



SPEC CPU®2026 Integer Rate Result

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Supermicro
(Test Sponsor: Intel Corporation)

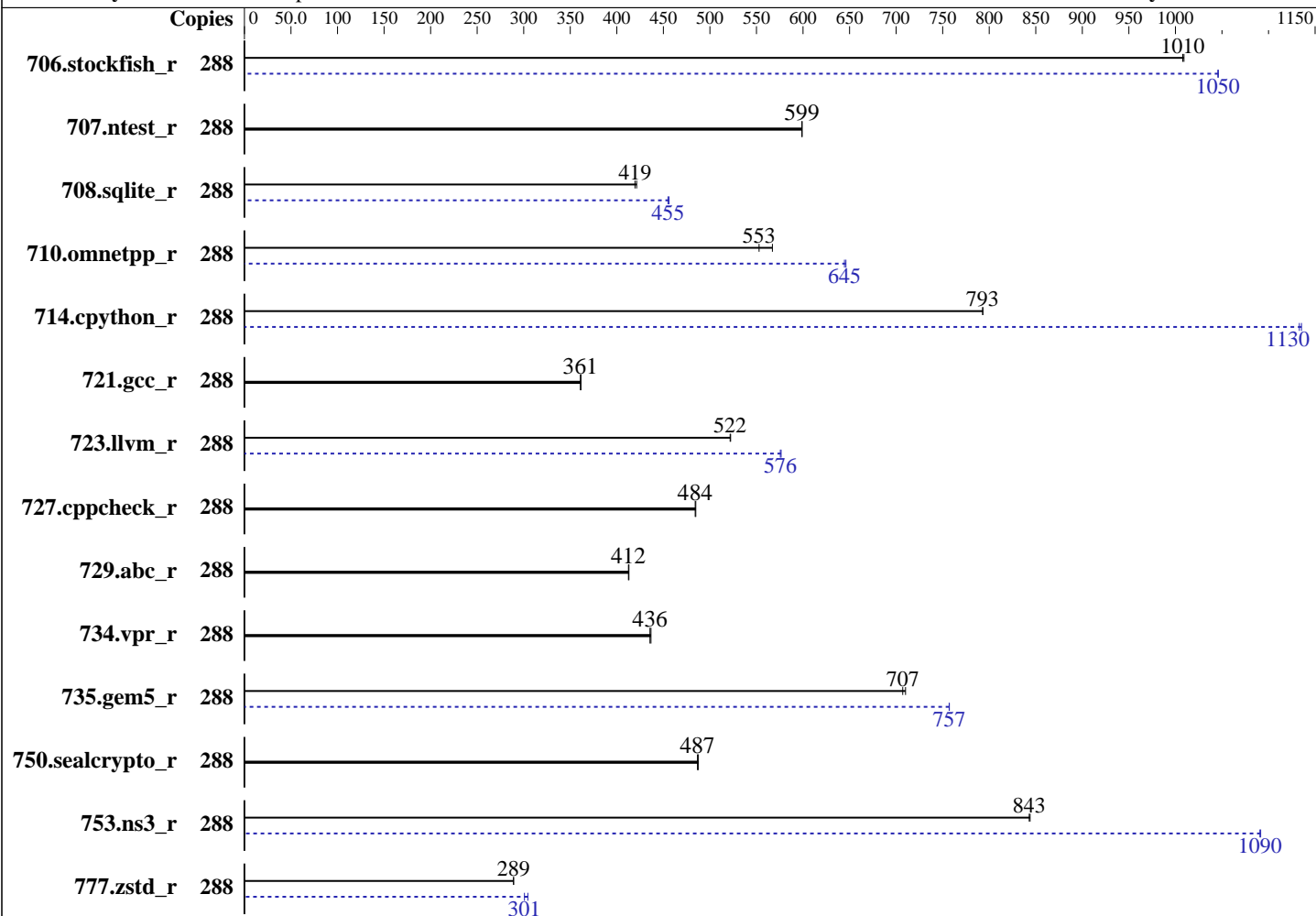
SPECrate®2026_int_base = 534

Hyper SuperServer SYS-222H-TN

SPECrate®2026_int_peak = 577

CPU2026 License: 13
Test Sponsor: Intel Corporation
Tested by: Intel Corporation

Test Date: Feb-2026
Hardware Availability: Feb-2025
Software Availability: Nov-2025



