



SPEC CPU®2026 Floating Point Rate Result

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Cisco Systems

Cisco UCS X410c M8 (Intel Xeon 6788P 2.0 GHz processor)

SPECrate®2026_fp_base = 1180

SPECrate®2026_fp_peak = 1210

CPU2026 License: 9019

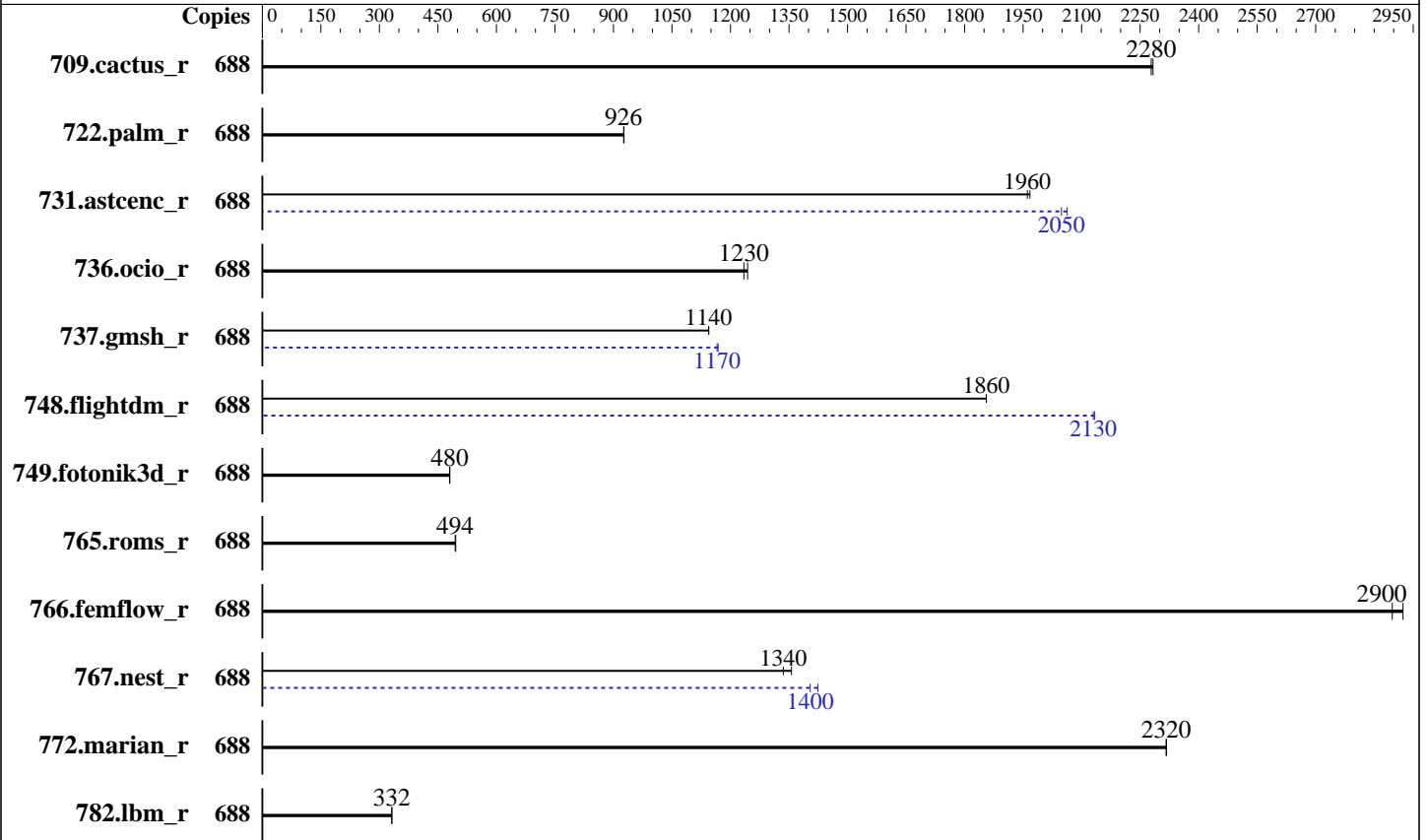
Test Sponsor: Cisco Systems

Tested by: Cisco Systems

Test Date: May-2026

Hardware Availability: May-2025

Software Availability: Apr-2026



Hardware

CPU Name: Intel Xeon 6788P
 Max MHz: 3800
 Nominal: 2000
 Enabled: 344 cores, 4 chips, 2 threads/core
 Orderable: 2,4 Chips
 Cache L1: 64 KB I + 48 KB D on chip per core
 L2: 2 MB I+D on chip per core
 L3: 336 MB I+D on chip per chip
 Other: None
 Memory: 2 TB (32 x 64 GB 2Rx4 PC5-6400B-R)
 Storage: 1 x 400 GB NVME SSD
 Cooling: Air
 Other: CPU Cooling: Air

Software

OS: SUSE Linux Enterprise Server 15 SP6
 6.4.0-150600.21-default
 Compiler: C/C++: Version 2026.0 of Intel oneAPI DPC++/C++
 Compiler for Linux;
 Fortran: Version 2026.0 of Intel Fortran
 Compiler for Linux
 Compiler Category: Vendor
 Firmware: Version 6.0.2b released Jan-2026
 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						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
709.cactus_r	688	259	2280	<u>259</u>	<u>2280</u>			688	259	2280	<u>259</u>	<u>2280</u>		
722.palm_r	688	<u>981</u>	<u>926</u>	980	927			688	<u>981</u>	<u>926</u>	980	927		
731.ascenc_r	688	294	1970	<u>295</u>	<u>1960</u>			688	<u>282</u>	<u>2050</u>	280	2060		
736.ocio_r	688	484	1240	<u>488</u>	<u>1230</u>			688	484	1240	<u>488</u>	<u>1230</u>		
737.gmsh_r	688	<u>276</u>	<u>1140</u>	276	1140			688	<u>271</u>	<u>1170</u>	270	1170		
748.flightdm_r	688	265	1860	<u>265</u>	<u>1860</u>			688	<u>231</u>	<u>2130</u>	231	2130		
749.fotonik3d_r	688	<u>1656</u>	<u>480</u>	1656	480			688	<u>1656</u>	<u>480</u>	1656	480		
