



# SPEC CPU®2026 Integer Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

**Supermicro**  
(Test Sponsor: Intel Corporation)

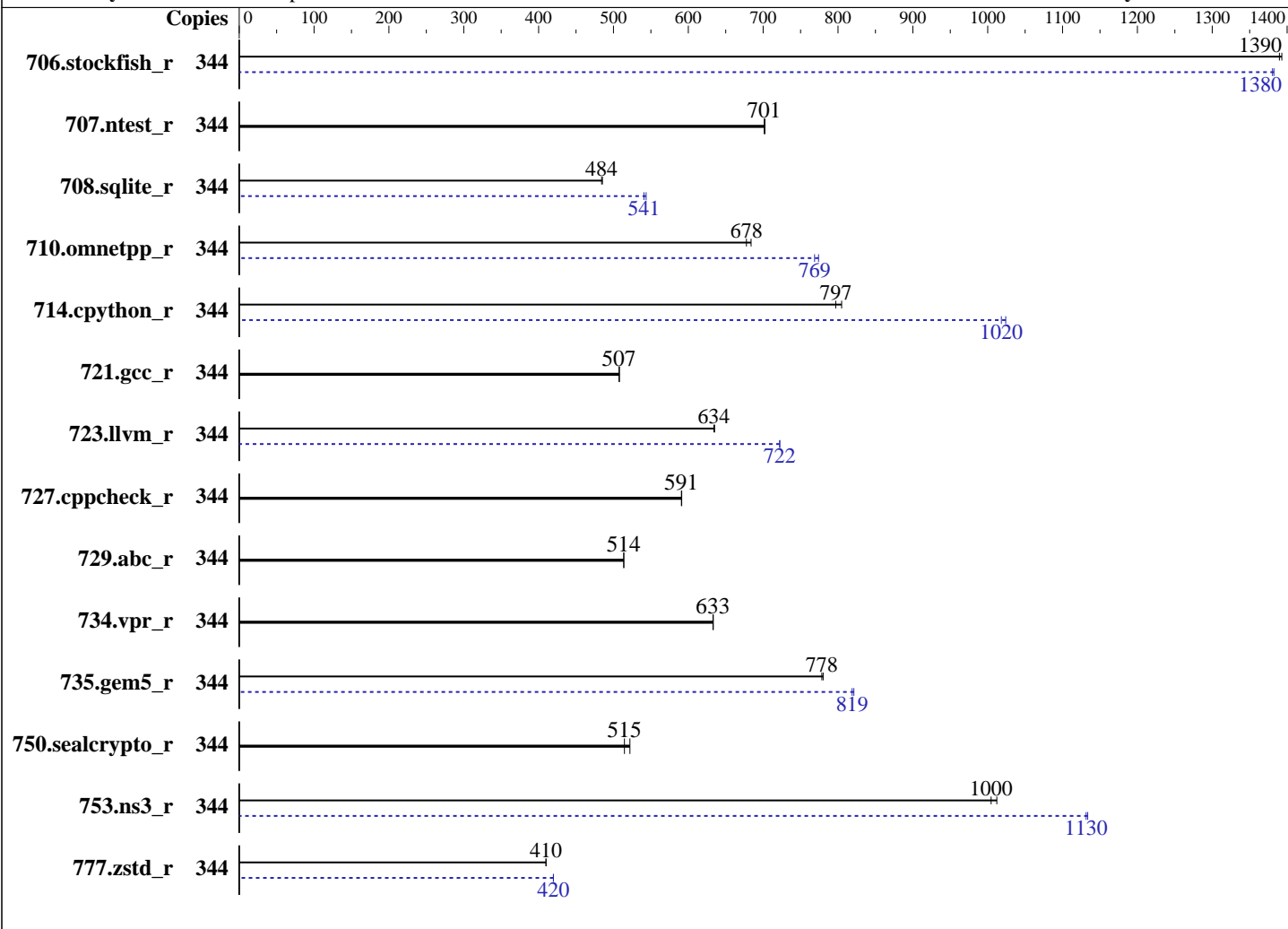
## SuperServer SYS-222H-TN

SPECrate®2026\_int\_base = 654

SPECrate®2026\_int\_peak = 692

**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 6787P  
 Max MHz: 3800  
 Nominal: 2000  
 Enabled: 172 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: 336 MB I+D on chip per chip  
 Other: None  
 Memory: 1 TB (16 x 64 GB 2Rx4 PC5-88/56B-M, running at 8000)  
 Storage: 1 x 3.5 TB NVMe SSD  
 Cooling: Air  
 Other: None

