



# SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

## Lenovo Global Technology

ThinkSystem SR860 V3  
(1.90 GHz, Intel Xeon Platinum 8490H)

SPECspeed®2017\_fp\_base = 413

SPECspeed®2017\_fp\_peak = Not Run

CPU2017 License: 9017

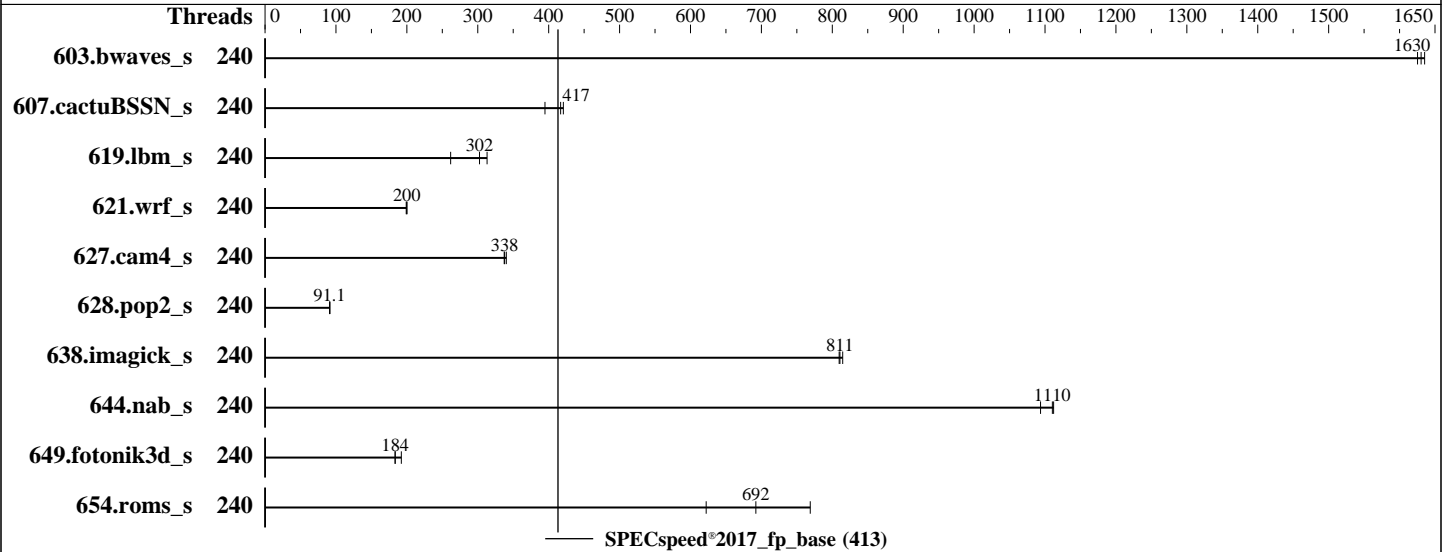
Test Sponsor: Lenovo Global Technology

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 480 TB NVME SSD  
 Other: CPU Cooling: Air

### Software

OS: SUSE Linux Enterprise Server 15 SP7  
 Kernel 6.4.0-150700.51-default  
 Compiler: C/C++: Version 2026.0 of Intel oneAPI DPC++/C++ Compiler for Linux;  
 Fortran: Version 2026.0 of Intel Fortran Compiler for Linux;  
 Parallel: Yes  
 Firmware: Lenovo BIOS Version RSE127F 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 V5.0.1  
 Power Management: BIOS set to prefer performance at the cost of additional power usage



# SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

## Lenovo Global Technology

ThinkSystem SR860 V3  
(1.90 GHz, Intel Xeon Platinum 8490H)

SPECspeed®2017\_fp\_base = 413

SPECspeed®2017\_fp\_peak = Not Run

CPU2017 License: 9017  
Test Sponsor: Lenovo Global Technology  
Tested by: Lenovo Global Technology

Test Date: May-2026  
Hardware Availability: Jun-2023  
Software Availability: Apr-2026

