



# SPEC CPU®2026 Floating Point Speed Result

Copyright 2026 Standard Performance Evaluation Corporation

## Lenovo Global Technology

ThinkSystem SR850 V3  
(1.90 GHz, Intel Xeon Platinum 8490H)

SPECspeed®2026\_fp\_base = 5.58

SPECspeed®2026\_fp\_peak = Not Run

CPU2026 License: 9017

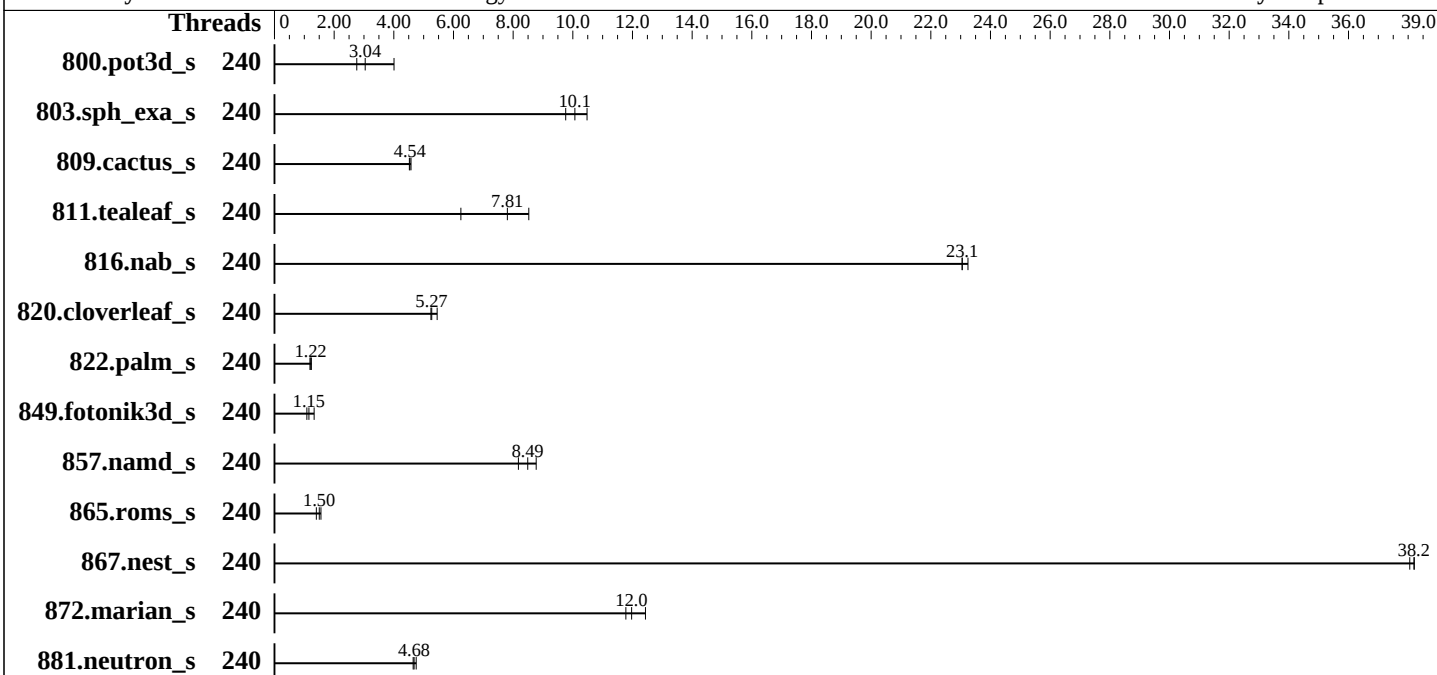
Test Sponsor: Lenovo Global Technology

Tested by: Lenovo Global Technology

Test Date: May-2026

Hardware Availability: Jun-2023

Software Availability: Apr-2026



### Hardware

CPU Name: Intel Xeon Platinum 8490H  
Max MHz: 3500  
Nominal: 1900  
Enabled: 240 cores, 4 chips  
Orderable: 2,4 chips  
Cache L1: 32 KB I + 48 KB D on chip per core  
L2: 2 MB I+D on chip per core  
L3: 112.5 MB I+D on chip per chip  
Other: None  
Memory: 1 TB (32 x 32 GB 2Rx8 PC5-4800B-R)  
Storage: 1 x 960 GB M.2 NVME SSD  
Cooling: Air  
Other: None

