SPEC CPU®2026 Integer Speed Result

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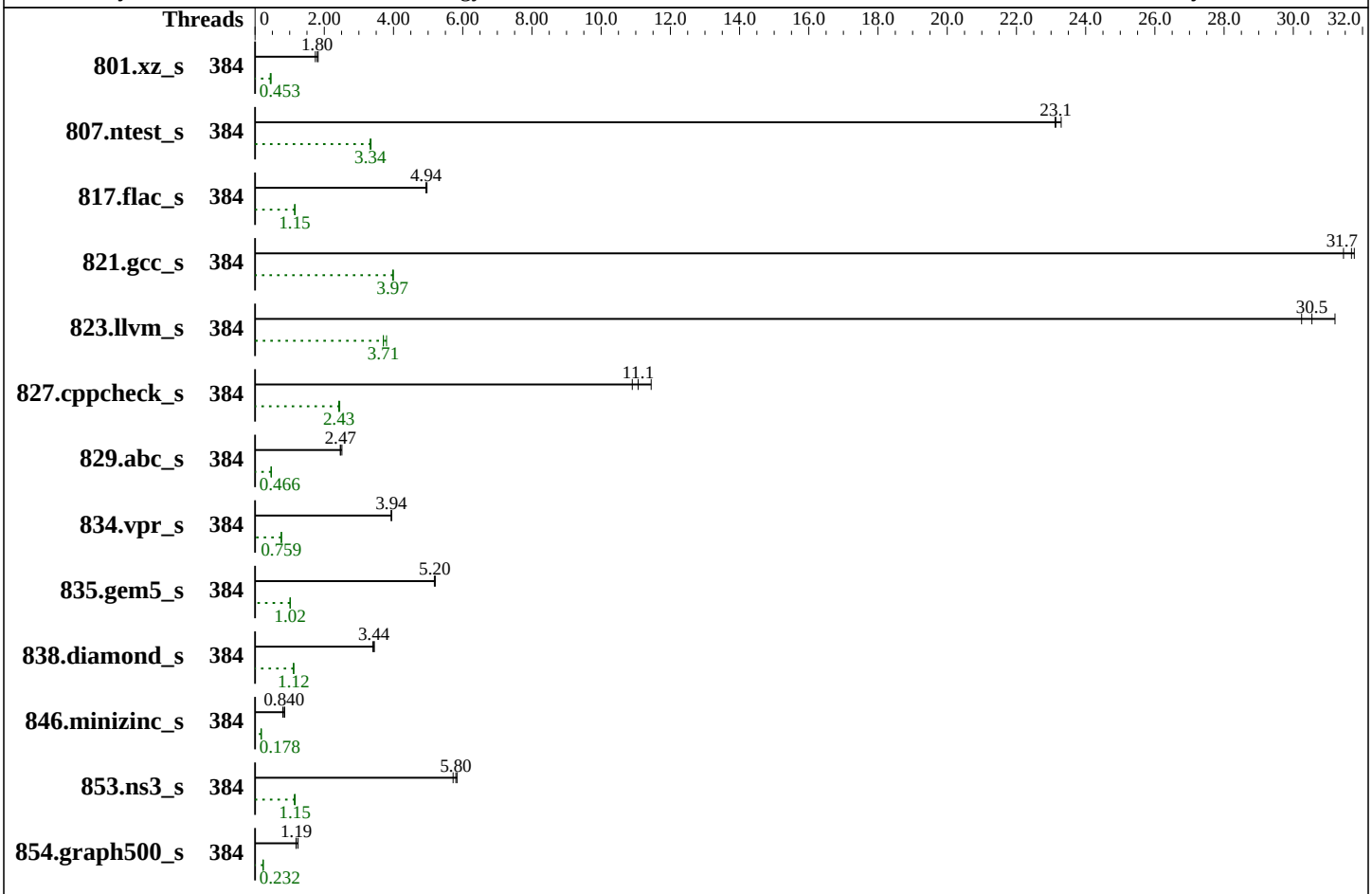
Lenovo Global Technology

ThinkSystem SR850 V4
(2.50 GHZ, Intel Xeon 6748P)

SPECspeed®2026_int_base =	5.24
SPECspeed®2026_int_energy_base =	1.01
SPECspeed®2026_int_peak =	Not Run
SPECspeed®2026_int_energy_peak =	Not Run