## Results Table

| Benchmark       | Base    |             |             |             |             |         | Peak  |         |         |       |         |       |         |       |
|-----------------|---------|-------------|-------------|-------------|-------------|---------|-------|---------|---------|-------|---------|-------|---------|-------|
|                 | Threads | Seconds     | Ratio       | Seconds     | Ratio       | Seconds | Ratio | Threads | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio |
| 603.bwaves_s    | 240     | 36.1        | 1640        | <u>36.2</u> | <u>1630</u> | 36.3    | 1630  |         |         |       |         |       |         |       |
| 607.cactuBSSN_s | 240     | 42.2        | 395         | <u>40.0</u> | <u>417</u>  | 39.6    | 421   |         |         |       |         |       |         |       |
| 619.lbm_s       | 240     | <u>17.3</u> | <u>302</u>  | 16.7        | 313         | 20.0    | 262   |         |         |       |         |       |         |       |
| 621.wrf_s       | 240     | 66.1        | 200         | <u>66.2</u> | <u>200</u>  | 66.4    | 199   |         |         |       |         |       |         |       |
| 627.cam4_s      | 240     | 26.3        | 337         | <u>26.2</u> | <u>338</u>  | 26.0    | 340   |         |         |       |         |       |         |       |
| 628.pop2_s      | 240     | 130         | 91.5        | <u>130</u>  | <u>91.1</u> | 131     | 91.0  |         |         |       |         |       |         |       |
| 638.imagick_s   | 240     | 17.8        | 810         | <u>17.8</u> | <u>811</u>  | 17.7    | 815   |         |         |       |         |       |         |       |
| 644.nab_s       | 240     | <u>15.7</u> | <u>1110</u> | 16.0        | 1090        | 15.7    | 1110  |         |         |       |         |       |         |       |
| 649.fotonik3d_s | 240     | <u>49.6</u> | <u>184</u>  | 49.7        | 183         | 47.4    | 192   |         |         |       |         |       |         |       |
| 654.roms_s      | 240     | 25.3        | 622         | <u>22.7</u> | <u>692</u>  | 20.5    | 769   |         |         |       |         |       |         |       |

SPECspeed®2017\_fp\_base = 413

SPECspeed®2017\_fp\_peak = Not Run

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,compact"  
LD\_LIBRARY\_PATH = "/home/cpu2017-1.1.9-ic2026.0/lib/intel64"  
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 Redhat Enterprise Linux 8.0  
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.  
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 RedHat Enterprise 7.5, and the system compiler gcc 4.8.5  
sources available from jemalloc.net or <https://github.com/jemalloc/jemalloc/releases>

## Platform Notes

BIOS configuration:  
Choose Operating Mode set to Maximum Performance

(Continued on next page)



# SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

## Lenovo Global Technology

ThinkSystem SR860 V3  
(1.90 GHz, Intel Xeon Platinum 8490H)

SPECspeed®2017\_fp\_base = 413

SPECspeed®2017\_fp\_peak = Not Run

**CPU2017 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)

Hyper-Threading set to Disabled  
DCU Streamer Prefetcher set to Disabled

Sysinfo program /home/cpu2017-1.1.9-ic2026.0/bin/sysinfo  
Rev: r6732 of 2022-11-07 fe91c89b7ed5c36ae2c92cc097bec197  
running on localhost Thu May 14 16:49:09 2026

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

-----  
Table of contents  
-----

1. uname -a
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. 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 -a  
Linux localhost 6.4.0-150700.51-default #1 SMP PREEMPT\_DYNAMIC Wed Apr 30 21:35:43 UTC 2025 (6930611)  
x86\_64 x86\_64 x86\_64 GNU/Linux  
-----

2. w  
16:49:09 up 3 min, 1 user, load average: 0.10, 0.09, 0.04  
USER TTY FROM LOGIN@ IDLE JCPU PCPU WHAT  
-----

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

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) 4126728  
max locked memory (kbytes, -l) 8192  
max memory size (kbytes, -m) unlimited  
open files (-n) 1024  
-----

(Continued on next page)



# SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

## Lenovo Global Technology

ThinkSystem SR860 V3  
(1.90 GHz, Intel Xeon Platinum 8490H)

SPECspeed®2017\_fp\_base = 413

SPECspeed®2017\_fp\_peak = Not Run

**CPU2017 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)

```
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) 4126728
virtual memory     (kbytes, -v) unlimited
file locks         (-x) unlimited
```

#### 5. sysinfo process ancestry

```
/usr/lib/systemd/systemd --switched-root --system --deserialize=43
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 --action validate --define default-platform-flags -c
  ic2026.0-lin-sapphirerapids-speed-20260429.cfg --define cores=240 --tune base -o all --define drop_caches
  fpspeed
runcpu --nobuild --action validate --define default-platform-flags --configfile
  ic2026.0-lin-sapphirerapids-speed-20260429.cfg --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/CPU2017.009/templogs/preenv.fpspeed.009.0.log --lognum 009.0 --from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /home/cpu2017-1.1.9-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

(Continued on next page)



# SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

## Lenovo Global Technology

ThinkSystem SR860 V3  
(1.90 GHz, Intel Xeon Platinum 8490H)

SPECspeed®2017\_fp\_base = 413

SPECspeed®2017\_fp\_peak = Not Run

**CPU2017 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)

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:         46 bits physical, 57 bits virtual
Byte Order:            Little Endian
CPU(s):                240
On-line CPU(s) list:   0-239
Vendor ID:             GenuineIntel
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:    25%
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 bmil 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 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_lld 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
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