### Software

OS: Ubuntu 24.04.3 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 CPU®2026 Integer Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

Supermicro  
(Test Sponsor: Intel Corporation)

SPECrate®2026\_int\_base = 654

SuperServer SYS-222H-TN

SPECrate®2026\_int\_peak = 692

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

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

## Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
706.stockfish_r	344	<b>312</b>	<b>1390</b>	311	1390			344	<b>314</b>	<b>1380</b>	314	1380		
707.ntest_r	344	<b>290</b>	<b>701</b>	290	702			344	<b>290</b>	<b>701</b>	290	702		
708.sqlite_r	344	<b>375</b>	<b>484</b>	374	485			344	<b>336</b>	<b>541</b>	334	544		
710.omnetpp_r	344	<b>247</b>	<b>678</b>	244	684			344	<b>217</b>	<b>769</b>	216	774		
714.cpython_r	344	<b>207</b>	<b>797</b>	205	805			344	<b>162</b>	<b>1020</b>	161	1020		
721.gcc_r	344	<b>465</b>	<b>507</b>	465	508			344	<b>465</b>	<b>507</b>	465	508		
723.llvm_r	344	275	635	<b>275</b>	<b>634</b>			344	242	722	<b>242</b>	<b>722</b>		
727.cppcheck_r	344	<b>209</b>	<b>591</b>	209	591			344	<b>209</b>	<b>591</b>	209	591		
729.abc_r	344	307	514	<b>307</b>	<b>514</b>			344	307	514	<b>307</b>	<b>514</b>		
734.vpr_r	344	250	633	<b>251</b>	<b>633</b>			344	250	633	<b>251</b>	<b>633</b>		
735.gem5_r	344	215	780	<b>215</b>	<b>778</b>			344	<b>205</b>	<b>819</b>	204	821		
750.sealcrypto_r	344	<b>358</b>	<b>515</b>	353	522			344	<b>358</b>	<b>515</b>	353	522		
753.ns3_r	344	208	1010	<b>210</b>	<b>1000</b>			344	<b>186</b>	<b>1130</b>	186	1130		
777.zstd_r	344	<b>541</b>	<b>410</b>	540	410			344	528	420	<b>528</b>	<b>420</b>		

SPECrate®2026\_int\_base = **654**

SPECrate®2026\_int\_peak = **692**

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/cpu2026-0.902.0/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

(Continued on next page)



# SPEC CPU®2026 Integer Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

**Supermicro**  
(Test Sponsor: Intel Corporation)

**SuperServer SYS-222H-TN**

**SPECrate®2026\_int\_base = 654**

**SPECrate®2026\_int\_peak = 692**

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

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

## 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  
Sub NUMA Clustering (SNC) set to Enabled  
KTI Prefetch set to Enabled  
Stale AtoS set to Disabled  
LLC Dead Line Alloc set to Disabled  
BMC Configuration:  
System Fan speed set to full speed

Sysinfo program /root/cpu2026-0.902.0/bin/sysinfo  
Rev: 069f95da7e7f5d81b2ce48a82150e54f  
running on smc-gnr-sp Wed Feb 4 09:17:58 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)

(Continued on next page)