CPU2026 License: 9017
Test Sponsor: Lenovo Global Technology
Tested by: Lenovo Global Technology

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



Hardware

CPU Name:	Intel Xeon 6748P
Max MHz:	4100
Nominal:	2500
Enabled:	192 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:	192 MB I+D on chip per chip
Other:	None
Memory:	2 TB (32 x 64 GB 2Rx4 PC5-6400B-R, running at 4800)
Storage:	1 x 960 GB M.2 NVMe SSD
Cooling:	Air
Other:	None

Software

OS:	SUSE Linux Enterprise Server 15 SP7 Kernel 6.4.0-150700.51-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:	BIOS Version RVE105I 1.20 released Dec-2025
File System:	xfs
System State:	Run level 3 (multi-user)
Base Pointers:	64-bit
Peak Pointers:	Not Applicable
Other:	jemalloc memory allocator v5.3
Power Management:	BIOS set to balance power and performance

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Power

Max. Power (W): 1994.6
Idle Power (W): 378.36
Min. Temperature (C): 22.56
Elevation (m): 43
Line Standard: 220 V / 50 Hz / 1 phase / 3 wires
Provisioning: Line-powered

Power Settings

Management FW: Version 2.00 of IHX427H
Memory Mode: Normal

Power-Relevant Hardware

Power Supply: 2 x 2000 W (redundant)
Details: ThinkSystem 2000W 230V Titanium CRPS Hot-Swap
Backplane: M.2 SATA/NVMe Drive Assembly Kit
Other Storage: None
Storage Model #s: 4XB7A13999
NICs Installed: 1 x ThinkSystem Ethernet 2-port Adaptor @ 10 Gb
NICs Enabled (FW/OS): 2 / 1
NICs Connected/Speed: 1 @ 10 Gb
Other HW Model #s: 6 x Performance fans

Power Analyzer

Power Analyzer: WIN:9888
Hardware Vendor: YOKOGAWA, Inc.
Model: YokogawaWT310E
Serial Number: C3SH31009E
Input Connection: Default
Metrology Institute: CNAS
Calibration By: CEPREI Calibration and Testing Centre
Calibration Label: 1GA25011731-0001
Calibration Date: 15-Sep-2025
PTDaemon® Version: 1.11.1 (462c978e; 2024-09-07)
Setup Description: Connected to PSU1
Current Ranges Used: 10A
Voltage Range Used: 300V

Temperature Meter

Temperature Meter: WIN:9889
Hardware Vendor: Digi International, Inc.
Model: DigiWATCHPORT_H
Serial Number: W63181846
Input Connection: USB
PTDaemon Version: 1.11.1 (462c978e; 2024-09-07)
Setup Description: 50 mm in front of SUT main intake

Base Results Table

Benchmark	Threads	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
801.xz_s	384	324	1.82	180	0.461	555	1740	339	1.74	189	0.439	557	1630	**329**	**1.80**	**183**	**0.453**	**556**	**1470**
807.ntest_s	384	48.9	23.3	69.2	3.35	1410	1820	49.3	23.1	69.7	3.33	1410	1810	**49.3**	**23.1**	**69.6**	**3.34**	**1410**	**1820**
817.flac_s	384	**351**	**4.94**	**162**	**1.15**	**461**	**535**	351	4.94	162	1.14	462	538	350	4.97	161	1.16	460	542
821.gcc_s	384	**65.3**	**31.7**	**107**	**3.97**	**1640**	**1870**	65.2	31.8	106	3.99	1630	1860	65.8	31.5	107	3.99	1620	1900
823.llvm_s	384	45.2	31.2	78.9	3.71	1750	1980	46.7	30.2	77.1	3.80	1650	1910	**46.2**	**30.5**	**79.0**	**3.71**	**1710**	**1910**
827.cppcheck_s	384	103	10.9	101	2.42	979	1910	**101**	**11.1**	**100**	**2.43**	**991**	**1930**	97.8	11.4	99.3	2.45	1020	1990
829.abc_s	384	337	2.46	151	0.463	446	460	**336**	**2.47**	**150**	**0.466**	**445**	**457**	331	2.51	148	0.472	446	460
834.vpr_s	384	**242**	**3.94**	**106**	**0.759**	**436**	**451**	242	3.94	106	0.759	436	453	242	3.94	105	0.760	435	453
835.gem5_s	384	219	5.21	95.1	1.02	435	436	**219**	**5.20**	**95.2**	**1.02**	**435**	**436**	220	5.18	95.6	1.01	435	439
838.diamond_s	384	294	3.40	181	1.10	616	1690	**291**	**3.44**	**179**	**1.12**	**615**	**1730**	291	3.44	179	1.12	616	1740
846.minizinc_s	384	835	0.802	369	0.170	441	449	**797**	**0.840**	**352**	**0.178**	**441**	**457**	781	0.857	345	0.182	441	460
853.ns3_s	384	202	5.72	87.5	1.13	434	444	**199**	**5.80**	**86.0**	**1.15**	**433**	**445**	198	5.84	85.6	1.16	433	444