Hardware

CPU Name: Intel Xeon 6780E
Max MHz: 3000
Nominal: 2200
Enabled: 288 cores, 2 chips
Orderable: 1,2 chips
Cache L1: 64 KB I + 32 KB D on chip per core
L2: 4 MB I+D on chip per core
L3: 108 MB I+D on chip per chip
Other: None
Memory: 1 TB (16 x 64 GB 2Rx4 PC5-6400B-R)
Storage: 1 x 900 GB M.2 NVMe SSD
Cooling: Air
Other: None

Software

OS: Ubuntu 24.04 LTS
6.8.0-90-generic
Compiler: C/C++: Version 2025.3 of Intel oneAPI DPC++/C++ Compiler for Linux;
Fortran: Version 2025.3 of Intel Fortran Compiler for Linux
Compiler Category: Vendor
Firmware: Version 5.35 released Aug-2025
File System: ext4
System State: Run level 5 (Multiuser with networking)
Base Pointers: 64-bit
Peak Pointers: 64-bit
Other: None
Power Management: BIOS set to prefer performance at the cost of additional power usage.



SPEC

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Results Table

| Benchmark | Base | | | | | | | Peak | | | | | | |
|------------------|--------|------------|-------------|------------|------------|---------|-------|--------|------------|-------------|------------|-------------|---------|-------|
| | Copies | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio | Copies | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio |
| 706.stockfish_r | 288 | 360 | 1010 | 360 | 1010 | | | 288 | 347 | 1050 | 347 | 1050 | | |
| 707.ntest_r | 288 | 285 | 599 | 285 | 599 | | | 288 | 285 | 599 | 285 | 599 | | |
| 708.sqlite_r | 288 | 361 | 421 | 363 | 419 | | | 288 | 334 | 455 | 333 | 456 | | |
| 710.omnetpp_r | 288 | 253 | 553 | 247 | 567 | | | 288 | 217 | 646 | 217 | 645 | | |
| 714.cpython_r | 288 | 174 | 793 | 174 | 793 | | | 288 | 122 | 1130 | 122 | 1140 | | |
| 721.gcc_r | 288 | 548 | 361 | 547 | 362 | | | 288 | 548 | 361 | 547 | 362 | | |
| 723.llvm_r | 288 | 280 | 522 | 280 | 522 | | | 288 | 253 | 576 | 254 | 576 | | |
| 727.cppcheck_r | 288 | 214 | 484 | 213 | 485 | | | 288 | 214 | 484 | 213 | 485 | | |
| 729.abc_r | 288 | 320 | 413 | 320 | 412 | | | 288 | 320 | 413 | 320 | 412 | | |
| 734.vpr_r | 288 | 305 | 436 | 304 | 437 | | | 288 | 305 | 436 | 304 | 437 | | |
| 735.gem5_r | 288 | 198 | 710 | 198 | 707 | | | 288 | 185 | 757 | 185 | 757 | | |
| 750.sealcrypto_r | 288 | 317 | 488 | 317 | 487 | | | 288 | 317 | 488 | 317 | 487 | | |
| 753.ns3_r | 288 | 209 | 843 | 209 | 844 | | | 288 | 162 | 1090 | 162 | 1090 | | |
| 777.zstd_r | 288 | 642 | 289 | 641 | 289 | | | 288 | 609 | 304 | 617 | 301 | | |

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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"

Environment Variables Notes

Environment variables set by runcpu before the start of the run:
LD_LIBRARY_PATH = "/root/cpu2026_new/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

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General Notes (Continued)

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 Configuration :
Workload Profile set to Disabled
Power Performance Tuning set to BIOS Controls EPB
Energy Perf Bias CFG mode set to Extreme Performance
KTI Prefetch set to Enabled
LLC Dead Line Alloc set to Disabled
BMC Configuration:
System Fan speed set to full speed