### Software

OS: Red Hat Enterprise Linux 9.6 (Plow)  
Kernel 5.14.0-570.12.1.el9\_6.x86\_64  
Compiler: C/C++: Version 2026.0 of Intel oneAPI DPC++/C++ Compiler for Linux;  
Fortran: Version 2026.0 of Intel Fortran Compiler for Linux  
Compiler Category: Vendor  
Firmware: Lenovo BIOS Version RSE127G 8.50 released May-2026  
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 and OS set to prefer performance at the cost of additional power usage



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## Results Table

| Benchmark        | Base    |             |             |             |             |             |             | Peak    |         |       |         |       |         |       |
|------------------|---------|-------------|-------------|-------------|-------------|-------------|-------------|---------|---------|-------|---------|-------|---------|-------|
|                  | Threads | Seconds     | Ratio       | Seconds     | Ratio       | Seconds     | Ratio       | Threads | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio |
| 800.pot3d_s      | 240     | <b>221</b>  | <b>3.04</b> | 244         | 2.76        | 168         | 4.01        |         |         |       |         |       |         |       |
| 803.sph_exa_s    | 240     | 118         | 10.5        | <b>123</b>  | <b>10.1</b> | 127         | 9.76        |         |         |       |         |       |         |       |
| 809.cactus_s     | 240     | 245         | 4.58        | <b>247</b>  | <b>4.54</b> | 248         | 4.52        |         |         |       |         |       |         |       |
| 811.tealeaf_s    | 240     | <b>71.4</b> | <b>7.81</b> | 89.1        | 6.25        | 65.3        | 8.52        |         |         |       |         |       |         |       |
| 816.nab_s        | 240     | 48.9        | 23.0        | <b>48.8</b> | <b>23.1</b> | 48.4        | 23.2        |         |         |       |         |       |         |       |
| 820.cloverleaf_s | 240     | 163         | 5.24        | 157         | 5.45        | <b>163</b>  | <b>5.27</b> |         |         |       |         |       |         |       |
| 822.palm_s       | 240     | <b>1010</b> | <b>1.22</b> | 994         | 1.24        | 1033        | 1.19        |         |         |       |         |       |         |       |
| 849.fotonik3d_s  | 240     | 497         | 1.33        | <b>572</b>  | <b>1.15</b> | 608         | 1.09        |         |         |       |         |       |         |       |
| 857.namd_s       | 240     | <b>171</b>  | <b>8.49</b> | 178         | 8.18        | 166         | 8.77        |         |         |       |         |       |         |       |
| 865.roms_s       | 240     | 777         | 1.40        | <b>726</b>  | <b>1.50</b> | 700         | 1.56        |         |         |       |         |       |         |       |
| 867.nest_s       | 240     | 56.8        | 38.1        | 56.5        | 38.2        | <b>56.6</b> | <b>38.2</b> |         |         |       |         |       |         |       |
| 872.marian_s     | 240     | <b>90.4</b> | <b>12.0</b> | 87.0        | 12.4        | 91.9        | 11.8        |         |         |       |         |       |         |       |
| 881.neutron_s    | 240     | 172         | 4.75        | <b>174</b>  | <b>4.68</b> | 175         | 4.65        |         |         |       |         |       |         |       |

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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:

KMP\_AFFINITY = "granularity=fine,scatter"

LD\_LIBRARY\_PATH = "/home/cpu2026-1.0.1-ic2026.0/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

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.

