SPEC CPU®2026 Integer Rate Result

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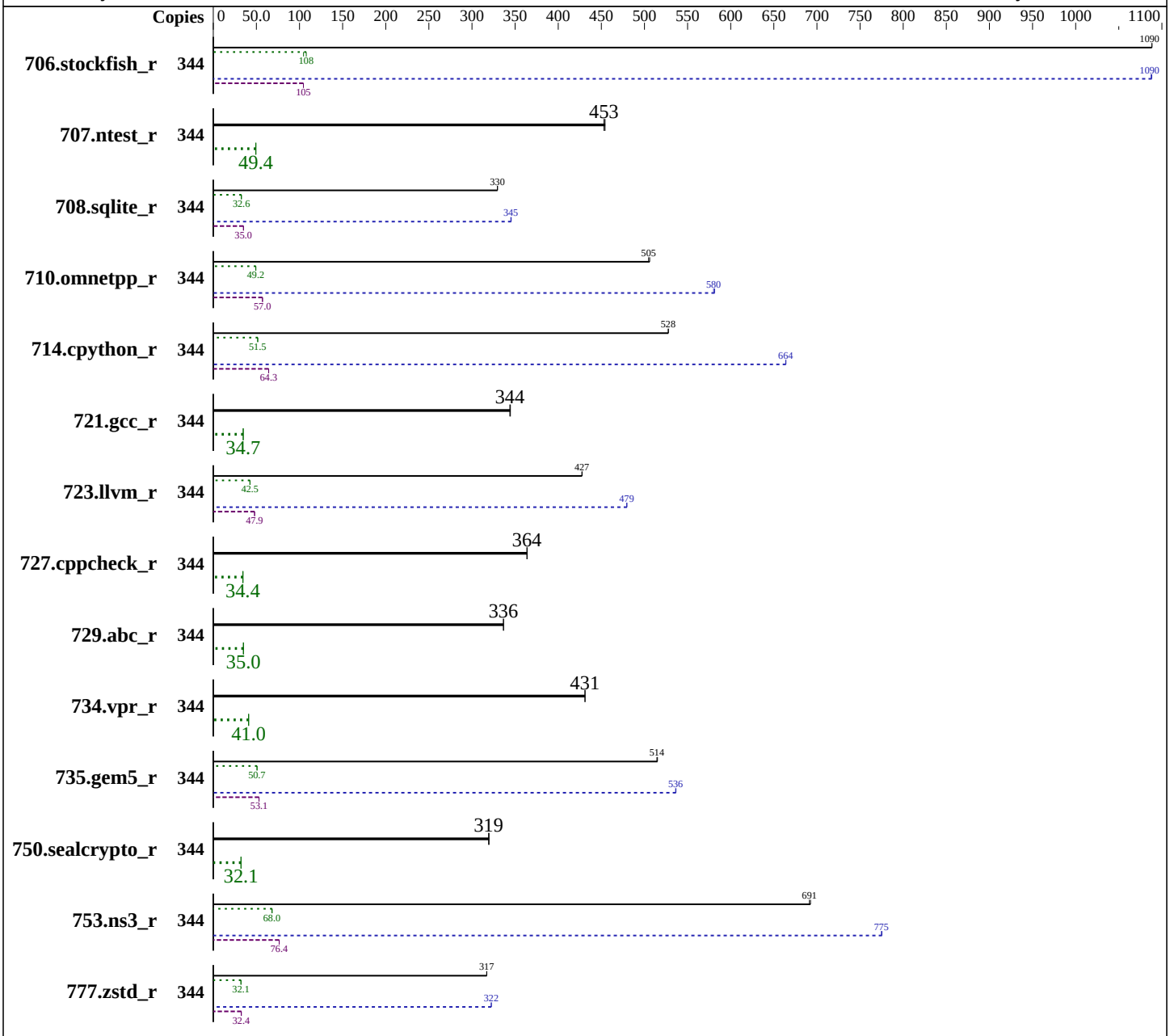
Dell Inc.

PowerEdge R770 (Intel Xeon 6787P)

SPECrate®2026_int_base =	445
SPECrate®2026_int_energy_base =	44.4
SPECrate®2026_int_peak =	468
SPECrate®2026_int_energy_peak =	46.6

CPU2026 License: 6573
Test Sponsor: Dell Inc.
Tested by: Dell Inc.