Sysinfo program /root/cpu2026_new/bin/sysinfo
Rev: 069f95da7e7f5d81b2ce48a82150e54f
running on smc-gnr-sp Thu Feb 5 05:25:49 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 255 (255.4-lubuntu8.8)
12. Failed units, from systemctl list-units --state=failed
13. Services, from systemctl list-unit-files

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Platform Notes (Continued)

- 14. Linux kernel boot-time arguments, from /proc/cmdline
- 15. cpupower frequency-info
- 16. sysctl
- 17. /sys/kernel/mm/transparent_hugepage
- 18. /sys/kernel/mm/transparent_hugepage/khugepaged
- 19. OS release
- 20. Disk information
- 21. /sys/devices/virtual/dmi/id
- 22. dmidecode
- 23. BIOS

```
-----
1. uname -srvm
Linux 6.8.0-90-generic #91-Ubuntu SMP PREEMPT_DYNAMIC Tue Nov 18 14:14:30 UTC 2025 x86_64
-----
```

```
-----
2. w
05:25:49 up 14:54,  4 users,  load average: 0.00, 8.64, 92.44
USER      TTY      FROM          LOGIN@      IDLE        JCPU      PCPU  WHAT
root      pts/0    10.125.66.56  04:53       7:20m      0.00s    0.12s sshd: root@notty
root      pts/0    10.125.66.56  04:53       7:20m      0.00s    0.90s sshd: root@pts/0
root      pts/0    10.241.241.144 03:16       7:20m      0.00s    0.04s sshd: root@notty
-----
```

```
-----
3. Username
From environment variable $USER:  root
-----
```

```
-----
4. ulimit -a
time(seconds)      unlimited
file(blocks)       unlimited
data(kbytes)       unlimited
stack(kbytes)      unlimited
coredump(blocks)   0
memory(kbytes)     unlimited
locked memory(kbytes) 132038924
process            4125905
nofiles            1024
vmemory(kbytes)    unlimited
locks              unlimited
rtprio             0
-----
```

```
-----
5. sysinfo process ancestry
/sbin/init
tmux new -s spec
-----
```

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Platform Notes (Continued)

```

-bash
-bash
runcpu --nobuild --action validate --define default-platform-flags --copies 288 -c
ic2025.3-sierraforest-cpu2026-0.902-rate-20260121.cfg --define smt-on --define cores=288 --define
physicalfirst --define invoke_with_interleave --define drop_caches --reportable --tune base,peak -o all
intrate
runcpu --nobuild --action validate --define default-platform-flags --copies 288 --configfile
ic2025.3-sierraforest-cpu2026-0.902-rate-20260121.cfg --define smt-on --define cores=288 --define
physicalfirst --define invoke_with_interleave --define drop_caches --reportable --tune base,peak
--output_format all --nopower --runmode rate --tune base:peak --size refrate intrate --nopreenv
--note-preenv --logfile $SPEC/tmp/CPU2026.009/templogs/preenv.intrate.009.0.log --lognum 009.0
--from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /root/cpu2026_new

```

```

-----
6. /proc/cpuinfo
   model name      : Intel(R) Xeon(R) 6780E
   vendor_id       : GenuineIntel
   cpu family      : 6
   model           : 175
   stepping        : 3
   microcode       : 0x3000382
   bugs            : spectre_v1 spectre_v2 spec_store_bypass swapgs bhi vmscape
   cpu cores       : 144
   siblings        : 144
   2 physical ids (chips)
   288 processors (hardware threads)
   physical id 0:  core ids 0-143
   physical id 1:  core ids 0-143
   physical id 0:  apicids
0,2,4,6,8,10,12,14,16,18,20,22,24,26,28,30,32,34,36,38,40,42,44,46,48,50,52,54,56,58,60,62,64,66,68,70,72
,74,76,78,80,82,84,86,88,90,92,94,96,98,100,102,104,106,108,110,112,114,116,118,120,122,124,126,128,130,1
32,134,136,138,140,142,144,146,148,150,152,154,156,158,160,162,164,166,168,170,172,174,176,178,180,182,18
4,186,188,190,192,194,196,198,200,202,204,206,208,210,212,214,216,218,220,222,224,226,228,230,232,234,236
,238,240,242,244,246,248,250,252,254,256,258,260,262,264,266,268,270,272,274,276,278,280,282,284,286
   physical id 1:  apicids
512,514,516,518,520,522,524,526,528,530,532,534,536,538,540,542,544,546,548,550,552,554,556,558,560,562,5
64,566,568,570,572,574,576,578,580,582,584,586,588,590,592,594,596,598,600,602,604,606,608,610,612,614,61
6,618,620,622,624,626,628,630,632,634,636,638,640,642,644,646,648,650,652,654,656,658,660,662,664,666,668
,670,672,674,676,678,680,682,684,686,688,690,692,694,696,698,700,702,704,706,708,710,712,714,716,718,720,
722,724,726,728,730,732,734,736,738,740,742,744,746,748,750,752,754,756,758,760,762,764,766,768,770,772,7
74,776,778,780,782,784,786,788,790,792,794,796,798