```

(Continued on next page)



# SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

## Lenovo Global Technology

SPECspeed®2017\_fp\_base = 413

ThinkSystem SR860 V3  
(1.90 GHz, Intel Xeon Platinum 8490H)

SPECspeed®2017\_fp\_peak = Not Run

**CPU2017 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)

|                                     |  |
|-------------------------------------|--|
| 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/swaps 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: 257693 MB
node 0 free: 256951 MB
node 1 cpus: 60-119
node 1 size: 257993 MB
node 1 free: 257197 MB
node 2 cpus: 120-179
node 2 size: 258031 MB
node 2 free: 257124 MB
node 3 cpus: 180-239
node 3 size: 257991 MB
node 3 free: 257320 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

```

9. /proc/meminfo

MemTotal: 1056471644 kB

10. who -r

run-level 3 May 14 16:45

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 nvme-fc-boot-connections nvme-autoconnect postfix purge-kernels rollback rsyslog smartd sshd systemd-pstore wicked wickedd-auto4 wickedd-dhcp4 wickedd-dhcp6 wickedd-nanny |
| enabled-runtime | systemd-remount-fs  |

(Continued on next page)



# SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

## Lenovo Global Technology

SPECspeed®2017\_fp\_base = 413

ThinkSystem SR860 V3  
(1.90 GHz, Intel Xeon Platinum 8490H)

SPECspeed®2017\_fp\_peak = Not Run

**CPU2017 License:** 9017

**Test Date:** May-2026

**Test Sponsor:** Lenovo Global Technology

**Hardware Availability:** Jun-2023

**Tested by:** Lenovo Global Technology

**Software Availability:** Apr-2026

### Platform Notes (Continued)

```

disabled      autofsd autofast-initscripts blk-availability boot-sysctl ca-certificates chrony-wait
              chronyd console-getty cups cups-browsed debug-shell ebttables exchange-bmc-os-info
              firewallld 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-sysexit systemd-time-wait-sync systemd-timesyncd
              systemd-userdbd wickedd
indirect

```

```

-----
13. Linux kernel boot-time arguments, from /proc/cmdline
BOOT_IMAGE=/boot/vmlinuz-6.4.0-150700.51-default
root=UUID=7a0ea09d-0975-48e7-9598-0d39dc424077
splash=silent
mitigations=auto
quiet
security=apparmor

```

```

-----
14. cpupower frequency-info
analyzing CPU 88:
  current policy: frequency should be within 800 MHz and 3.50 GHz.
                  The governor "powersave" may decide which speed to use
                  within this range.

  boost state support:
    Supported: yes
    Active: yes

```

```

-----
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
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+madvice [madvice] never
enabled     [always] madvice 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

```

(Continued on next page)



# SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

## Lenovo Global Technology

ThinkSystem SR860 V3  
(1.90 GHz, Intel Xeon Platinum 8490H)

SPECspeed®2017\_fp\_base = 413

SPECspeed®2017\_fp\_peak = Not Run

**CPU2017 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)

```
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 SP7

-----  
19. Disk information  
SPEC is set to: /home/cpu2017-1.1.9-ic2026.0  
Filesystem Type Size Used Avail Use% Mounted on  
/dev/nvme0n1p3 xfs 892G 94G 798G 11% /

-----  
20. /sys/devices/virtual/dmi/id  
Vendor: Lenovo  
Product: ThinkSystem SR860 V3  
Product Family: ThinkSystem  
Serial: None

-----  
21. 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:  
7x Samsung M321R4GA3BB0-CQKDG 32 GB 2 rank 4800  
13x Samsung M321R4GA3BB0-CQKEG 32 GB 2 rank 4800  
5x Samsung M321R4GA3BB0-CQKMG 32 GB 2 rank 4800  
7x Samsung M321R4GA3BB0-CQKVG 32 GB 2 rank 4800

-----  
22. BIOS  
(This section combines info from /sys/devices and dmidecode.)  
BIOS Vendor: Lenovo  
BIOS Version: RSE127F-8.50  
BIOS Date: 05/07/2026  
BIOS Revision: 8.50  
Firmware Revision: 8.10

### Compiler Version Notes

=====  
C | 619.lbm\_s(base) 638.imagick\_s(base) 644.nab\_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, Fortran | 607.cactuBSSN\_s(base)

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

(Continued on next page)



# SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

## Lenovo Global Technology

SPECspeed®2017\_fp\_base = 413

ThinkSystem SR860 V3  
(1.90 GHz, Intel Xeon Platinum 8490H)

SPECspeed®2017\_fp\_peak = Not Run

**CPU2017 License:** 9017

**Test Date:** May-2026

**Test Sponsor:** Lenovo Global Technology

**Hardware Availability:** Jun-2023

**Tested by:** Lenovo Global Technology

**Software Availability:** Apr-2026

## Compiler Version Notes (Continued)

Copyright (C) 1985-2026 Intel Corporation. All rights reserved.  
 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.  
 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.