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



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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 PC5-6400B-R, running at 4800)
Storage:	2.0 TB
Cooling:	Air
Other:	CPU Cooling : Air

Software

OS:	SUSE Linux Enterprise Server 15 SP6 6.4.0-150600.21-default
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 1.6.4 released Nov-2025
File System:	xfs
System State:	Run level 3 (multi-user)
Base Pointers:	64-bit
Peak Pointers:	64-bit
Other:	None
Power Management:	BIOS and OS set to balanced performance

Power

Max. Power (W):	1005.1
Idle Power (W):	191.37
Min. Temperature (C):	21.19
Elevation (m):	255
Line Standard:	220 V / 50 Hz / 1 phase / 3 wires
Provisioning:	Line-powered

Power Settings

Management FW:	Version 1.20.80.50 of IDRAC
Memory Mode:	Normal

Power-Relevant Hardware

Power Supply:	1 x 1500 W (non-redundant)
Details:	1500W Titanium Power supply DPN 1PKMH
Backplane:	8 x EDSFF E3.S NVMe
Other Storage:	1 x NVMe E3 Drive
Storage Model #s:	NVMe PM1745 MU E3.S 3.2TB
NICs Installed:	1 x Intel E610-XT2 @ 10 Gbps (Dell P/N FC0HK)
NICs Enabled (FW/OS):	2 / 1
NICs Connected/Speed:	1 @ 10 Gb
Other HW Model #s:	6 x performance fans

Power Analyzer

Power Analyzer:	192.168.0.5:8888
Hardware Vendor:	Yokogawa Meters and Instruments Corporation
Model:	YokogawaWT310E
Serial Number:	T11733386
Input Connection:	Default
Metrology Institute:	Tescom
Calibration By:	NIST
Calibration Label:	T126623
Calibration Date:	13-Aug-2025
PTDaemon® Version:	1.11.4 (5bcc369b; 2026-01-19)
Setup Description:	Connected to PSU1
Current Ranges Used:	10A
Voltage Range Used:	300V

Temperature Meter

Temperature Meter:	192.168.0.5:8889
Hardware Vendor:	Digi International Inc.
Model:	DigiWATCHPORT_H
Serial Number:	W13370940
Input Connection:	USB
PTDaemon Version:	1.11.4 (5bcc369b; 2026-01-19)
Setup Description:	25 mm in front of SUT main airflow intake

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SPECrate®2026_int_peak = 468

SPECrate®2026_int_energy_peak = 46.6

CPU2026 License: 6573
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Tested by: Dell Inc.

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

Base Results Table

Benchmark	Copies	Seconds	Ratio	Energy (kJ)	Energy Ratio	Average Power	Maximum Power	Seconds	Ratio	Energy (kJ)	Energy Ratio	Average Power	Maximum Power	Seconds	Ratio	Energy (kJ)	Energy Ratio	Average Power	Maximum Power
706.stockfish_r	344	**398**	**1090**	**341**	**108**	**857**	**996**	398	1090	352	105	883	988						
707.ntest_r	344	**449**	**453**	**346**	**49.4**	**769**	**835**	448	454	345	49.4	770	834						
708.sqlite_r	344	**551**	**330**	**467**	**32.6**	**847**	**1010**	551	330	469	32.5	850	1000						
710.omnetpp_r	344	**331**	**505**	**286**	**49.2**	**863**	**921**	330	506	285	49.4	862	917						
714.cpython_r	344	312	528	267	51.6	855	977	**312**	**528**	**268**	**51.5**	**857**	**979**						
721.gcc_r	344	685	345	573	34.7	836	952	**686**	**344**	**573**	**34.7**	**835**	**946**						
723.llvm_r	344	408	428	344	42.5	843	924	**408**	**427**	**344**	**42.5**	**843**	**918**						
727.cppcheck_r	344	**340**	**364**	**302**	**34.4**	**889**	**976**	339	364	301	34.5	887	970						
729.abc_r	344	**469**	**336**	**378**	**35.0**	**805**	**920**	469	337	379	34.9	807	921						
734.vpr_r	344	368	431	323	41.1	879	999	**368**	**431**	**324**	**41.0**	**880**	**992**						
735.gem5_r	344	**326**	**514**	**276**	**50.7**	**849**	**943**	325	515	276	50.8	849	946						
750.sealcrypto_r	344	**578**	**319**	**484**	**32.1**	**838**	**852**	577	320	483	32.2	839	848						
753.ns3_r	344	304	693	259	68.3	852	897	**305**	**691**	**260**	**68.0**	**854**	**902**						
777.zstd_r	344	698	317	579	32.1	829	927	**699**	**317**	**578**	**32.1**	**827**	**919**						