```

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:                52 bits physical, 48 bits virtual
Byte Order:                   Little Endian
CPU(s):                       288
On-line CPU(s) list:         0-287
Vendor ID:                    GenuineIntel
BIOS Vendor ID:              Intel(R) Corporation
Model name:                   Intel(R) Xeon(R) 6780E
BIOS Model name:              Intel(R) Xeon(R) 6780E CPU @ 2.2GHz
BIOS CPU family:              179
CPU family:                   6
Model:                        175
Thread(s) per core:          1
Core(s) per socket:          144
Socket(s):                    2
Stepping:                     3
BogoMIPS:                     4400.00

```

```

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 vmx 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 tpr_shadow flexpriority ept
                             vpid ept_ad fsgsbase tsc_adjust bmi1 avx2 smep bmi2 erms invpcid cqm
                             rdt_a rdseed adx smap clflushopt clwb intel_pt sha_ni xsaveopt xsavec
                             xgetbv1 xsaves cqm_llc cqm_occup_llc cqm_mbm_total cqm_mbm_local
                             split_lock_detect user_shstk avx_vnni lam wbnoinvd dtherm ida arat
                             pln pts vnmi umip pku ospke waitpkg gfni vaes vpclmulqdq tme rdpid
                             bus_lock_detect cldemote movdiri movdir64b enqcmd fsrm md_clear
                             serialize pconfig arch_lbr ibt flush_lld arch_capabilities
                             ibpb_exit_to_user

```

```

Virtualization:              VT-x
L1d cache:                   9 MiB (288 instances)
L1i cache:                   18 MiB (288 instances)
L2 cache:                    288 MiB (72 instances)
L3 cache:                    216 MiB (2 instances)
NUMA node(s):                2
NUMA node0 CPU(s):           0-143
NUMA node1 CPU(s):           144-287
Vulnerability Gather data sampling: Not affected

```

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Platform Notes (Continued)

```

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-eIBRS Not affected; BHI BHI_DIS_S
Vulnerability Srbds:                  Not affected
Vulnerability Tsx async abort:        Not affected
Vulnerability Vmscape:                Mitigation; IBPB before exit to userspace

```

From lscpu --cache:

| NAME | ONE-SIZE | ALL-SIZE | WAYS | TYPE | LEVEL | SETS | PHY-LINE | COHERENCY-SIZE |
|------|----------|----------|------|-------------|-------|--------|----------|----------------|
| L1d | 32K | 9M | 8 | Data | 1 | 64 | 1 | 64 |
| L1i | 64K | 18M | 8 | Instruction | 1 | 128 | 1 | 64 |
| L2 | 4M | 288M | 16 | Unified | 2 | 4096 | 1 | 64 |
| L3 | 108M | 216M | 12 | 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: 0-143
node 0 size: 515566 MB
node 0 free: 484784 MB
node 1 cpus: 144-287
node 1 size: 515987 MB
node 1 free: 485892 MB
node distances:
node  0  1
 0:  10  21
 1:  21  10

```

9. /proc/meminfo

MemTotal: 1056311404 kB

10. who -r

run-level 5 Feb 4 14:33

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Platform Notes (Continued)

11. Systemd service manager version: systemd 255 (255.4-lubuntu8.8)
Default Target Status
graphical degraded

12. Failed units, from systemctl list-units --state=failed
UNIT LOAD ACTIVE SUB DESCRIPTION
* fwupd-refresh.service loaded failed failed Refresh fwupd metadata and update motd
* systemd-networkd-wait-online.service loaded failed failed Wait for Network to be Configured
Legend: LOAD -> Reflects whether the unit definition was properly loaded.
ACTIVE -> The high-level unit activation state, i.e. generalization of SUB.
SUB -> The low-level unit activation state, values depend on unit type.
2 loaded units listed.