Table continues on next page. Results appear in the order in which they were run. Bold underlined text indicates a median measurement.

Base Results Table (Continued)

Benchmark	Threads	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
854.graph500_s	384	491	1.24	542	0.240	1100	1510	**512**	**1.19**	**560**	**0.232**	**1090**	**1460**	516	1.18	572	0.227	1110	1460
SPECspeed®2026_int_base =			**5.24**																
SPECspeed®2026_int_energy_base =									**1.01**										

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

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/cpu2026-0.902.0-ic2025p3/lib"
MALLOC_CONF = "retain:true"
OMP_STACKSIZE = "192M"
```

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
jemalloc, a general purpose malloc implementation
built with the CentOS Stream 9, and the system compiler gcc 11.5.0
sources available from jemalloc.net or https://github.com/jemalloc/jemalloc/releases
```

Platform Notes

```
BIOS configuration:
Workload Profile set to Custom
UPI Link Disable set to Minimum Number of Links Enabled
SNC set to Enabled
Page Policy set to Adaptive
Memory Speed set to Minimal Power
UPI Link Frequency set to Balanced

 Sysinfo program /home/cpu2026-0.902.0-ic2025p3/bin/sysinfo
 Rev: 069f95da7e7f5d81b2ce48a82150e54f
 running on localhost Wed Feb  4 22:25:10 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 (254.24+suse.148.g83b9060b6e)
12. Services, from systemctl list-unit-files
13. Linux kernel boot-time arguments, from /proc/cmdline
14. cpupower frequency-info
15. tuned-adm active
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 6.4.0-150700.51-default #1 SMP PREEMPT_DYNAMIC Wed Apr 30 21:35:43 UTC 2025 (6930611) x86_64

------------------------------------------------------------
2. w
   22:25:11 up  3:12,  1 user,  load average: 20.74, 162.72, 130.09
  USER     TTY      FROM             LOGIN@   IDLE   JCPU   PCPU WHAT

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

------------------------------------------------------------
4. ulimit -a
```

(Continued on next page)

Platform Notes (Continued)

```
   core file size          (blocks, -c) unlimited
   data seg size           (kbytes, -d) unlimited
   scheduling priority             (-e) 0
   file size               (blocks, -f) unlimited
   pending signals                 (-i) 8254672
   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) 8254672
   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@notty
 /bin/bash ./02.remote_local_SPECcpu_1.01.sh
 sh Run342-compliant-ic2025.3-lin-graniterapids-speedint-base-smt-on-20260121.sh
 runcpu --power --nobuild --reportable --iterations=3 --action validate --define default-platform-flags -c
   ic2025.3-graniterapids-cpu2026-0.902-speed-20260121.cfg --threads 384 --define cores=192 --tune base -o
    all --define intspeedaffinity --define smt-on --define drop_caches intspeed
 runcpu --power --nobuild --reportable --iterations 3 --action validate --define default-platform-flags
   --configfile ic2025.3-graniterapids-cpu2026-0.902-speed-20260121.cfg --threads 384 --define cores=192
   --tune base --output_format all --define intspeedaffinity --define smt-on --define drop_caches --runmode
    speed --tune base --size refspeed intspeed --nopreenv --note-preenv --logfile
    $SPEC/tmp/CPU2026.018/templogs/preenv.intspeed.018.0.log --lognum 018.0 --from_runcpu 2
 specperl $SPEC/bin/sysinfo
$SPEC = /home/cpu2026-0.902.0-ic2025p3

------------------------------------------------------------
6. /proc/cpuinfo
    model name      : Intel(R) Xeon(R) 6748P
    vendor_id       : GenuineIntel
    cpu family      : 6
    model           : 173
    stepping        : 1
    microcode       : 0x1000405
    bugs            : spectre_v1 spectre_v2 spec_store_bypass swapgs bhi
```