SPECrate®2026_int_base = 445

SPECrate®2026_int_energy_base = 44.4

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

Peak Results Table

Benchmark	Copies	Seconds	Ratio	Energy (kJ)	Energy Ratio	Average Power	Maximum Power	Seconds	Ratio	Energy (kJ)	Energy Ratio	Average Power	Maximum Power	Seconds	Ratio	Energy (kJ)	Energy Ratio	Average Power	Maximum Power
706.stockfish_r	344	**399**	**1090**	**352**	**105**	**883**	**999**	398	1090	352	105	884	999						
707.ntest_r	344	**449**	**453**	**346**	**49.4**	**769**	**835**	448	454	345	49.4	770	834						
708.sqlite_r	344	526	346	434	35.1	826	970	**526**	**345**	**436**	**35.0**	**828**	**966**						
710.omnetpp_r	344	288	581	246	57.1	857	942	**288**	**580**	**247**	**57.0**	**857**	**943**						
714.cpython_r	344	**248**	**664**	**214**	**64.3**	**863**	**972**	248	664	215	64.2	865	985						
721.gcc_r	344	685	345	573	34.7	836	952	**686**	**344**	**573**	**34.7**	**835**	**946**						
723.llvm_r	344	364	480	305	47.9	840	925	**364**	**479**	**306**	**47.9**	**840**	**922**						
727.cppcheck_r	344	**340**	**364**	**302**	**34.4**	**889**	**976**	339	364	301	34.5	887	970						
729.abc_r	344	**469**	**336**	**378**	**35.0**	**805**	**920**	469	337	379	34.9	807	921						
734.vpr_r	344	368	431	323	41.1	879	999	**368**	**431**	**324**	**41.0**	**880**	**992**						
735.gem5_r	344	312	537	265	53.0	847	940	**312**	**536**	**264**	**53.1**	**846**	**941**						
750.sealcrypto_r	344	**578**	**319**	**484**	**32.1**	**838**	**852**	577	320	483	32.2	839	848						
753.ns3_r	344	272	775	232	76.5	851	898	**272**	**775**	**232**	**76.4**	**852**	**897**						
777.zstd_r	344	687	322	571	32.6	831	922	**687**	**322**	**573**	**32.4**	**834**	**923**						

SPECrate®2026_int_peak = 468

SPECrate®2026_int_energy_peak = 46.6

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 = "/home/cpu2026rc2/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:
sync; echo 3>       /proc/sys/vm/drop_caches
runcpu command invoked through numactl i.e.:
numactl --interleave=all runcpu <etc>
```

Platform Notes

```
BIOS Settings:
 Virtualization Technology : Disabled
       Hardware Prefetcher : Disabled
          Sub NUMA Cluster : Enabled
     MADT Core Enumeration : Linear

             System Profile : Custom
      CPU Power Management : OS DBPM
          Memory Frequency : Maximum Reliability
               Turbo Boost : Disabled
    Energy Efficient Turbo : Disabled
    Latency Optimized Mode : Enabled
   Energy Efficient Policy : Energy Efficient
            ADDDC Setting : Disabled
       DIMM Self Healing -
on Uncorrectable Memory Error : Disabled

Sysinfo program /home/cpu2026rc2/bin/sysinfo
Rev: 069f95da7e7f5d81b2ce48a82150e54f
running on B2KQ54-R770 Thu Feb  5 07:31:39 2026
```

(Continued on next page)

Platform Notes (Continued)

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

------------------------------------------------------------
1. uname -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
   07:31:39 up  1:38,  1 user,  load average: 0.42, 7.13, 94.99
  USER     TTY      FROM             LOGIN@   IDLE   JCPU   PCPU WHAT
  root     tty1     -                05:54   51.00s  3.39s  0.04s /bin/bash
  /home/DellFiles/bin/Intel/dell-run-speccpu.sh rate --define DL-VERS=7.0_T01 --output_format html,pdf,txt

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

(Continued on next page)

Platform Notes (Continued)

```
------------------------------------------------------------
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) 4125988
  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) 4125988
  virtual memory          (kbytes, -v) unlimited
  file locks                      (-x) unlimited