13. Services, from systemctl list-unit-files
STATE UNIT FILES
enabled ModemManager apparmor appport blk-availability cloud-config cloud-final cloud-init cloud-init-local console-setup cron dmesg e2scrub_reap finalrd getty@ gpu-manager grub-common grub-initrd-fallback keyboard-setup lvm2-monitor multipathd networkd-dispatcher open-iscsi open-vm-tools pollinate rsyslog secureboot-db setvtrgb snapd sysstat systemd-networkd systemd-networkd-wait-online systemd-pstore systemd-resolved systemd-timesyncd thermald ua-reboot-cmds ubuntu-advantage udisks2 ufw unattended-upgrades vgauth
enabled-runtime netplan-ovs-cleanup systemd-fsck-root systemd-remount-fs
disabled console-getty debug-shell ipmievd iscsid nftables rsync serial-getty@ ssh systemd-boot-check-no-failures systemd-confext systemd-network-generator systemd-networkd-wait-online@ systemd-pcrlock-file-system systemd-pcrlock-firmware-code systemd-pcrlock-firmware-config systemd-pcrlock-machine-id systemd-pcrlock-make-policy systemd-pcrlock-secureboot-authority systemd-pcrlock-secureboot-policy systemd-sysextr systemd-time-wait-sync upower
generated openipmi
indirect systemd-sysupdate systemd-sysupdate-reboot uidd
masked cryptdisks cryptdisks-early hwclock multipath-tools-boot screen-cleanup sudo x11-common

14. Linux kernel boot-time arguments, from /proc/cmdline
BOOT_IMAGE=/boot/vmlinuz-6.8.0-90-generic
root=UUID=e15c24f4-c5fa-4691-a009-705a47ba067b
ro

15. cpupower frequency-info
analyzing CPU 192:
Unable to determine current policy
boost state support:
Supported: yes

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Platform Notes (Continued)

Active: yes

16. 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 | 60 |
| vm.watermark_boost_factor | 15000 |
| vm.watermark_scale_factor | 10 |
| vm.zone_reclaim_mode | 0 |

17. /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 |

18. /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 |

19. OS release

| | | |
|------------|------------------|----------------|
| From | /etc/*-release | /etc/*-version |
| os-release | Ubuntu 24.04 LTS | |

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Platform Notes (Continued)

20. Disk information

SPEC is set to: /root/cpu2026_new

| Filesystem | Type | Size | Used | Avail | Use% | Mounted on |
|----------------|------|------|------|-------|------|------------|
| /dev/nvme0n1p2 | ext4 | 879G | 293G | 541G | 36% | / |

21. /sys/devices/virtual/dmi/id

```
Vendor: Supermicro
Product: SYS-222H-TN
Product Family: Family
Serial: S913244X4504458
```

22. dmidecode

Additional information from dmidecode 3.5 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:

```
14x Micron Technology MTC40F2046S1RC64BDY QSFF 64 GB 2 rank 6400
2x Micron Technology MTC40F2046S1RC64BDY USFF 64 GB 2 rank 6400
```

23. BIOS

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

```
BIOS Vendor: American Megatrends International, LLC.
BIOS Version: 1.4
BIOS Date: 08/21/2025
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 2025.3.0 Build 20251010  
Copyright (C) 1985-2025 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)  
=====
```

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SPEC CPU®2026 Integer Rate Result

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Supermicro

(Test Sponsor: Intel Corporation)