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## General Notes (Continued)

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.

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:

Choose Operating Mode set to Maximum Performance and then set it to Custom Mode

HyperThreading set to Disabled

DCU Streamer Prefetcher set to Disabled

Page Policy set to Adaptive

Sysinfo program /home/cpu2026-1.0.1-ic2026.0/bin/sysinfo

Rev: 779ab21020787073335a329f3a45e2cd

running on localhost Fri May 29 10:28:40 2026

SUT (System Under Test) info as seen by some common utilities.

### Table of contents

1. uname -srv
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 252 (252-51.el9)
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

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## Platform Notes (Continued)

1. `uname -srv`

Linux 5.14.0-570.12.1.el9\_6.x86\_64 #1 SMP PREEMPT\_DYNAMIC Fri Apr 4 10:41:31 EDT 2025 x86\_64

2. `w`

10:28:40 up 3:17, 0 users, load average: 40.34, 96.05, 162.96  
USER TTY LOGIN@ IDLE JCPU PCPU WHAT

3. Username

From environment variable \$USER: root

4. `ulimit -a`

real-time non-blocking time (microseconds, -R) unlimited  
core file size (blocks, -c) unlimited  
data seg size (kbytes, -d) unlimited  
scheduling priority (-e) 0  
file size (blocks, -f) unlimited  
pending signals (-i) 4126737  
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) 4126737  
virtual memory (kbytes, -v) unlimited  
file locks (-x) unlimited

5. `sysinfo process ancestry`

/usr/lib/systemd/systemd --switched-root --system --deserialize 31  
sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups  
sshd: root [priv]  
sshd: root@notty  
/bin/bash ./02.remote\_local\_SPECcpu\_1.02.sh  
sh Run553-compliant-ic2026.0-lin-sapphirerapids-speedfp-base-smt-off-20260429.sh  
runcpu --nobuild --iterations=3 --reportable --action validate --define default-platform-flags -c  
ic2026.0-sapphirerapids-cpu2026-1.0.1-speed-20260429.cfg --threads 240 --define cores=240 --tune base -o  
all --define drop\_caches fpspeed  
runcpu --nobuild --iterations 3 --reportable --action validate --define default-platform-flags --configfile

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### Platform Notes (Continued)

```
ic2026.0-sapphirerapids-cpu2026-1.0.1-speed-20260429.cfg --threads 240 --define cores=240 --tune base
--output_format all --define drop_caches --nopower --runmode speed --tune base --size refspeed fpspeed
--nopreenv --note-preenv --logfile $SPEC/tmp/CPU2026.016/templogs/preenv.fpspeed.016.0.log --lognum 016.0
--from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /home/cpu2026-1.0.1-ic2026.0
```

#### 6. /proc/cpuinfo

```
model name      : Intel(R) Xeon(R) Platinum 8490H
vendor_id       : GenuineIntel
cpu family      : 6
model           : 143
stepping        : 8
microcode       : 0x2b000661
bugs            : spectre_v1 spectre_v2 spec_store_bypass swapgs eibrs_pbrsb bhi
cpu cores       : 60
siblings        : 60
4 physical ids (chips)
240 processors (hardware threads)
physical id 0:  core ids 0-59
physical id 1:  core ids 0-59
physical id 2:  core ids 0-59
physical id 3:  core ids 0-59
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
physical id 1:  apicids
128, 130, 132, 134, 136, 138, 140, 142, 144, 146, 148, 150, 152, 154, 156, 158, 160, 162, 164, 166, 168, 170, 172, 174, 176, 178, 1
80, 182, 184, 186, 188, 190, 192, 194, 196, 198, 200, 202, 204, 206, 208, 210, 212, 214, 216, 218, 220, 222, 224, 226, 228, 230, 23
2, 234, 236, 238, 240, 242, 244, 246
physical id 2:  apicids
256, 258, 260, 262, 264, 266, 268, 270, 272, 274, 276, 278, 280, 282, 284, 286, 288, 290, 292, 294, 296, 298, 300, 302, 304, 306, 3
08, 310, 312, 314, 316, 318, 320, 322, 324, 326, 328, 330, 332, 334, 336, 338, 340, 342, 344, 346, 348, 350, 352, 354, 356, 358, 36
0, 362, 364, 366, 368, 370, 372, 374
physical id 3:  apicids
384, 386, 388, 390, 392, 394, 396, 398, 400, 402, 404, 406, 408, 410, 412, 414, 416, 418, 420, 422, 424, 426, 428, 430, 432, 434, 4
36, 438, 440, 442, 444, 446, 448, 450, 452, 454, 456, 458, 460, 462, 464, 466, 468, 470, 472, 474, 476, 478, 480, 482, 484, 486, 48
8, 490, 492, 494, 496, 498, 500, 502
```

