203                | 23.2               | 96      | <b><u>204</u></b> | <b><u>23.2</u></b> | 204                | 23.1               | 203               | 23.2               |
| 620.omnetpp_s   | 96      | <b><u>172</u></b> | <b><u>9.48</u></b> | 172               | 9.50               | 183                | 8.91               | 96      | <b><u>172</u></b> | <b><u>9.48</u></b> | 172                | 9.50               | 183               | 8.91               |
| 623.xalanchmk_s | 96      | 105               | 13.5               | 105               | 13.5               | <b><u>105</u></b>  | <b><u>13.5</u></b> | 96      | 105               | 13.5               | 105                | 13.5               | <b><u>105</u></b> | <b><u>13.5</u></b> |
| 625.x264_s      | 96      | 78.7              | 22.4               | 78.5              | 22.5               | <b><u>78.7</u></b> | <b><u>22.4</u></b> | 96      | 76.0              | 23.2               | <b><u>76.0</u></b> | <b><u>23.2</u></b> | 75.7              | 23.3               |
| 631.deepsjeng_s | 96      | <b><u>208</u></b> | <b><u>6.88</u></b> | 208               | 6.89               | 209                | 6.86               | 96      | <b><u>208</u></b> | <b><u>6.88</u></b> | 208                | 6.89               | 209               | 6.86               |
| 641.leela_s     | 96      | <b><u>262</u></b> | <b><u>6.51</u></b> | 262               | 6.51               | 262                | 6.51               | 96      | <b><u>262</u></b> | <b><u>6.51</u></b> | 262                | 6.51               | 262               | 6.51               |
| 648.exchange2_s | 96      | 104               | 28.2               | 104               | 28.4               | <b><u>104</u></b>  | <b><u>28.4</u></b> | 96      | 104               | 28.2               | 104                | 28.4               | <b><u>104</u></b> | <b><u>28.4</u></b> |
| 657.xz_s        | 96      | <b><u>243</u></b> | <b><u>25.5</u></b> | 243               | 25.5               | 243                | 25.4               | 96      | <b><u>243</u></b> | <b><u>25.5</u></b> | 243                | 25.5               | 243               | 25.4               |

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Results appear in the order in which they were run. Bold underlined text indicates a median measurement.

## 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.

jemalloc, a general purpose malloc implementation

built with the RedHat Enterprise 7.5, and the system compiler gcc 4.8.5

sources available from jemalloc.net or <https://github.com/jemalloc/jemalloc/releases>



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## Platform Notes

### BIOS settings:

Sub NUMA clustering set to Disabled  
Hardware prefetcher set to Enabled  
Adjacent cache line prefetcher set to Disabled  
XPT prefetch set to Auto  
LLC prefetch set to Enabled  
Enhanced CPU performance set to Auto

Sysinfo program /home/cpu2017/bin/sysinfo  
Rev: r6732 of 2022-11-07 fe91c89b7ed5c36ae2c92cc097bec197  
running on localhost Mon Aug 25 05:14:39 2025

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 254 (254.10+suse.84.ge8d77af424)
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/transparent\_hugepage
17. /sys/kernel/mm/transparent\_hugepage/khugepaged
18. OS release
19. Disk information
20. /sys/devices/virtual/dmi/id
21. dmidecode
22. BIOS

1. uname -a  
Linux localhost 6.4.0-150600.21-default #1 SMP PREEMPT\_DYNAMIC Thu May 16 11:09:22 UTC 2024 (36c1e09)  
x86\_64 x86\_64 x86\_64 GNU/Linux

2. w  
05:14:39 up 1:05, 3 users, load average: 67.15, 82.91, 83.32  
USER TTY FROM LOGIN@ IDLE JCPU PCPU WHAT  
root tty1 - 04:19 54:55 1.64s 0.20s -bash

3. Username  
From environment variable \$USER: root

4. ulimit -a  
core file size (blocks, -c) unlimited

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### Platform Notes (Continued)

data seg size (kbytes, -d) unlimited  
scheduling priority (-e) 0  
file size (blocks, -f) unlimited  
pending signals (-i) 4125644  
max locked memory (kbytes, -l) 8192  
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) 4125644  
virtual memory (kbytes, -v) unlimited  
file locks (-x) unlimited