SPECrate®2026_int_base = 534

Hyper SuperServer SYS-222H-TN

SPECrate®2026_int_peak = 577

CPU2026 License: 13

Test Sponsor: Intel Corporation

Tested by: Intel Corporation

Test Date: Feb-2026

Hardware Availability: Feb-2025

Software Availability: Nov-2025

Compiler Version Notes (Continued)

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64,
Version 2025.3.0 Build 20251010
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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)  
=====
```

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64,
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Base Compiler Invocation

C benchmarks:

icx

C++ benchmarks:

icpx

Benchmarks using both C and C++:

icpx icx

Base Portability Flags

```
706.stockfish_r: -DSPEC_LP64  
707.ntest_r: -DSPEC_LP64  
708.sqlite_r: -DSPEC_LP64  
710.omnetpp_r: -DSPEC_LP64  
714.cpython_r: -DSPEC_LP64  
721.gcc_r: -DSPEC_LP64  
723.llvm_r: -DSPEC_LP64  
727.cppcheck_r: -DSPEC_LP64  
729.abc_r: -DSPEC_LP64  
734.vpr_r: -DSPEC_LP64  
735.gem5_r: -DSPEC_LP64  
750.sealcrypto_r: -DSPEC_LP64  
753.ns3_r: -DSPEC_LP64  
777.zstd_r: -DSPEC_LP64
```



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Base Optimization Flags

C benchmarks:

```
-m64 -std=c18 -Wl,-z,muldefs -xsierraforest -O3 -ffp-model=fast
-flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4
-L/opt/intel/oneapi/compiler/2025.3/lib -lqkmalloc
```

C++ benchmarks:

```
-m64 -std=c++17 -Wl,-z,muldefs -xsierraforest -O3 -ffp-model=fast
-flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4
-L/opt/intel/oneapi/compiler/2025.3/lib -lqkmalloc
```

Benchmarks using both C and C++:

```
-m64 -std=c++17 -std=c18 -Wl,-z,muldefs -xsierraforest -O3
-ffp-model=fast -flto -mfpmath=sse -funroll-loops
-qopt-mem-layout-trans=4 -L/opt/intel/oneapi/compiler/2025.3/lib
-lqkmalloc
```

Peak Compiler Invocation

C benchmarks:

icx

C++ benchmarks:

icpx

Benchmarks using both C and C++:

icpx icx

Peak Portability Flags

Same as Base Portability Flags

Peak Optimization Flags

C benchmarks:

```
-m64 -std=c18 -Wl,-z,muldefs -fprofile-generate(pass 1)
-fprofile-use=default.profddata(pass 2) -xCORE-AVX2(pass 1)
-ffp-model=fast -xsierraforest(pass 2) -flto -qopt-mem-layout-trans=4
-O3 -mfpmath=sse -funroll-loops
-L/opt/intel/oneapi/compiler/2025.3/lib -lqkmalloc
```

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Peak Optimization Flags (Continued)

C++ benchmarks:

```
706.stockfish_r: -m64 -std=c++17 -Wl,-z,muldefs
-fprofile-generate(pass 1)
-fprofile-use=default.profdata(pass 2) -xCORE-AVX2(pass 1)
-ffp-model=fast -xsierraforest(pass 2) -flto
-qopt-mem-layout-trans=4 -O3 -mfpmath=sse -funroll-loops
-L/opt/intel/oneapi/compiler/2025.3/lib -lqkmalloc
```

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
-fprofile-generate(pass 1)
-fprofile-use=default.profdata(pass 2) -xCORE-AVX2(pass 1)
-ffp-model=fast -xsierraforest(pass 2) -flto
-qopt-mem-layout-trans=4 -O3 -mfpmath=sse -funroll-loops
-L/opt/intel/oneapi/compiler/2025.3/lib -lqkmalloc
```

721.gcc_r: basepeak = yes

723.llvm_r: Same as 710.omnetpp_r

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-ic2025-official-linux64-cpu2026-0.902.html>
<http://www.spec.org/cpu2026/results/flags/Intel-Platform-Settings-standard-v1.html>

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

<http://www.spec.org/cpu2026/results/flags/Intel-ic2025-official-linux64-cpu2026-0.902.xml>
<http://www.spec.org/cpu2026/results/flags/Intel-Platform-Settings-standard-v1.xml>



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