765.roms_r	688	2186	496	<u>2192</u>	<u>494</u>			688	2186	496	<u>2192</u>	<u>494</u>		
766.femflow_r	688	<u>348</u>	<u>2900</u>	345	2920			688	<u>348</u>	<u>2900</u>	345	2920		
767.nest_r	688	<u>409</u>	<u>1340</u>	402	1360			688	383	1420	<u>389</u>	<u>1400</u>		
772.marian_r	688	<u>469</u>	<u>2320</u>	469	2320			688	<u>469</u>	<u>2320</u>	469	2320		
782.lbm_r	688	1188	332	<u>1188</u>	<u>332</u>			688	1188	332	<u>1188</u>	<u>332</u>		

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

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"
tuned-adm was set to latency-performance using "tuned-adm profile latency-performance"

Environment Variables Notes

Environment variables set by runcpu before the start of the run:
LD_LIBRARY_PATH = "/home/cpu2026/lib"
MALLOC_CONF = "retain:true"

General Notes

Binaries compiled on a system with 2x Intel Xeon Platinum 8280M CPU + 384GB RAM memory using CentOS Stream 9.
Transparent Huge Pages enabled by default
Prior to runcpu invocation
Filesystem page cache synced and cleared with:

(Continued on next page)



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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.

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>

Platform Notes

BIOS settings:

Adjacent cache line prefetcher set to Enabled
DCU Streamer Prefetch set to Enabled
UPI Power Management set to Enabled
Patrol scrub set to Disabled
XPT prefetch set to Disabled
Enhanced CPU performance set to Auto
CPU Performance set to Custom

```
Sysinfo program /home/cpu2026/bin/sysinfo
Rev: 779ab21020787073335a329f3a45e2cd
running on localhost Tue May 19 05:12:53 2026
```

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

Table of contents

1. `uname -srvm`
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)`

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Platform Notes (Continued)

