



SPEC CPU®2026 Integer Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

Cisco Systems

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

SPECrate®2026_int_base = 1270

SPECrate®2026_int_peak = 1320

CPU2026 License: 9019

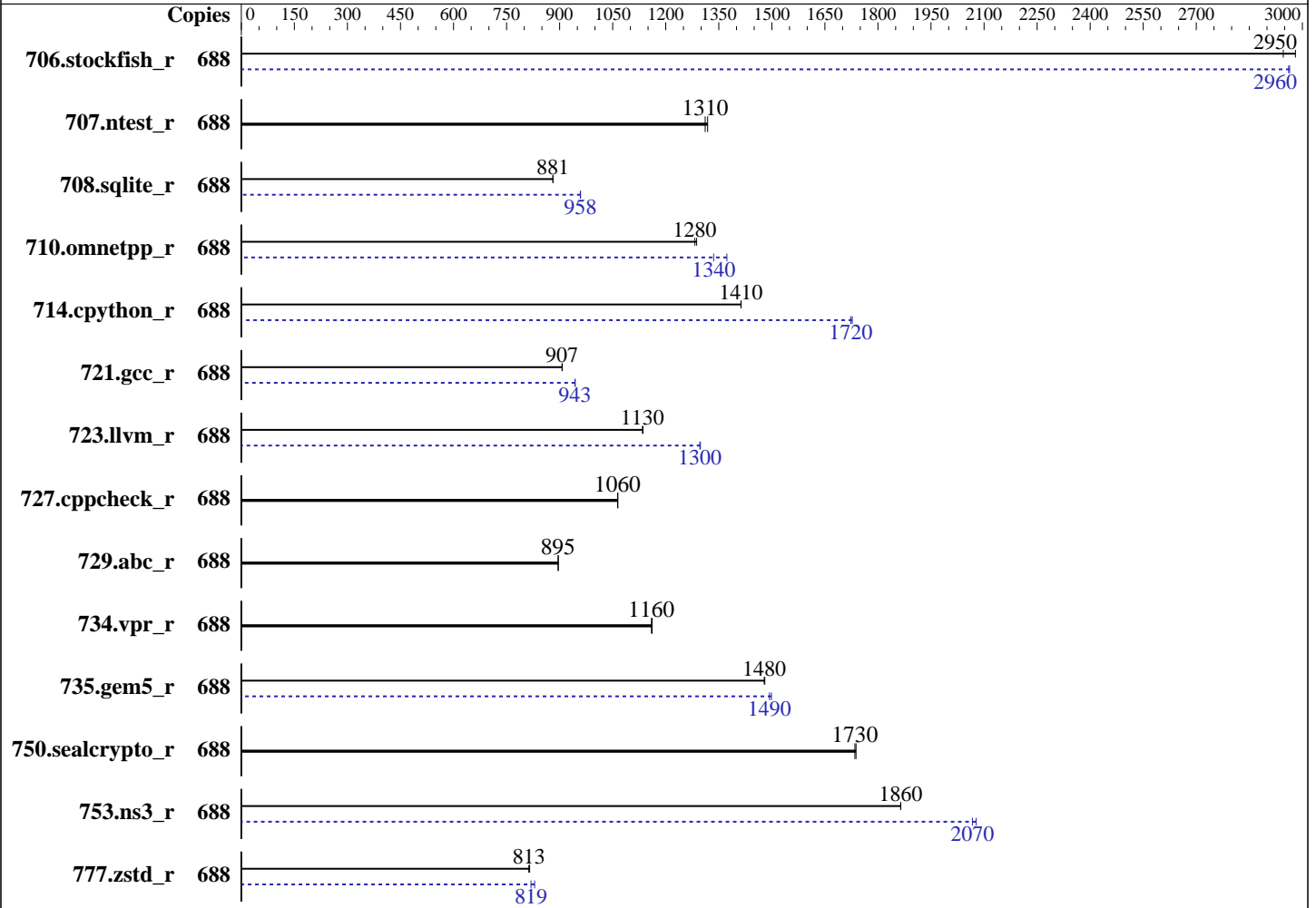
Test Sponsor: Cisco Systems

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: None

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Software (Continued)

Power Management: BIOS and OS set to prefer performance at the cost of additional power usage