# SPEC CPU®2026 Integer Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

**Supermicro**  
(Test Sponsor: Intel Corporation)

SPECrate®2026\_int\_base = 654

**SuperServer SYS-222H-TN**

SPECrate®2026\_int\_peak = 692

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

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

## 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. `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
09:17:58 up 4:22, 5 users, load average: 0.01, 4.50, 82.59
USER      TTY      FROM          LOGIN@      IDLE        JCPU      PCPU  WHAT
root      TTY      10.241.241.117 06:32      1:38        0.00s     0.06s  sshd: root@notty
root      TTY      10.241.241.117 06:32      1:38        0.00s     2.66s  sshd: root@pts/2
root      TTY      10.241.241.117 05:08      1:38        0.00s     0.04s  sshd: root@notty
root      TTY      10.241.241.117 05:08      1:38        0.00s     0.21s  sshd: root@pts/0
root      tty1    -              05:06      4:10m      0.04s     ?      -bash
```

```
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) 132035832
process            4125808
nofiles            1024
vmemory(kbytes)    unlimited
locks              unlimited
rtprio             0
```

(Continued on next page)



# SPEC CPU®2026 Integer Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

**Supermicro**  
(Test Sponsor: Intel Corporation)

**SuperServer SYS-222H-TN**

**SPECrate®2026\_int\_base = 654**

**SPECrate®2026\_int\_peak = 692**

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

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

## Platform Notes (Continued)

```

-----
5. sysinfo process ancestry
  /sbin/init
  tmux new -s spec
  -bash
  -bash
  runcpu --nobuild --reportable --action validate --define default-platform-flags --copies 344 -c
    ic2025.3-sapphirerapids-cpu2026-0.902-rate-20260121.cfg --define smt-on --define cores=172 --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 344 --configfile
    ic2025.3-sapphirerapids-cpu2026-0.902-rate-20260121.cfg --define smt-on --define cores=172 --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/CPU2026.005/templogs/preenv.intrate.005.0.log --lognum 005.0 --from_runcpu 2
  specperl $SPEC/bin/sysinfo
  $SPEC = /root/cpu2026-0.902.0

```

```

-----
6. /proc/cpuinfo
  model name      : Intel(R) Xeon(R) 6787P
  vendor_id      : GenuineIntel
  cpu family     : 6
  model          : 173
  stepping       : 1
  microcode      : 0x10003f0
  bugs           : spectre_v1 spectre_v2 spec_store_bypass swapgs bhi vmscape
  cpu cores      : 86
  siblings       : 172
  2 physical ids (chips)
  344 processors (hardware threads)
  physical id 0: core ids 0-42,64-106
  physical id 1: core ids 0-42,64-106
  physical id 0: apicids 0-85,128-213
  physical id 1: apicids 256-341,384-469

```

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:      52 bits physical, 57 bits virtual
  Byte Order:         Little Endian
  CPU(s):             344
  On-line CPU(s) list: 0-343

```

(Continued on next page)



# SPEC CPU®2026 Integer Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

**Supermicro**  
(Test Sponsor: Intel Corporation)

**SPECrate®2026\_int\_base = 654**

**SuperServer SYS-222H-TN**

**SPECrate®2026\_int\_peak = 692**

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

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

## Platform Notes (Continued)

Vendor ID:	GenuineIntel
BIOS Vendor ID:	Intel(R) Corporation
Model name:	Intel(R) Xeon(R) 6787P
BIOS Model name:	Intel(R) Xeon(R) 6787P CPU @ 2.0GHz
BIOS CPU family:	179
CPU family:	6
Model:	173
Thread(s) per core:	2
Core(s) per socket:	86
Socket(s):	2
Stepping:	1
BogoMIPS:	4000.00
Flags:	<p> 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 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 fl6c 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 bml avx2 smep bmi2 erms invpcid 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 vnni 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 ibpb_exit_to_user </p>
Virtualization:	VT-x
L1d cache:	8.1 MiB (172 instances)
L1i cache:	10.8 MiB (172 instances)
L2 cache:	344 MiB (172 instances)
L3 cache:	672 MiB (2 instances)
NUMA node(s):	4
NUMA node0 CPU(s):	0-42,172-214
NUMA node1 CPU(s):	43-85,215-257
NUMA node2 CPU(s):	86-128,258-300
NUMA node3 CPU(s):	129-171,301-343
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