#### 5. sysinfo process ancestry

```
/usr/lib/systemd/systemd --switched-root --system --deserialize=42
login -- root
-bash
-bash
runcpu --define default-platform-flags -c ic2024.1-lin-sapphirerapids-speed-20240308.cfg --define cores=96
--tune all -o all --define drop_caches intspeerd
runcpu --define default-platform-flags --configfile ic2024.1-lin-sapphirerapids-speed-20240308.cfg --define
cores=96 --tune all --output_format all --define drop_caches --nopower --runmode speed --tune base:peak
--size refspeerd intspeerd --nopreenv --note-preenv --logfile
$SPEC/tmp/CPU2017.004/templogs/preenv.intspeerd.004.0.log --lognum 004.0 --from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /home/cpu2017
```

#### 6. /proc/cpuinfo

```
model name      : Intel(R) Xeon(R) 6527P
vendor_id       : GenuineIntel
cpu family      : 6
model           : 173
stepping        : 1
microcode       : 0x10003c2
bugs            : spectre_v1 spectre_v2 spec_store_bypass swapgs bhi
cpu cores       : 24
siblings        : 48
2 physical ids (chips)
96 processors (hardware threads)
physical id 0:  core ids 0-23
physical id 1:  core ids 0-23
physical id 0:  apicids 0-47
physical id 1:  apicids 128-175
```

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 2.39.3:

```
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):             96
```

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## Platform Notes (Continued)

On-line CPU(s) list: 0-95  
Vendor ID: GenuineIntel  
BIOS Vendor ID: Intel(R) Corporation  
Model name: Intel(R) Xeon(R) 6527P  
BIOS Model name: Intel(R) Xeon(R) 6527P CPU @ 3.0GHz  
BIOS CPU family: 179  
CPU family: 6  
Model: 173  
Thread(s) per core: 2  
Core(s) per socket: 24  
Socket(s): 2  
Stepping: 1  
CPU(s) scaling MHz: 19%  
CPU max MHz: 4200.0000  
CPU min MHz: 800.0000  
BogoMIPS: 6000.00  
Flags: fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36 clflush 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 monitor ds\_cpl smx est tm2 ssse3 sdbg fma cx16 xtpr pdcm pcid dca sse4\_1 sse4\_2 x2apic movbe popcnt tsc\_deadline\_timer aes xsave avx f16c rdrand lahf\_lm abm 3dnowprefetch cpuid\_fault epb cat\_l3 cat\_l2 cdp\_l3 intel\_ppin cdp\_l2 ssbd mba ibrs ibpb stibp ibrs\_enhanced fsgsbase tsc\_adjust bmi1 hle avx2 smep bmi2 erms invpcid rtm cqm 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\_mbm\_total cqm\_mbm\_local split\_lock\_detect user\_shstk avx\_vnni avx512\_bf16 wbnoinvd dtherm ida arat pln pts hwp hwp\_act\_window hwp\_epp hwp\_pkg\_req avx512vbmi umip pku ospke waitpkg avx512\_vbmi2 gfni vaes vpclmulqdq avx512\_vnni avx512\_bitalg tme avx512\_vpopcntdq la57 rdpid bus\_lock\_detect cldemote movdiri movdir64b enqcmd fsrm md\_clear serialize tsxldtrk pconfig arch\_lbr ibt amx\_bf16 avx512\_fp16 amx\_tile amx\_int8 flush\_l1d arch\_capabilities  
L1d cache: 2.3 MiB (48 instances)  
L1i cache: 3 MiB (48 instances)  
L2 cache: 96 MiB (48 instances)  
L3 cache: 288 MiB (2 instances)  
NUMA node(s): 2  
NUMA node0 CPU(s): 0-23, 48-71  
NUMA node1 CPU(s): 24-47, 72-95  
Vulnerability Gather data sampling: Not affected  
Vulnerability Itlb multihit: Not affected  
Vulnerability L1tf: Not affected  
Vulnerability Mds: Not affected  
Vulnerability Meltdown: Not affected  
Vulnerability Mmio stale data: Not affected  
Vulnerability Reg file data sampling: Not affected  
Vulnerability Retbleed: Not affected  
Vulnerability Spec rstack overflow: Not affected  
Vulnerability Spec store bypass: Mitigation; Speculative Store Bypass disabled via prctl  
Vulnerability Spectre v1: Mitigation; usercopy/swapgs barriers and \_\_user pointer sanitization  
Vulnerability Spectre v2: Mitigation; Enhanced / Automatic IBRS; IBPB conditional; RSB filling; PBRSE-IBRS Not affected; BHI BHI\_DIS\_S  
Vulnerability Srbds: Not affected  
Vulnerability Tsx async abort: Not affected