Results Table

Benchmark	Base						Peak							
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
706.stockfish_r	688	291	2980	<u>294</u>	<u>2950</u>			688	<u>293</u>	<u>2960</u>	292	2960		
707.nstest_r	688	309	1320	<u>311</u>	<u>1310</u>			688	309	1320	<u>311</u>	<u>1310</u>		
708.sqlite_r	688	412	881	<u>412</u>	<u>881</u>			688	<u>379</u>	<u>958</u>	379	959		
710.omnetpp_r	688	260	1290	<u>261</u>	<u>1280</u>			688	244	1370	<u>250</u>	<u>1340</u>		
714.cpython_r	688	<u>233</u>	<u>1410</u>	233	1410			688	<u>191</u>	<u>1720</u>	191	1730		
721.gcc_r	688	520	908	<u>521</u>	<u>907</u>			688	500	944	<u>500</u>	<u>943</u>		
723.llvm_r	688	307	1140	<u>308</u>	<u>1130</u>			688	<u>269</u>	<u>1300</u>	269	1300		
727.cppcheck_r	688	<u>232</u>	<u>1060</u>	232	1060			688	<u>232</u>	<u>1060</u>	232	1060		
729.abc_r	688	<u>353</u>	<u>895</u>	352	896			688	<u>353</u>	<u>895</u>	352	896		
734.vpr_r	688	273	1160	<u>274</u>	<u>1160</u>			688	273	1160	<u>274</u>	<u>1160</u>		
735.gem5_r	688	226	1480	<u>227</u>	<u>1480</u>			688	224	1500	<u>224</u>	<u>1490</u>		
750.sealcrypto_r	688	212	1740	<u>213</u>	<u>1730</u>			688	212	1740	<u>213</u>	<u>1730</u>		
753.ns3_r	688	226	1860	<u>226</u>	<u>1860</u>			688	<u>204</u>	<u>2070</u>	203	2080		
777.zstd_r	688	543	815	<u>545</u>	<u>813</u>			688	<u>541</u>	<u>819</u>	534	829		

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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"



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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:

```
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 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 Mon May 18 21:31:59 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`

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Platform Notes (Continued)

- 10. who -r
- 11. Systemd service manager version: systemd 254 (254.10+suse.84.ge8d77af424)
- 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
 21:31:59 up 1:14, 2 users, load average: 0.07, 0.02, 0.00
USER      TTY      FROM          LOGIN@   IDLE   JCPU   PCPU   WHAT
root      tty1     -             21:02   28:51  0.06s  0.06s  -bash
root      pts/0   10.29.148.201 21:07   14.00s 1.66s  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) 8252477
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
-----
```

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Platform Notes (Continued)

```
max user processes      (-u) 8252477
virtual memory          (kbytes, -v) unlimited
file locks              (-x) unlimited
```

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 intrate
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 intrate --nopreenv --note-preenv --logfile
$SPEC/tmp/CPU2026.001/templogs/preenv.intrate.001.0.log --lognum 001.0 --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 swappgs 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.

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Platform Notes (Continued)

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):                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
pdpelgb rdtscp lm constant_tsc art arch_perfmon pebs bts rep_good
nopl xtopology nonstop_tsc cpuid aperfperf 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 ept
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
xsaves 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)

```

(Continued on next page)



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Platform Notes (Continued)

```

L3 cache:                               1.3 GiB (4 instances)
NUMA node(s):                             8
NUMA node0 CPU(s):                        0-42,344-386
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 Lltf:                       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/swaps barriers and __user pointer sanitization
Vulnerability Spectre v2:                  Mitigation; Enhanced / Automatic IBRS; IBPB conditional; RSB filling;
                                           PBRSE-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: 256104 MB
node 1 cpus: 43-85,387-429
node 1 size: 258025 MB
node 1 free: 257366 MB
node 2 cpus: 86-128,430-472
node 2 size: 258025 MB
node 2 free: 257278 MB
node 3 cpus: 129-171,473-515

```

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Platform Notes (Continued)

```

node 3 size: 258025 MB
node 3 free: 257346 MB
node 4 cpus: 172-214,516-558
node 4 size: 258025 MB
node 4 free: 257298 MB
node 5 cpus: 215-257,559-601
node 5 size: 258025 MB
node 5 free: 257007 MB
node 6 cpus: 258-300,602-644
node 6 size: 258025 MB
node 6 free: 257418 MB
node 7 cpus: 301-343,645-687
node 7 size: 257827 MB
node 7 free: 257174 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:          2112660912 kB

```