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 2.37.4:

Architecture: x86\_64

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### Platform Notes (Continued)

CPU op-mode(s): 32-bit, 64-bit  
Address sizes: 46 bits physical, 57 bits virtual  
Byte Order: Little Endian  
CPU(s): 240  
On-line CPU(s) list: 0-239  
Vendor ID: GenuineIntel  
BIOS Vendor ID: Intel(R) Corporation  
Model name: Intel(R) Xeon(R) Platinum 8490H  
BIOS Model name: Intel(R) Xeon(R) Platinum 8490H  
CPU family: 6  
Model: 143  
Thread(s) per core: 1  
Core(s) per socket: 60  
Socket(s): 4  
Stepping: 8  
CPU(s) scaling MHz: 99%  
CPU max MHz: 3500.0000  
CPU min MHz: 800.0000  
BogoMIPS: 3800.00  
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 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 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 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\_l1d arch\_capabilities  
Virtualization: VT-x  
L1d cache: 11.3 MiB (240 instances)  
L1i cache: 7.5 MiB (240 instances)  
L2 cache: 480 MiB (240 instances)  
L3 cache: 450 MiB (4 instances)  
NUMA node(s): 4  
NUMA node0 CPU(s): 0-59  
NUMA node1 CPU(s): 60-119  
NUMA node2 CPU(s): 120-179

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### Platform Notes (Continued)

NUMA node3 CPU(s): 180-239  
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; PBRSE-eIBRS SW sequence; 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      | 11.3M    | 12   | Data        | 1     | 64     | 1        | 64             |
| L1i  | 32K      | 7.5M     | 8    | Instruction | 1     | 64     | 1        | 64             |
| L2   | 2M       | 480M     | 16   | Unified     | 2     | 2048   | 1        | 64             |
| L3   | 112.5M   | 450M     | 15   | Unified     | 3     | 122880 | 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: 0-59

node 0 size: 257649 MB

node 0 free: 256283 MB

node 1 cpus: 60-119

node 1 size: 258032 MB

node 1 free: 254976 MB

node 2 cpus: 120-179

node 2 size: 258032 MB

node 2 free: 256861 MB

node 3 cpus: 180-239

node 3 size: 258016 MB

node 3 free: 256381 MB

node distances:

|      |   |   |   |   |
|------|---|---|---|---|
| node | 0 | 1 | 2 | 3 |
|------|---|---|---|---|

|    |    |    |    |    |
|----|----|----|----|----|
| 0: | 10 | 21 | 21 | 21 |
|----|----|----|----|----|

|    |    |    |    |    |
|----|----|----|----|----|
| 1: | 21 | 10 | 21 | 21 |
|----|----|----|----|----|

|    |    |    |    |    |
|----|----|----|----|----|
| 2: | 21 | 21 | 10 | 21 |
|----|----|----|----|----|

|    |    |    |    |    |
|----|----|----|----|----|
| 3: | 21 | 21 | 21 | 10 |
|----|----|----|----|----|