From lscpu --cache:

| NAME | ONE-SIZE | ALL-SIZE | WAYS | TYPE | LEVEL | SETS | PHY-LINE | COHERENCY-SIZE |
|------|----------|----------|------|------|-------|------|----------|----------------|
|------|----------|----------|------|------|-------|------|----------|----------------|

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### Platform Notes (Continued)

|     |      |      |                |   |        |   |    |
|-----|------|------|----------------|---|--------|---|----|
| L1d | 48K  | 2.3M | 12 Data        | 1 | 64     | 1 | 64 |
| L1i | 64K  | 3M   | 16 Instruction | 1 | 64     | 1 | 64 |
| L2  | 2M   | 96M  | 16 Unified     | 2 | 2048   | 1 | 64 |
| L3  | 144M | 288M | 16 Unified     | 3 | 147456 | 1 | 64 |

8. numactl --hardware

NOTE: a numactl 'node' might or might not correspond to a physical chip.

```
available: 2 nodes (0-1)
node 0 cpus: 0-23,48-71
node 0 size: 515379 MB
node 0 free: 513813 MB
node 1 cpus: 24-47,72-95
node 1 size: 516058 MB
node 1 free: 513762 MB
node distances:
node  0  1
 0:  10  21
 1:  21  10
```

9. /proc/meminfo

MemTotal: 1056192128 kB

10. who -r

run-level 3 Aug 25 04:09

11. Systemd service manager version: systemd 254 (254.10+suse.84.ge8d77af424)

```
Default Target    Status
multi-user        running
```

12. Services, from systemctl list-unit-files

```
STATE      UNIT FILES
enabled    YaST2-Firstboot YaST2-Second-Stage apparmor auditd cron getty@ irqbalance iscsi
            issue-generator kbdsettings klog lvm2-monitor nsd nvme-fc-boot-connections
            nvmmf-autoconnect postfix purge-kernels rollback rsyslog smartd sshd systemd-pstore
            virtqemud wicked wickedd-auto4 wickedd-dhcp4 wickedd-dhcp6 wickedd-nanny

enabled-runtime systemd-remount-fs
disabled      autofs autoyast-initscripts blk-availability boot-sysctl ca-certificates chrony-wait
            chronyd console-getty cups cups-browsed debug-shell dnsmasq ebttables exchange-bmc-os-info
            firewallld fsidd gpm grub2-once haveged hv_fcopy_daemon hv_kvp_daemon hv_vss_daemon ipmi
            ipmievdev iscsi-init iscsid issue-add-ssh-keys kexec-load ksm kvm_stat libvirt-guests
            lunmask man-db-create multipathd nfs nfs-blkmap nfs-server nfs-server rpcbind
            rpmconfigcheck rsyncd rtkit-daemon serial-getty@ smartd generate_opts snmpd snmptrapd
            strongswan strongswan-starter svnserv systemd-boot-check-no-failures systemd-confext
            systemd-network-generator systemd-nspawn@ systemd-sysext systemd-time-wait-sync
            systemd-timesyncd tcstd udisks2 virtinterfaced virtlockd virtlogd virtnetworkd virtnodedevd
            virtnwfilterd virtsecret virtstoraged

indirect     pcsd systemd-userdbd tftpd wickedd
```