------------------------------------------------------------
5. sysinfo process ancestry
 /usr/lib/systemd/systemd --switched-root --system --deserialize=42
 login -- root
 -bash
 /bin/bash /home/DellFiles/bin/DELL_rate.sh
 /bin/bash /home/DellFiles/bin/dell-run-main.sh rate
 /bin/bash /home/DellFiles/bin/dell-run-main.sh rate
 /bin/bash /home/DellFiles/bin/Intel/dell-run-speccpu.sh rate --define DL-VERS=7.0_T01 --output_format
   html,pdf,txt
 /bin/bash /home/DellFiles/bin/Intel/dell-run-speccpu.sh rate --define DL-VERS=7.0_T01 --output_format
   html,pdf,txt
 runcpu --nobuild --reportable --action validate --define default-platform-flags --copies 344 -c
   ic2025.3-graniterapids-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 --iterations 2
    --define DL-VERS=7.0_T01 --output_format html,pdf,txt intrate
 runcpu --nobuild --reportable --action validate --define default-platform-flags --copies 344 --configfile
   ic2025.3-graniterapids-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
   --iterations 2 --define DL-VERS=7.0_T01 --output_format html,pdf,txt --runmode rate --tune base:peak
    --size refrate intrate --nopreenv --note-preenv --logfile
    $SPEC/tmp/CPU2026.003/templogs/preenv.intrate.003.0.log --lognum 003.0 --from_runcpu 2
 specperl $SPEC/bin/sysinfo
$SPEC = /home/cpu2026rc2

------------------------------------------------------------
```

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Platform Notes (Continued)

```
6. /proc/cpuinfo
    model name      : Intel(R) Xeon(R) 6787P
    vendor_id       : GenuineIntel
    cpu family      : 6
    model           : 173
    stepping        : 1
    microcode       : 0x10003f3
    bugs            : spectre_v1 spectre_v2 spec_store_bypass swapgs bhi
    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
  Vendor ID:                            GenuineIntel
  BIOS Vendor ID:                       Intel
  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
  CPU(s) scaling MHz:                   40%
  CPU max MHz:                          2000.0000
  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
```

(Continued on next page)

Platform Notes (Continued)

```
                    pse36 clflush dts acpi mmx fxsr sse sse2 ss ht tm pbe syscall nx
                   pdpe1gb rdtscp lm constant_tsc art arch_perfmon pebs bts rep_good
                    nopl xtopology nonstop_tsc cpuid aperfmperf tsc_known_freq pni
                  pclmulqdq dtes64 monitor ds_cpl smx est tm2 ssse3 sdbg fma cx16 xtpr
                   pdcm pcid dca sse4_1 sse4_2 x2apic movbe popcnt tsc_deadline_timer
                  aes xsave avx f16c rdrand lahf_lm abm 3dnowprefetch cpuid_fault epb
                    cat_l3 cat_l2 cdp_l3 intel_ppin cdp_l2 ssbd mba ibrs ibpb stibp
                    ibrs_enhanced fsgsbase tsc_adjust bmi1 hle avx2 smep bmi2 erms
                   invpcid rtm cqm rdt_a avx512f avx512dq rdseed adx smap avx512ifma
                  clflushopt clwb intel_pt avx512cd sha_ni avx512bw avx512vl xsaveopt
                      xsavec xgetbv1 xsaves cqm_llc cqm_occup_llc cqm_mbm_total
                    cqm_mbm_local split_lock_detect user_shstk avx_vnni avx512_bf16
                  wbnoinvd dtherm arat pln pts hwp hwp_act_window hwp_epp hwp_pkg_req
                  avx512vbmi umip pku ospke waitpkg avx512_vbmi2 gfni vaes vpclmulqdq
                      avx512_vnni avx512_bitalg tme avx512_vpopcntdq la57 rdpid
                    bus_lock_detect cldemote movdiri movdir64b enqcmd fsrm md_clear
                  serialize tsxldtrk pconfig arch_lbr ibt amx_bf16 avx512_fp16 amx_tile
                            amx_int8 flush_l1d arch_capabilities
  L1d cache:                            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
  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;
                                        PBRSB-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
```

(Continued on next page)

Platform Notes (Continued)

```
      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: 257525 MB
  node 0 free: 256398 MB
  node 1 cpus: 43-85,215-257
  node 1 size: 258025 MB
  node 1 free: 257031 MB
  node 2 cpus: 86-128,258-300
  node 2 size: 258025 MB
  node 2 free: 256963 MB
  node 3 cpus: 129-171,301-343
  node 3 size: 257947 MB
  node 3 free: 256902 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:       1056280048 kB