(Continued on next page)

Platform Notes (Continued)

```
     cpu cores       : 48
     siblings        : 96
     4 physical ids (chips)
     384 processors (hardware threads)
     physical id 0: core ids 0-47
     physical id 1: core ids 0-47
     physical id 2: core ids 0-47
     physical id 3: core ids 0-47
     physical id 0: apicids 0-95
     physical id 1: apicids 128-223
     physical id 2: apicids 256-351
     physical id 3: apicids 384-479
   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 2.40.4:
   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):                                  384
   On-line CPU(s) list:                     0-383
   Vendor ID:                               GenuineIntel
   Model name:                              Intel(R) Xeon(R) 6748P
   CPU family:                              6
   Model:                                   173
   Thread(s) per core:                      2
   Core(s) per socket:                      48
   Socket(s):                               4
   Stepping:                                1
   BogoMIPS:                                5000.00
   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 avx512f avx512dq rdseed adx smap avx512ifma clflushopt clwb
```

(Continued on next page)

Platform Notes (Continued)

```
                      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 vnmi 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
  Virtualization:                VT-x
  L1d cache:                     9 MiB (192 instances)
  L1i cache:                     12 MiB (192 instances)
  L2 cache:                      384 MiB (192 instances)
  L3 cache:                      768 MiB (4 instances)
  NUMA node(s):                  4
  NUMA node0 CPU(s):             0-47,192-239
  NUMA node1 CPU(s):             48-95,240-287
  NUMA node2 CPU(s):             96-143,288-335
  NUMA node3 CPU(s):             144-191,336-383
  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
     L1d       48K       9M   12 Data            1     64        1             64
     L1i       64K      12M   16 Instruction     1     64        1             64
     L2         2M     384M   16 Unified         2   2048        1             64
     L3       192M     768M   16 Unified         3 196608        1             64

------------------------------------------------------------
8. numactl --hardware
NOTE: a numactl 'node' might or might not correspond to a physical chip.
  available: 4 nodes (0-3)
```

(Continued on next page)

Platform Notes (Continued)

```
  node 0 cpus: 0-47,192-239
  node 0 size: 515607 MB
  node 0 free: 507048 MB
  node 1 cpus: 48-95,240-287
  node 1 size: 516070 MB
  node 1 free: 514895 MB
  node 2 cpus: 96-143,288-335
  node 2 size: 516031 MB
  node 2 free: 515037 MB
  node 3 cpus: 144-191,336-383
  node 3 size: 515986 MB
  node 3 free: 514800 MB
  node distances:
  node   0   1   2   3
    0:  10  21  31  21
    1:  21  10  21  31
    2:  31  21  10  21
    3:  21  31  21  10

------------------------------------------------------------
9. /proc/meminfo
   MemTotal:       2113224068 kB

------------------------------------------------------------
10. who -r
  run-level 3 Feb 4 19:14

------------------------------------------------------------
11. Systemd service manager version: systemd 254 (254.24+suse.148.g83b9060b6e)
  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 getty@ irqbalance 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
```

(Continued on next page)

Platform Notes (Continued)

```
                systemd-network-generator systemd-sysext systemd-time-wait-sync systemd-timesyncd tuned
  generated         ntp_sync
  indirect          systemd-userdbd wickedd

------------------------------------------------------------
13. Linux kernel boot-time arguments, from /proc/cmdline
  BOOT_IMAGE=/boot/vmlinuz-6.4.0-150700.51-default
  root=UUID=5caa0f87-5156-4d0e-b8a9-eafcf70a6b5a
  splash=silent
  mitigations=auto
  quiet
  security=apparmor

------------------------------------------------------------
14. cpupower frequency-info
  analyzing CPU 282:
    Unable to determine current policy
    boost state support:
      Supported: yes
      Active: yes

------------------------------------------------------------
15. tuned-adm active
  It seems that tuned daemon is not running, preset profile is not activated.
  Preset profile: latency-performance

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

(Continued on next page)

Platform Notes (Continued)

```
  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 SUSE Linux Enterprise Server 15 SP7