13. Linux kernel boot-time arguments, from /proc/cmdline

```
BOOT_IMAGE=/boot/vmlinuz-6.4.0-150600.21-default
root=UUID=8e9f907e-efe9-44a3-b843-a3c1cccd3852
splash=silent
mitigations=auto
quiet
```

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## Platform Notes (Continued)

security=apparmor

### 14. cpupower frequency-info

analyzing CPU 1:

current policy: frequency should be within 800 MHz and 4.20 GHz.  
The governor "powersave" 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    | 2     |
| 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               | 20    |
| 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         | 0     |

### 16. /sys/kernel/mm/transparent\_hugepage

|                |          |             |               |         |            |
|----------------|----------|-------------|---------------|---------|------------|
| defrag         | [always] | defer       | defer+madvice | madvice | never      |
| enabled        | [always] | madvice     | never         |         |            |
| hpage_pmd_size | 2097152  |             |               |         |            |
| shmem_enabled  | always   | within_size | advise        | [never] | deny force |

### 17. /sys/kernel/mm/transparent\_hugepage/khugepaged

|                       |       |
|-----------------------|-------|
| 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 SP6

### 19. Disk information

SPEC is set to: /home/cpu2017

| Filesystem | Type | Size | Used | Avail | Use% | Mounted on |
|------------|------|------|------|-------|------|------------|
|------------|------|------|------|-------|------|------------|

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## Platform Notes (Continued)

```
/dev/nvme0n1p2 btrfs 370G 20G 349G 6% /home
```

```
-----
20. /sys/devices/virtual/dmi/id
Vendor:      Cisco Systems Inc
Product:     UCSX-210C-M8
Serial:      FCH2842725V
-----
```

```
-----
21. dmidecode
Additional information from dmidecode 3.4 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:
  9x 0xCE00 M321R8GA0PB2-CCPKC 64 GB 2 rank 6400
  7x 0xCE00 M321R8GA0PB2-CCPPC 64 GB 2 rank 6400
-----
```

```
-----
22. BIOS
(This section combines info from /sys/devices and dmidecode.)
BIOS Vendor:      Cisco Systems, Inc.
BIOS Version:     X210M8.6.0.1a.3.0718251042
BIOS Date:        07/18/2025
BIOS Revision:    5.35
-----
```

## Compiler Version Notes

```
=====
C      | 600.perlbench_s(base, peak) 602.gcc_s(base, peak) 605.mcf_s(base, peak) 625.x264_s(base, peak)
      | 657.xz_s(base, peak)
-----
```

```
Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2024.1.0 Build 20240308
Copyright (C) 1985-2024 Intel Corporation. All rights reserved.
-----
```

```
=====
C++    | 620.omnetpp_s(base, peak) 623.xalancbmk_s(base, peak) 631.deepsjeng_s(base, peak)
      | 641.leela_s(base, peak)
-----
```

```
Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2024.1.0 Build 20240308
Copyright (C) 1985-2024 Intel Corporation. All rights reserved.
-----
```

```
=====
Fortran | 648.exchange2_s(base, peak)
-----
```

```
Intel(R) Fortran Compiler for applications running on Intel(R) 64, Version 2024.1.0 Build 20240308
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-----
```

## Base Compiler Invocation

C benchmarks:  
icx

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# SPEC CPU®2017 Integer Speed Result

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## Cisco Systems

Cisco UCS X210c M8 (Intel Xeon 6527P 3.00 GHz processor)

SPECspeed®2017\_int\_base = 13.7

SPECspeed®2017\_int\_peak = 13.9

CPU2017 License: 9019

Test Sponsor: Cisco Systems

Tested by: Cisco Systems

Test Date: Aug-2025

Hardware Availability: Feb-2025

Software Availability: Jun-2024

## Base Compiler Invocation (Continued)

C++ benchmarks:

icpx

Fortran benchmarks:

ifx

## Base Portability Flags

600.perlbench\_s: -DSPEC\_LP64 -DSPEC\_LINUX\_X64  
602.gcc\_s: -DSPEC\_LP64  
605.mcf\_s: -DSPEC\_LP64  
620.omnetpp\_s: -DSPEC\_LP64  
623.xalancbmk\_s: -DSPEC\_LP64 -DSPEC\_LINUX  
625.x264\_s: -DSPEC\_LP64  
631.deepsjeng\_s: -DSPEC\_LP64  
641.leela\_s: -DSPEC\_LP64  
648.exchange2\_s: -DSPEC\_LP64  
657.xz\_s: -DSPEC\_LP64