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### Platform Notes (Continued)

9. /proc/meminfo

MemTotal: 1056492680 kB

10. who -r

run-level 3 May 29 07:10

11. Systemd service manager version: systemd 252 (252-51.el9)

| Default Target | Status   |
|----------------|----------|
| multi-user     | degraded |

12. Failed units, from systemctl list-units --state=failed

| UNIT                    | LOAD   | ACTIVE | SUB    | DESCRIPTION   |
|-------------------------|--------|--------|--------|---------------|
| * dnf-makecache.service | loaded | failed | failed | dnf makecache |

13. Services, from systemctl list-unit-files

| STATE           | UNIT FILES                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| enabled         | NetworkManager NetworkManager-dispatcher NetworkManager-wait-online auditd crond<br>dbus-broker firewalld getty@ insights-client-boot irqbalance kdump low-memory-monitor<br>lvm2-monitor mdmonitor microcode nis-domainname nvme-fc-boot-connections rhsmcertd rsyslog<br>rtkit-daemon selinux-autorelabel-mark sshd sssd systemd-boot-update<br>systemd-network-generator systemd-pstore udisks2 upower     |
| enabled-runtime | systemd-remount-fs                                                                                                                                                                                                                                                                                                                                                                                            |
| disabled        | blk-availability canberra-system-bootup canberra-system-shutdown<br>canberra-system-shutdown-reboot console-getty cpupower debug-shell dnf-system-upgrade<br>kvm_stat lvm-devices-import man-db-restart-cache-update nftables nvme-fc-autoconnect pesign<br>rdisc rhcd rhsm rhsm-facts rpmdm-rebuild selinux-check-proper-disable serial-getty@<br>sshd-keygen@ systemd-boot-check-no-failures systemd-sysext |
| indirect        | sssd-autofs sssd-kcm sssd-nss sssd-pac sssd-pam sssd-ssh sssd-sudo systemd-sysupdate<br>systemd-sysupdate-reboot                                                                                                                                                                                                                                                                                              |

14. Linux kernel boot-time arguments, from /proc/cmdline

BOOT\_IMAGE=(hd3,gpt2)/vmlinuz-5.14.0-570.12.1.el9\_6.x86\_64  
root=/dev/mapper/rhel-root  
ro  
resume=/dev/mapper/rhel-swap  
rd.lvm.lv=rhel/root  
rd.lvm.lv=rhel/swap

15. cpupower frequency-info

analyzing CPU 170:

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### Platform Notes (Continued)

current policy: frequency should be within 800 MHz and 3.50 GHz.  
The governor "performance" may decide which speed to use within this range.

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+madvice [madvice] never
enabled     [always] madvice 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
```

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# SPEC CPU®2026 Floating Point Speed Result

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## Lenovo Global Technology

ThinkSystem SR850 V3  
(1.90 GHz, Intel Xeon Platinum 8490H)

SPECspeed®2026\_fp\_base = 5.58

SPECspeed®2026\_fp\_peak = Not Run

CPU2026 License: 9017

Test Sponsor: Lenovo Global Technology

Tested by: Lenovo Global Technology

Test Date: May-2026

Hardware Availability: Jun-2023

Software Availability: Apr-2026

## Platform Notes (Continued)

### 19. OS release

From /etc/\*-release /etc/\*-version

os-release Red Hat Enterprise Linux 9.6 (Plow)

redhat-release Red Hat Enterprise Linux release 9.6 (Plow)

system-release Red Hat Enterprise Linux release 9.6 (Plow)

### 20. Disk information

SPEC is set to: /home/cpu2026-1.0.1-ic2026.0

| Filesystem            | Type | Size | Used | Avail | Use% | Mounted on |
|-----------------------|------|------|------|-------|------|------------|
| /dev/mapper/rhel-home | xfs  | 819G | 73G  | 746G  | 9%   | /home      |

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

Vendor: Lenovo

Product: ThinkSystem SR850 V3

Product Family: ThinkSystem

Serial: None

### 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:

32x SK Hynix HMC88AEBRA168N 32 GB 2 rank 4800

### 23. BIOS

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

BIOS Vendor: Lenovo

BIOS Version: RSE127G-8.50

BIOS Date: 05/15/2026

BIOS Revision: 8.50

Firmware Revision: 8.10

## Compiler Version Notes

=====  
C | 811.tealeaf\_s(base) 816.nab\_s(base) 881.neutron\_s(base)  
=====

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64,  
Version 2026.0.0 Build 20260331

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## Compiler Version Notes (Continued)