(Continued on next page)



SPEC

# SPEC CPU®2026 Integer Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

Supermicro  
(Test Sponsor: Intel Corporation)

## SuperServer SYS-222H-TN

SPECrate®2026\_int\_base = 654

SPECrate®2026\_int\_peak = 692

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

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

### Platform Notes (Continued)

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	48K	8.1M	12	Data	1	64	1	64
L1i	64K	10.8M	16	Instruction	1	64	1	64
L2	2M	344M	16	Unified	2	2048	1	64
L3	336M	672M	16	Unified	3	344064	1	64

8. numactl --hardware

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

```

available: 4 nodes (0-3)
node 0 cpus: 0-42,172-214
node 0 size: 257491 MB
node 0 free: 237729 MB
node 1 cpus: 43-85,215-257
node 1 size: 258018 MB
node 1 free: 237734 MB
node 2 cpus: 86-128,258-300
node 2 size: 258018 MB
node 2 free: 237794 MB
node 3 cpus: 129-171,301-343
node 3 size: 258000 MB
node 3 free: 237723 MB
node distances:
node  0  1  2  3
 0:  10  12  21  21
 1:  12  10  21  21
 2:  21  21  10  12
 3:  21  21  12  10

```

9. /proc/meminfo

MemTotal: 1056286672 kB

10. who -r

(Continued on next page)



# SPEC CPU®2026 Integer Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

**Supermicro**  
(Test Sponsor: Intel Corporation)

## SuperServer SYS-222H-TN

SPECrate®2026\_int\_base = 654

SPECrate®2026\_int\_peak = 692

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

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

### Platform Notes (Continued)

run-level 5 Feb 4 04:57

11. Systemd service manager version: systemd 255 (255.4-1ubuntu8.8)

```
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 apport 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-sysext 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=1c7e57c2-ccf8-43ab-8a6d-55dc5698e7f1
ro
```

15. cpupower frequency-info  
analyzing CPU 220:

(Continued on next page)



# SPEC CPU®2026 Integer Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

Supermicro  
(Test Sponsor: Intel Corporation)

## SuperServer SYS-222H-TN

SPECrate®2026\_int\_base = 654

SPECrate®2026\_int\_peak = 692

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

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

### Platform Notes (Continued)

Unable to determine current policy  
boost state support:  
Supported: yes  
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

(Continued on next page)



# SPEC CPU®2026 Integer Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

**Supermicro**  
(Test Sponsor: Intel Corporation)

## SuperServer SYS-222H-TN

SPECrate®2026\_int\_base = 654

SPECrate®2026\_int\_peak = 692

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

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

### Platform Notes (Continued)

os-release Ubuntu 24.04 LTS

-----  
20. Disk information

SPEC is set to: /root/cpu2026-0.902.0  
Filesystem    Type    Size    Used Avail Use% Mounted on  
/dev/nvme0nlp2 ext4    3.5T    396G   2.9T   12% /

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

Vendor:            Supermicro  
Product:            SYS-222H-TN  
Product Family:    Family  
Serial:             S913244X4504456

-----  
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:

15x Micron Technology MTC40F2046S1HC88XDX WFFFG 64 GB 1 rank 8800, configured at 8000  
1x Micron Technology MTC40F2046S1HC88XDY WCCCC 64 GB 1 rank 8800, configured at 8000

-----  
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.  
=====

(Continued on next page)



# SPEC CPU®2026 Integer Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

**Supermicro**  
(Test Sponsor: Intel Corporation)

SPECrate®2026\_int\_base = 654

**SuperServer SYS-222H-TN**

SPECrate®2026\_int\_peak = 692

**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)

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 2025.3.0 Build 20251010  
Copyright (C) 1985-2025 Intel Corporation. All rights reserved.  
-----

=====  
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,  
Version 2025.3.0 Build 20251010  
Copyright (C) 1985-2025 Intel Corporation. All rights reserved.  
-----

## 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

(Continued on next page)