- 12. Failed units, from `systemctl list-units --state=failed`
- 13. Services, from `systemctl list-unit-files`
- 14. Linux kernel boot-time arguments, from `/proc/cmdline`
- 15. `cpupower frequency-info`
- 16. `tuned-adm active`
- 17. `sysctl`
- 18. `/sys/kernel/mm/transparent_hugepage`
- 19. `/sys/kernel/mm/transparent_hugepage/khugepaged`
- 20. OS release
- 21. Disk information
- 22. `/sys/devices/virtual/dmi/id`
- 23. `dmidecode`
- 24. BIOS

```
-----
1. uname -srvm
Linux 6.4.0-150600.21-default #1 SMP PREEMPT_DYNAMIC Thu May 16 11:09:22 UTC 2024 (36c1e09) x86_64
```

```
-----
2. w
05:12:53 up 35 min,  2 users,  load average: 0.07, 0.02, 0.42
USER      TTY      FROM          LOGIN@   IDLE   JCPU   PCPU   WHAT
root      pts/0    10.29.148.201 04:41    12.00s 1.59s  0.02s -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) 8252476
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) 8252476
virtual memory          (kbytes, -v) unlimited
file locks              (-x) unlimited
```

(Continued on next page)



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Platform Notes (Continued)

```

-----
5. sysinfo process ancestry
/usr/lib/systemd/systemd --switched-root --system --deserialize=42
sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups
sshd: root [priv]
sshd: root@pts/0
-bash
-bash
runcpu --nobuild --reportable --action validate --define default-platform-flags --copies 688 -c
ic2026.0-graniterapids-cpu2026-1.0.1-rate-20260429.cfg --define smt-on --define cores=344 --define
physicalfirst --define invoke_with_interleave --define drop_caches --tune base,peak -o all fprate
runcpu --nobuild --reportable --action validate --define default-platform-flags --copies 688 --configfile
ic2026.0-graniterapids-cpu2026-1.0.1-rate-20260429.cfg --define smt-on --define cores=344 --define
physicalfirst --define invoke_with_interleave --define drop_caches --tune base,peak --output_format all
--nopower --runmode rate --tune base:peak --size refrate fprate --nopreenv --note-preenv --logfile
$SPEC/tmp/CPU2026.002/templogs/preenv.fprate.002.0.log --lognum 002.0 --from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /home/cpu2026

```

```

-----
6. /proc/cpuinfo
model name      : Intel(R) Xeon(R) 6788P
vendor_id      : GenuineIntel
cpu family     : 6
model          : 173
stepping       : 1
microcode      : 0x1000405
bugs           : spectre_v1 spectre_v2 spec_store_bypass swaps bhi
cpu cores      : 86
siblings       : 172
4 physical ids (chips)
688 processors (hardware threads)
physical id 0: core ids 0-42,64-106
physical id 1: core ids 0-42,64-106
physical id 2: core ids 0-42,64-106
physical id 3: core ids 0-42,64-106
physical id 0: apicids 0-85,128-213
physical id 1: apicids 256-341,384-469
physical id 2: apicids 512-597,640-725
physical id 3: apicids 768-853,896-981

Caution: /proc/cpuinfo data regarding chips, cores, and threads is not necessarily reliable, especially for
virtualized systems. Use the above data carefully.

```

7. lscpu

(Continued on next page)



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Platform Notes (Continued)

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):                       688
On-line CPU(s) list:         0-687
Vendor ID:                    GenuineIntel
BIOS Vendor ID:              Intel(R) Corporation
Model name:                   Intel(R) Xeon(R) 6788P
BIOS Model name:             Intel(R) Xeon(R) 6788P CPU @ 2.0GHz
BIOS CPU family:             179
CPU family:                   6
Model:                        173
Thread(s) per core:          2
Core(s) per socket:          86
Socket(s):                    4
Stepping:                     1
CPU(s) scaling MHz:          22%
CPU max MHz:                  3800.0000
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 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 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_lld arch_capabilities

```

```

L1d cache:                   16.1 MiB (344 instances)
L1i cache:                   21.5 MiB (344 instances)
L2 cache:                     688 MiB (344 instances)
L3 cache:                     1.3 GiB (4 instances)
NUMA node(s):                 8
NUMA node0 CPU(s):           0-42,344-386

```

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Platform Notes (Continued)