```
=====
C++      | 803.sph_exa_s(base) 857.namd_s(base) 867.nest_s(base)
          | 872.marian_s(base)
-----
```

```
Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64,
Version 2026.0.0 Build 20260331
Copyright (C) 1985-2026 Intel Corporation. All rights reserved.
-----
```

```
=====
C++, C   | 809.cactus_s(base)
-----
```

```
Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64,
Version 2026.0.0 Build 20260331
Copyright (C) 1985-2026 Intel Corporation. All rights reserved.
-----
```

```
=====
Fortran  | 800.pot3d_s(base) 820.cloverleaf_s(base) 822.palm_s(base)
          | 849.fotonik3d_s(base) 865.roms_s(base)
-----
```

```
Intel(R) Fortran Compiler for applications running on Intel(R) 64, Version
2026.0.0 Build 20260331
Copyright (C) 1985-2026 Intel Corporation. All rights reserved.
-----
```

## Base Compiler Invocation

C benchmarks:

icx

C++ benchmarks:

icpx

Fortran benchmarks:

ifx

Benchmarks using both C and C++:

icpx icx



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Software Availability: Apr-2026

## Base Optimization Flags

C benchmarks:

```
-m64 -std=c18 -Wl, -z,muldefs -Wl,-plugin-opt=-inline-threshold=1500  
-xsapphirerapids -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:

```
-m64 -std=c++17 -Wl, -z,muldefs -Wl,-plugin-opt=-inline-threshold=1500  
-xsapphirerapids -mprefer-vector-width=512 -O3 -ffp-model=fast -flto  
-mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4 -pthread  
-fiopenmp -DSPEC_OPENMP -L/usr/local/jemalloc-5.3.0/lib -ljemalloc
```

Fortran benchmarks:

```
-m64 -stand f18 -Wl, -z,muldefs -Wl,-plugin-opt=-inline-threshold=1500  
-xsapphirerapids -mprefer-vector-width=512 -O3 -ffp-model=fast -flto  
-mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4 -DSPEC_OPENMP  
-fiopenmp -L/usr/local/jemalloc-5.3.0/lib -ljemalloc
```

Benchmarks using both C and C++:

```
-m64 -std=c++17 -std=c18 -Wl, -z,muldefs  
-Wl,-plugin-opt=-inline-threshold=1500 -xsapphirerapids  
-mprefer-vector-width=512 -O3 -ffp-model=fast -flto -mfpmath=sse  
-funroll-loops -qopt-mem-layout-trans=4 -fiopenmp -DSPEC_OPENMP  
-pthread -L/usr/local/jemalloc-5.3.0/lib -ljemalloc
```

The flags files that were used to format this result can be browsed at

<http://www.spec.org/cpu2026/results/flags/Lenovo-Platform-SPECcpu2026-Flags-V1.2-Eaglestream-AD.html>

<http://www.spec.org/cpu2026/results/flags/Intel-ic2026-official-linux64-v1.1.html>

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

<http://www.spec.org/cpu2026/results/flags/Lenovo-Platform-SPECcpu2026-Flags-V1.2-Eaglestream-AD.xml>

<http://www.spec.org/cpu2026/results/flags/Intel-ic2026-official-linux64-v1.1.xml>

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