------------------------------------------------------------
10. who -r
  run-level 3 Feb 5 05:54

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

------------------------------------------------------------
12. Services, from systemctl list-unit-files
  STATE            UNIT FILES
  enabled          YaST2-Firstboot YaST2-Second-Stage apparmor auditd cron display-manager getty@ irqbalance
```

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Platform Notes (Continued)

```
                issue-generator kbdsettings klog lvm2-monitor nscd nvmefc-boot-connections
              nvmf-autoconnect postfix purge-kernels rollback rsyslog 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 ebtables 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 udisks2
                  vncserver@
  indirect        systemd-userdbd wickedd

------------------------------------------------------------
13. Linux kernel boot-time arguments, from /proc/cmdline
  BOOT_IMAGE=/boot/vmlinuz-6.4.0-150600.21-default
  root=UUID=02b3adac-b4ec-425b-b06d-e66675474f80
  splash=silent
  mitigations=auto
  quiet
  security=apparmor

------------------------------------------------------------
14. cpupower frequency-info
  analyzing CPU 307:
    current policy: frequency should be within 800 MHz and 2.00 GHz.
                    The governor "powersave" may decide which speed to use
                    within this range.
    boost state support:
      Supported: no
      Active: no

------------------------------------------------------------
15. sysctl
  kernel.numa_balancing               1
  kernel.randomize_va_space           2
  vm.compaction_proactiveness        20
  vm.dirty_background_bytes           0
  vm.dirty_background_ratio          10
  vm.dirty_bytes                      0
  vm.dirty_expire_centisecs        3000
  vm.dirty_ratio                     20
  vm.dirty_writeback_centisecs      500
  vm.dirtytime_expire_seconds     43200
  vm.extfrag_threshold              500
```

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Platform Notes (Continued)

```
  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

------------------------------------------------------------
16. /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

------------------------------------------------------------
17. /sys/kernel/mm/transparent_hugepage/khugepaged
  alloc_sleep_millisecs   60000
  defrag                      1
  max_ptes_none             511
  max_ptes_shared           256
  max_ptes_swap              64
  pages_to_scan            4096
  scan_sleep_millisecs    10000

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

------------------------------------------------------------
19. Disk information
SPEC is set to: /home/cpu2026rc2
  Filesystem     Type  Size  Used Avail Use% Mounted on
  /dev/nvme0n1p2 xfs   2.0T   85G  1.9T   5% /

------------------------------------------------------------
20. /sys/devices/virtual/dmi/id
    Vendor:         Dell Inc.
    Product:        PowerEdge R770
    Product Family: PowerEdge
    Serial:         5B2KQ54

------------------------------------------------------------
```

(Continued on next page)

Platform Notes (Continued)

```
 21. dmidecode
   Additional information from dmidecode 3.4 follows.  WARNING: Use caution when you interpret this section.
   The 'dmidecode' program reads system data which is "intended to allow hardware to be accurately
   determined", but the intent may not be met, as there are frequent changes to hardware, firmware, and the
    "DMTF SMBIOS" standard.
    Memory:
      16x 002C069D002C MTC40F2046S1RC64BD2 QSFF 64 GB 2 rank 6400, configured at 4800


 ------------------------------------------------------------
 22. BIOS
 (This section combines info from /sys/devices and dmidecode.)
    BIOS Vendor:       Dell Inc.
    BIOS Version:      1.6.4
    BIOS Date:         11/02/2025
    BIOS Revision:     1.6
```

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)
------------------------------------------------------------------------------
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
```

(Continued on next page)

Compiler Version Notes (Continued)

```
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
753.ns3_r: -DSPEC_LP64
777.zstd_r: -DSPEC_LP64

Base Optimization Flags

C benchmarks:
-m64 -std=c18 -Wl,-z,muldefs -xgraniterapids
-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 -lqkmalloc

(Continued on next page)

Base Optimization Flags (Continued)

C++ benchmarks:
-m64 -std=c++17 -Wl,-z,muldefs -xgraniterapids
-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 -lqkmalloc

Benchmarks using both C and C++:
-m64 -std=c++17 -std=c18 -Wl,-z,muldefs -xgraniterapids
-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 -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.profdata(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/2025.3/lib -lqkmalloc

(Continued on next page)

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) `-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/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) `-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/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/Dell-Platform-Flags-PowerEdge-Intel-Xeon-v1.19.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/Dell-Platform-Flags-PowerEdge-Intel-Xeon-v1.19.xml

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