```

NUMA node1 CPU(s):          43-85,387-429
NUMA node2 CPU(s):          86-128,430-472
NUMA node3 CPU(s):          129-171,473-515
NUMA node4 CPU(s):          172-214,516-558
NUMA node5 CPU(s):          215-257,559-601
NUMA node6 CPU(s):          258-300,602-644
NUMA node7 CPU(s):          301-343,645-687
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/swappgs barriers and __user pointer sanitization
Vulnerability Spectre v2:          Mitigation; Enhanced / Automatic IBRS; IBPB conditional; RSB filling;
                                     PBR SB-eIBRS 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
L1d	48K	16.1M	12	Data	1	64	1	64
L1i	64K	21.5M	16	Instruction	1	64	1	64
L2	2M	688M	16	Unified	2	2048	1	64
L3	336M	1.3G	16	Unified	3	344064	1	64

8. `numactl --hardware`

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

```

available: 8 nodes (0-7)
node 0 cpus: 0-42,344-386
node 0 size: 257164 MB
node 0 free: 256279 MB
node 1 cpus: 43-85,387-429
node 1 size: 258025 MB
node 1 free: 257096 MB
node 2 cpus: 86-128,430-472
node 2 size: 258025 MB
node 2 free: 257326 MB
node 3 cpus: 129-171,473-515
node 3 size: 258025 MB
node 3 free: 255882 MB
node 4 cpus: 172-214,516-558

```

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Platform Notes (Continued)

```

node 4 size: 258025 MB
node 4 free: 257409 MB
node 5 cpus: 215-257,559-601
node 5 size: 257986 MB
node 5 free: 257322 MB
node 6 cpus: 258-300,602-644
node 6 size: 258025 MB
node 6 free: 257325 MB
node 7 cpus: 301-343,645-687
node 7 size: 257865 MB
node 7 free: 257074 MB
node distances:
node  0  1  2  3  4  5  6  7
  0:  10 12 21 21 21 21 21 21
  1:  12 10 21 21 21 21 21 21
  2:  21 21 10 12 21 21 21 21
  3:  21 21 12 10 21 21 21 21
  4:  21 21 21 21 10 12 21 21
  5:  21 21 21 21 12 10 21 21
  6:  21 21 21 21 21 21 10 12
  7:  21 21 21 21 21 21 12 10

```

```

-----
9. /proc/meminfo
   MemTotal:          2112660876 kB

```

```

-----
10. who -r
    run-level 3 May 19 04:39

```

```

-----
11. Systemd service manager version: systemd 254 (254.10+suse.84.ge8d77af424)
    Default Target    Status
    multi-user        degraded

```

```

-----
12. Failed units, from systemctl list-units --state=failed
    UNIT                LOAD    ACTIVE SUB    DESCRIPTION
    * sep5.service      loaded failed failed systemd script to load sep5 driver at boot time

```

```

-----
13. Services, from systemctl list-unit-files
    STATE                UNIT FILES
    enabled              YaST2-Firstboot YaST2-Second-Stage apparmor auditd cron display-manager getty@ irqbalance
                           issue-generator kbdsettings klog lvm2-monitor nscd nvme-fc-boot-connections
                           nvmf-autoconnect postfix purge-kernels rollback rsyslog sep5 smartd sshd systemd-pstore
                           wicked wickedd-auto4 wickedd-dhcp4 wickedd-dhcp6 wickedd-nanny

```

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Platform Notes (Continued)

```

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 ebttables exchange-bmc-os-info
                  firewallld fsidd gpm grub2-once haveged ipmi ipmievd issue-add-ssh-keys kexec-load lunmask
                  man-db-create multipathd nfs nfs-blkmap rpcbind rpmconfigcheck rsyncd serial-getty@
                  smartd_generate_opts snmpd snmptrapd systemd-boot-check-no-failures systemd-confext
                  systemd-network-generator systemd-sysext systemd-time-wait-sync systemd-timesyncd tuned
                  udisks2 vncserver@
indirect          systemd-userdbd wickedd