------------------------------------------------------------
20. Disk information
SPEC is set to: /home/cpu2026-0.902.0-ic2025p3
  Filesystem     Type  Size  Used Avail Use% Mounted on
  /dev/nvme0n1p3 xfs   890G  100G  790G  12% /

------------------------------------------------------------
21. /sys/devices/virtual/dmi/id
    Vendor:         Lenovo
    Product:        ThinkSystem SR850 V4
    Product Family: ThinkSystem
    Serial:         9876543210

------------------------------------------------------------
22. dmidecode
  Additional information from dmidecode 3.6 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:
```

(Continued on next page)

Platform Notes (Continued)

```
     5x Samsung M321R8GA0PB2-CCPEC 64 GB 2 rank 6400, configured at 4800
     6x Samsung M321R8GA0PB2-CCPKC 64 GB 2 rank 6400, configured at 4800
     17x Samsung M321R8GA0PB2-CCPPC 64 GB 2 rank 6400, configured at 4800
     4x Samsung M321R8GA0PB2-CCPWC 64 GB 2 rank 6400, configured at 4800


 ------------------------------------------------------------
 23. BIOS
 (This section combines info from /sys/devices and dmidecode.)
    BIOS Vendor:       Lenovo
    BIOS Version:      RVE105I-1.20
    BIOS Date:         12/16/2025
    BIOS Revision:     1.20
    Firmware Revision: 2.0
```

Compiler Version Notes

```
==============================================================================
C      | 854.graph500_s(base)
------------------------------------------------------------------------------
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++    | 807.ntest_s(base) 827.cppcheck_s(base) 853.ns3_s(base)
------------------------------------------------------------------------------
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 | 801.xz_s(base) 817.flac_s(base) 821.gcc_s(base) 823.llvm_s(base)
       | 829.abc_s(base) 834.vpr_s(base) 835.gem5_s(base) 838.diamond_s(base)
       | 846.minizinc_s(base)
------------------------------------------------------------------------------
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

801.xz_s: -DSPEC_LP64
807.ntest_s: -DSPEC_LP64
817.flac_s: -DSPEC_LP64
821.gcc_s: -DSPEC_LP64
823.llvm_s: -DSPEC_LP64
827.cppcheck_s: -DSPEC_LP64
829.abc_s: -DSPEC_LP64
834.vpr_s: -DSPEC_LP64
835.gem5_s: -DSPEC_LP64
838.diamond_s: -DSPEC_LP64
846.minizinc_s: -DSPEC_LP64
853.ns3_s: -DSPEC_LP64
854.graph500_s: -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 -fiopenmp -DSPEC_OPENMP
-L/usr/local/jemalloc-5.3.0/lib -ljemalloc

C++ benchmarks:

807.ntest_s: -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
-fiopenmp -DSPEC_OPENMP -L/usr/local/jemalloc-5.3.0/lib

(Continued on next page)

Base Optimization Flags (Continued)

807.ntest_s (continued):
-ljemalloc

827.cppcheck_s: -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
-pthread -L/usr/local/jemalloc-5.3.0/lib -ljemalloc

853.ns3_s: -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/usr/local/jemalloc-5.3.0/lib -ljemalloc

Benchmarks using both C and C++:

801.xz_s: -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
-pthread -L/usr/local/jemalloc-5.3.0/lib -ljemalloc

817.flac_s: Same as 801.xz_s

821.gcc_s: -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/usr/local/jemalloc-5.3.0/lib -ljemalloc

823.llvm_s: Same as 801.xz_s

829.abc_s: Same as 821.gcc_s

834.vpr_s: Same as 821.gcc_s

835.gem5_s: Same as 801.xz_s

838.diamond_s: Same as 801.xz_s

846.minizinc_s: Same as 801.xz_s

The flags files that were used to format this result can be browsed at
http://www.spec.org/cpu2026/results/flags/Lenovo-Platform-SPECcpu-Flags-V1.2-Birchstream-M.html
http://www.spec.org/cpu2026/results/flags/Intel-ic2025-official-linux64-cpu2026-0.902.html

You can also download the XML flags sources by saving the following links:
http://www.spec.org/cpu2026/results/flags/Lenovo-Platform-SPECcpu-Flags-V1.2-Birchstream-M.xml
http://www.spec.org/cpu2026/results/flags/Intel-ic2025-official-linux64-cpu2026-0.902.xml

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For questions about this result, please contact the tester. For other inquiries, please contact info@spec.org.

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