```

-----
10. who -r
    run-level 3 May 18 20:18

```

```

-----
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

```

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Platform Notes (Continued)

```

issue-generator kbdsettings klog lvm2-monitor nscd nvme-fc-boot-connections
nvme-fc-autoconnect postfix purge-kernels rollback rsyslog sep5 smartd sshd systemd-pstore
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 ebttables exchange-bmc-os-info
firewalld 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 458:
  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

```

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Platform Notes (Continued)

```

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                 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+madvice [madvice] never
enabled         [always] madvice 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/nvme2nlp2 btrfs 371G  65G  303G  18% /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.

```

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Test Sponsor: Cisco Systems

Tested by: Cisco Systems

Test Date: May-2026

Hardware Availability: May-2025

Software Availability: Apr-2026

Platform Notes (Continued)

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:

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 | 708.sqlite_r(base, peak) 714.cpython_r(base, peak) 777.zstd_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++ | 706.stockfish_r(base, peak) 707.ntest_r(base, peak)
727.cppcheck_r(base, peak) 753.ns3_r(base, peak)

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64,
Version 2026.0.0 Build 20260331
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=====
C++, C | 710.omnetpp_r(base, peak) 721.gcc_r(base, peak) 723.llvm_r(base, peak)
| 729.abc_r(base, peak) 734.vpr_r(base, peak) 735.gem5_r(base, peak)
750.sealcrypto_r(base, peak)

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SPEC CPU®2026 Integer Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

Cisco Systems

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

SPECrate®2026_int_base = 1270

SPECrate®2026_int_peak = 1320

CPU2026 License: 9019

Test Sponsor: Cisco Systems

Tested by: Cisco Systems

Test Date: May-2026

Hardware Availability: May-2025

Software Availability: Apr-2026

Base Compiler Invocation

C benchmarks:

icx

C++ benchmarks:

icpx

Benchmarks using both C and C++:

icpx icx

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  
-fno-strict-aliasing -L/opt/intel/oneapi/compiler/2026.0/lib -lqkmalloc
```

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/opt/intel/oneapi/compiler/2026.0/lib -lqkmalloc
```

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 -fno-strict-aliasing  
-L/opt/intel/oneapi/compiler/2026.0/lib -lqkmalloc
```

Peak Compiler Invocation

C benchmarks:

icx

C++ benchmarks:

icpx

Benchmarks using both C and C++:

icpx icx



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Software Availability: Apr-2026

Peak Optimization Flags

C benchmarks:

```
-m64 -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) -flto
-mprefer-vector-width=512 -qopt-mem-layout-trans=4 -O3 -mfpmath=sse
-funroll-loops -fno-strict-aliasing
-L/opt/intel/oneapi/compiler/2026.0/lib -lqkmallocc
```

C++ benchmarks:

```
706.stockfish_r: -m64 -std=c++17 -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) -flto
-mprefer-vector-width=512 -qopt-mem-layout-trans=4 -O3
-mfpmath=sse -funroll-loops
-L/opt/intel/oneapi/compiler/2026.0/lib -lqkmallocc
```

707.ntest_r: basepeak = yes

727.cppcheck_r: basepeak = yes

753.ns3_r: Same as 706.stockfish_r

Benchmarks using both C and C++:

```
710.omnetpp_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) -flto
-mprefer-vector-width=512 -qopt-mem-layout-trans=4 -O3
-mfpmath=sse -funroll-loops -fno-strict-aliasing
-L/opt/intel/oneapi/compiler/2026.0/lib -lqkmallocc
```

```
721.gcc_r: -m64 -std=c++17 -std=c18 -Wl,-z,muldefs
-fprofile-generate(pass 1)
-fprofile-use=default.profddata(pass 2) -xHost(pass 1)
-ffp-model=fast -xgraniterapids(pass 2) -flto
-mprefer-vector-width=512 -qopt-mem-layout-trans=4 -O3
-mfpmath=sse -funroll-loops -fno-strict-aliasing
-L/opt/intel/oneapi/compiler/2026.0/lib -lqkmallocc
```

723.llvm_r: Same as 721.gcc_r

(Continued on next page)



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Peak Optimization Flags (Continued)

729.abc_r: basepeak = yes

734.vpr_r: basepeak = yes

735.gem5_r: Same as 710.omnetpp_r

750.sealcrypto_r: basepeak = yes

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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