```

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

```

BOOT_IMAGE=/boot/vmlinuz-6.4.0-150600.21-default
root=UUID=c9a29bb1-f95d-4e5a-816b-db69c8356128
mitigations=auto
quiet
security=apparmor

```

15. cpupower frequency-info

```

analyzing CPU 397:
  current policy: frequency should be within 800 MHz and 3.80 GHz.
                  The governor "performance" may decide which speed to use
                  within this range.

boost state support:
  Supported: yes
  Active: yes

```

16. tuned-adm active

Current active profile: latency-performance

17. sysctl

```

kernel.numa_balancing          1
kernel.randomize_va_space      2
vm.compaction_proactiveness    20
vm.dirty_background_bytes      0
vm.dirty_background_ratio      3
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

```

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Platform Notes (Continued)

```

vm.nr_hugepages_mempolicy      0
vm.nr_overcommit_hugepages    0
vm.swappiness                  10
vm.watermark_boost_factor     15000
vm.watermark_scale_factor     10
vm.zone_reclaim_mode          0

```

```

-----
18. /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

```

```

-----
19. /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

```

```

-----
20. OS release
From /etc/*-release /etc/*-version
os-release SUSE Linux Enterprise Server 15 SP6

```

```

-----
21. Disk information
SPEC is set to: /home/cpu2026
Filesystem      Type      Size      Used Avail Use% Mounted on
/dev/nvme0nlp2  btrfs    371G      201G  169G  55% /home

```

```

-----
22. /sys/devices/virtual/dmi/id
Vendor:         Cisco Systems Inc
Product:        UCSX-410C-M8
Serial:         FVH2920P0DV

```

```

-----
23. 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.

```

(Continued on next page)



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Cisco UCS X410c M8 (Intel Xeon 6788P 2.0 GHz processor)

SPECrate®2026_fp_base = 1180

SPECrate®2026_fp_peak = 1210

CPU2026 License: 9019
Test Sponsor: Cisco Systems
Tested by: Cisco Systems

Test Date: May-2026
Hardware Availability: May-2025
Software Availability: Apr-2026

Platform Notes (Continued)

Memory:

- 1x 0xCE00 M321R8GA0PB2-CCPEC 64 GB 2 rank 6400
- 18x 0xCE00 M321R8GA0PB2-CCPKC 64 GB 2 rank 6400
- 13x 0xCE00 M321R8GA0PB2-CCPPC 64 GB 2 rank 6400

24. BIOS

(This section combines info from /sys/devices and dmidecode.)

```

BIOS Vendor:      Cisco Systems, Inc.
BIOS Version:     X410M8.6.0.2b.0.0130261958
BIOS Date:        01/30/2026
BIOS Revision:    5.35

```

Compiler Version Notes

```

=====
C          | 782.lbm_r(base, peak)
-----

```

```

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64,
Version 2026.0.0 Build 20260331
Copyright (C) 1985-2026 Intel Corporation. All rights reserved.
-----

```

```

=====
C++       | 731.astcenc_r(base, peak) 736.ocio_r(base, peak)
          | 748.flightdm_r(base, peak) 766.femflow_r(base, peak)
          | 767.nest_r(base, peak) 772.marian_r(base, peak)
-----

```

```

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64,
Version 2026.0.0 Build 20260331
Copyright (C) 1985-2026 Intel Corporation. All rights reserved.
-----

```

```

=====
C++, C    | 709.cactus_r(base, peak) 737.gmsh_r(base, peak)
-----

```

```

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64,
Version 2026.0.0 Build 20260331
Copyright (C) 1985-2026 Intel Corporation. All rights reserved.
-----

```

```

=====
Fortran   | 722.palm_r(base, peak) 749.fotonik3d_r(base, peak) 765.roms_r(base,
          | peak)
-----

```

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Compiler Version Notes (Continued)

Intel(R) Fortran Compiler for applications running on Intel(R) 64, Version 2026.0.0 Build 20260331

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Base Compiler Invocation

C benchmarks:

icx

C++ benchmarks:

icpx

Fortran benchmarks:

ifx

Benchmarks using both C and C++:

icpx icx

Base Portability Flags

737.gmsh_r: -fno-associative-math

Base Optimization Flags

C benchmarks:

-m64 -std=c18 -Wl,-z,muldefs -Wl,-plugin-opt=-inline-threshold=1500
-xgraniterapids -mprefer-vector-width=512 -O3 -ffp-model=fast -flto
-mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4
-L/usr/local/jemalloc-5.3.0/lib -ljemalloc

C++ benchmarks:

-m64 -std=c++17 -Wl,-z,muldefs -Wl,-plugin-opt=-inline-threshold=1500
-xgraniterapids -mprefer-vector-width=512 -O3 -ffp-model=fast -flto
-mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4
-L/usr/local/jemalloc-5.3.0/lib -ljemalloc

Fortran benchmarks:

-m64 -stand f18 -Wl,-z,muldefs -Wl,-plugin-opt=-inline-threshold=1500
-xgraniterapids -mprefer-vector-width=512 -O3 -ffp-model=fast -flto
-mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4

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Base Optimization Flags (Continued)

Fortran benchmarks (continued):

```
-nostandard-realloc-lhs -align array32byte -auto
-L/usr/local/jemalloc-5.3.0/lib -ljemalloc
```

Benchmarks using both C and C++:

```
-m64 -std=c++17 -std=c18 -Wl,-z,muldefs
-Wl,-plugin-opt=-inline-threshold=1500 -xgraniterapids
-mprefer-vector-width=512 -O3 -ffp-model=fast -flto -mfpmath=sse
-funroll-loops -qopt-mem-layout-trans=4 -L/usr/local/jemalloc-5.3.0/lib
-ljemalloc
```

Peak Compiler Invocation

C benchmarks:

```
icx
```

C++ benchmarks:

```
icpx
```

Fortran benchmarks:

```
ifx
```

Benchmarks using both C and C++:

```
icpx icx
```

Peak Portability Flags

```
737.gmsh_r: -fno-associative-math
```

Peak Optimization Flags

C benchmarks:

```
782.lbm_r: basepeak = yes
```

C++ benchmarks:

```
731.ascenc_r: -m64 -std=c++17 -Wl,-z,muldefs
-Wl,-plugin-opt=-inline-threshold=1500
-fprofile-generate(pass 1)
```

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Peak Optimization Flags (Continued)

731.astcenc_r (continued):

```
-fprofile-use=default.profddata(pass 2) -xHost(pass 1)
-ffp-model=fast -xgraniterapids(pass 2) -flt0
-mprefer-vector-width=512 -qopt-mem-layout-trans=4 -O3
-mfpmath=sse -funroll-loops
-L/usr/local/jemalloc-5.3.0/lib -ljemalloc
```

736.ocio_r: basepeak = yes

748.flightdm_r: Same as 731.astcenc_r

766.femflow_r: basepeak = yes

767.nest_r: Same as 731.astcenc_r

772.marian_r: basepeak = yes

Fortran benchmarks:

722.palm_r: basepeak = yes

749.fotonik3d_r: basepeak = yes

765.roms_r: basepeak = yes

Benchmarks using both C and C++:

709.cactus_r: basepeak = yes

```
737.gmsh_r: -m64 -std=c++17 -std=c18 -Wl,-z,muldefs
-Wl,-plugin-opt=-inline-threshold=1500
-fprofile-generate(pass 1)
-fprofile-use=default.profddata(pass 2) -xHost(pass 1)
-ffp-model=fast -xgraniterapids(pass 2) -flt0
-mprefer-vector-width=512 -qopt-mem-layout-trans=4 -O3
-mfpmath=sse -funroll-loops
-L/usr/local/jemalloc-5.3.0/lib -ljemalloc
```

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

<http://www.spec.org/cpu2026/results/flags/Intel-ic2026-official-linux64-v1.1.html>

<http://www.spec.org/cpu2026/results/flags/Cisco-Platform-Settings-V2.0-GNR-revP.html>

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

<http://www.spec.org/cpu2026/results/flags/Intel-ic2026-official-linux64-v1.1.xml>

<http://www.spec.org/cpu2026/results/flags/Cisco-Platform-Settings-V2.0-GNR-revP.xml>



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