## Base Optimization Flags

C benchmarks:

-w -std=c11 -m64 -Wl,-z,muldefs -xsapphirerapids -O3 -ffast-math  
-flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4 -fiopenmp  
-DSPEC\_OPENMP -L/usr/local/jemalloc64-5.0.1/lib -ljemalloc

C++ benchmarks:

-w -std=c++14 -m64 -Wl,-z,muldefs -xsapphirerapids -O3 -ffast-math  
-flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4  
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc

Fortran benchmarks:

-w -m64 -Wl,-z,muldefs -xsapphirerapids -O3 -ffast-math -flto  
-mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4  
-nostandard-realloc-lhs -align array32byte  
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc



# SPEC CPU®2017 Integer Speed Result

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## Cisco Systems

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SPECspeed®2017\_int\_peak = 13.9

CPU2017 License: 9019

Test Sponsor: Cisco Systems

Tested by: Cisco Systems

Test Date: Aug-2025

Hardware Availability: Feb-2025

Software Availability: Jun-2024

## Peak Compiler Invocation

C benchmarks:

icx

C++ benchmarks:

icpx

Fortran benchmarks:

ifx

## Peak Portability Flags

Same as Base Portability Flags

## Peak Optimization Flags

C benchmarks:

```
600.perlbench_s: -w -m64 -std=c11 -Wl,-z,muldefs
-fprofile-generate(pass 1)
-fprofile-use=default.profdata(pass 2) -xCORE-AVX2(pass 1)
-flto -Ofast(pass 1) -xCORE-AVX512 -O3 -ffast-math
-mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4
-fiopenmp -DSPEC_OPENMP -fno-strict-overflow
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

```
602.gcc_s: -w -m64 -std=c11 -Wl,-z,muldefs
-fprofile-generate(pass 1)
-fprofile-use=default.profdata(pass 2) -xCORE-AVX2(pass 1)
-flto -Ofast(pass 1) -xCORE-AVX512 -O3 -ffast-math
-mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4
-fiopenmp -DSPEC_OPENMP -L/usr/local/jemalloc64-5.0.1/lib
-ljemalloc
```

605.mcf\_s: basepeak = yes

```
625.x264_s: -w -std=c11 -m64 -Wl,-z,muldefs -xsapphirerapids -O3
-ffast-math -flto -mfpmath=sse -funroll-loops
-qopt-mem-layout-trans=4 -fiopenmp -DSPEC_OPENMP
-fno-alias -L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

657.xz\_s: basepeak = yes

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# SPEC CPU®2017 Integer Speed Result

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## Cisco Systems

Cisco UCS X210c M8 (Intel Xeon 6527P 3.00 GHz processor)

SPECspeed®2017\_int\_base = 13.7

SPECspeed®2017\_int\_peak = 13.9

**CPU2017 License:** 9019

**Test Sponsor:** Cisco Systems

**Tested by:** Cisco Systems

**Test Date:** Aug-2025

**Hardware Availability:** Feb-2025

**Software Availability:** Jun-2024

## Peak Optimization Flags (Continued)

C++ benchmarks:

620.omnetpp\_s: basepeak = yes

623.xalancbmk\_s: basepeak = yes

631.deepsjeng\_s: basepeak = yes

641.leela\_s: basepeak = yes

Fortran benchmarks:

648.exchange2\_s: basepeak = yes

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

<http://www.spec.org/cpu2017/flags/Intel-ic2024-official-linux64.html>

<http://www.spec.org/cpu2017/flags/Cisco-Platform-Settings-V1.2-GNR-revE.html>

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

<http://www.spec.org/cpu2017/flags/Intel-ic2024-official-linux64.xml>

<http://www.spec.org/cpu2017/flags/Cisco-Platform-Settings-V1.2-GNR-revE.xml>

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