# SPEC CPU®2026 Integer Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

**Supermicro**  
(Test Sponsor: Intel Corporation)

**SuperServer SYS-222H-TN**

SPECrate®2026\_int\_base = 654

SPECrate®2026\_int\_peak = 692

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

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

## Base Portability Flags (Continued)

753.ns3\_r: -DSPEC\_LP64  
777.zstd\_r: -DSPEC\_LP64

## Base Optimization Flags

C benchmarks:

-m64 -std=c18 -Wl,-z,muldefs -xsapphirerapids  
-mprefer-vector-width=512 -O3 -ffp-model=fast -flto -mfpmath=sse  
-funroll-loops -qopt-mem-layout-trans=4  
-L/opt/intel/oneapi/compiler/2025.3/lib -lqkmallo

C++ benchmarks:

-m64 -std=c++17 -Wl,-z,muldefs -xsapphirerapids  
-mprefer-vector-width=512 -O3 -ffp-model=fast -flto -mfpmath=sse  
-funroll-loops -qopt-mem-layout-trans=4  
-L/opt/intel/oneapi/compiler/2025.3/lib -lqkmallo

Benchmarks using both C and C++:

-m64 -std=c++17 -std=c18 -Wl,-z,muldefs -xsapphirerapids  
-mprefer-vector-width=512 -O3 -ffp-model=fast -flto -mfpmath=sse  
-funroll-loops -qopt-mem-layout-trans=4  
-L/opt/intel/oneapi/compiler/2025.3/lib -lqkmallo

## 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



# SPEC CPU®2026 Integer Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

**Supermicro**  
(Test Sponsor: Intel Corporation)

**SuperServer SYS-222H-TN**

SPECrate®2026\_int\_base = 654

SPECrate®2026\_int\_peak = 692

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

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

## Peak Optimization Flags

### C benchmarks:

```
-m64 -std=c18 -Wl,-z,muldefs -fprofile-generate(pass 1)  
-fprofile-use=default.profddata(pass 2) -xHost(pass 1) -ffp-model=fast  
-xsapphirerapids(pass 2) -flto -mprefer-vector-width=512  
-qopt-mem-layout-trans=4 -O3 -mfpmath=sse -funroll-loops  
-L/opt/intel/oneapi/compiler/2025.3/lib -lqkmallo
```

### C++ benchmarks:

```
706.stockfish_r: -m64 -std=c++17 -Wl,-z,muldefs  
-fprofile-generate(pass 1)  
-fprofile-use=default.profddata(pass 2) -xHost(pass 1)  
-ffp-model=fast -xsapphirerapids(pass 2) -flto  
-mprefer-vector-width=512 -qopt-mem-layout-trans=4 -O3  
-mfpmath=sse -funroll-loops  
-L/opt/intel/oneapi/compiler/2025.3/lib -lqkmallo
```

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.profddata(pass 2) -xHost(pass 1)  
-ffp-model=fast -xsapphirerapids(pass 2) -flto  
-mprefer-vector-width=512 -qopt-mem-layout-trans=4 -O3  
-mfpmath=sse -funroll-loops  
-L/opt/intel/oneapi/compiler/2025.3/lib -lqkmallo
```

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



# SPEC CPU®2026 Integer Rate Result

Copyright 2026 Standard Performance Evaluation Corporation

**Supermicro**  
(Test Sponsor: Intel Corporation)

## SuperServer SYS-222H-TN

SPECrate®2026\_int\_base = 654

SPECrate®2026\_int\_peak = 692

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

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

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>

SPEC CPU and SPECrate are registered trademarks of the Standard Performance Evaluation Corporation. All other brand and product names appearing in this result are trademarks or registered trademarks of their respective holders.

For questions about this result, please contact the tester. For other inquiries, please contact [info@spec.org](mailto:info@spec.org).

Tested with SPEC CPU®2026 v0.902.0 on 2026-02-04 04:17:57-0500.  
Report generated on 2026-05-11 16:38:21 by CPU2026 PDF formatter (unknown).  
Originally published on 2026-05-05.