-----  
 Fortran | 603.bwaves\_s(base) 649.fotonik3d\_s(base) 654.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.

-----  
 Fortran, C | 621.wrf\_s(base) 627.cam4\_s(base) 628.pop2\_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.  
 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.

## Base Compiler Invocation

C benchmarks:

icx

Fortran benchmarks:

ifx

Benchmarks using both Fortran and C:

ifx icx

Benchmarks using Fortran, C, and C++:

icpx icx ifx

## Base Portability Flags

603.bwaves\_s: -DSPEC\_LP64  
 607.cactuBSSN\_s: -DSPEC\_LP64  
 619.lbm\_s: -DSPEC\_LP64  
 621.wrf\_s: -DSPEC\_LP64 -DSPEC\_CASE\_FLAG -convert big\_endian  
 627.cam4\_s: -DSPEC\_LP64 -DSPEC\_CASE\_FLAG  
 628.pop2\_s: -DSPEC\_LP64 -DSPEC\_CASE\_FLAG -convert big\_endian  
 -assume byterecl  
 638.imagick\_s: -DSPEC\_LP64

(Continued on next page)



# SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

**Lenovo Global Technology**

SPECspeed®2017\_fp\_base = 413

ThinkSystem SR860 V3  
(1.90 GHz, Intel Xeon Platinum 8490H)

SPECspeed®2017\_fp\_peak = Not Run

**CPU2017 License:** 9017

**Test Date:** May-2026

**Test Sponsor:** Lenovo Global Technology

**Hardware Availability:** Jun-2023

**Tested by:** Lenovo Global Technology

**Software Availability:** Apr-2026

## Base Portability Flags (Continued)

644.nab\_s: -DSPEC\_LP64  
649.fotonik3d\_s: -DSPEC\_LP64  
654.roms\_s: -DSPEC\_LP64

## Base Optimization Flags

C benchmarks:

```
-w -std=c11 -m64 -Wl,-z,muldefs -xsapphirerapids -Ofast -ffast-math
-flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4 -fiopenmp
-DSPEC_OPENMP -Wno-implicit-int -mprefer-vector-width=512
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

Fortran benchmarks:

```
-w -m64 -Wl,-z,muldefs -DSPEC_OPENMP -xsapphirerapids -Ofast
-ffast-math -flto -mfpmath=sse -funroll-loops
-qopt-mem-layout-trans=4 -fiopenmp -nostandard-realloc-lhs
-align array32byte -auto -L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

Benchmarks using both Fortran and C:

```
-w -m64 -std=c11 -Wl,-z,muldefs -xsapphirerapids -Ofast -ffast-math
-flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4 -fiopenmp
-DSPEC_OPENMP -Wno-implicit-int -mprefer-vector-width=512
-nostandard-realloc-lhs -align array32byte -auto
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

Benchmarks using Fortran, C, and C++:

```
-w -std=c++14 -m64 -std=c11 -Wl,-z,muldefs -xsapphirerapids -Ofast
-ffast-math -flto -mfpmath=sse -funroll-loops
-qopt-mem-layout-trans=4 -fiopenmp -DSPEC_OPENMP -Wno-implicit-int
-mprefer-vector-width=512 -nostandard-realloc-lhs -align array32byte
-auto -L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

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

<http://www.spec.org/cpu2017/flags/Lenovo-Platform-SPECcpu2017-Flags-V1.2-Eaglestream-AC.html>  
<http://www.spec.org/cpu2017/flags/Intel-ic2026-official-linux64.html>

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

<http://www.spec.org/cpu2017/flags/Lenovo-Platform-SPECcpu2017-Flags-V1.2-Eaglestream-AC.xml>  
<http://www.spec.org/cpu2017/flags/Intel-ic2026-official-linux64.xml>



# SPEC CPU®2017 Floating Point Speed Result

Copyright 2017-2026 Standard Performance Evaluation Corporation

## Lenovo Global Technology

ThinkSystem SR860 V3  
(1.90 GHz, Intel Xeon Platinum 8490H)

SPECspeed®2017\_fp\_base = 413

SPECspeed®2017\_fp\_peak = Not Run

**CPU2017 License:** 9017

**Test Sponsor:** Lenovo Global Technology

**Tested by:** Lenovo Global Technology

**Test Date:** May-2026

**Hardware Availability:** Jun-2023

**Software Availability:** Apr-2026

SPEC CPU and SPECspeed 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®2017 v1.1.9 on 2026-05-14 04:49:09-0400.  
Report generated on 2026-06-02 16:16:24 by CPU2017 PDF formatter v6716.  
Originally published on 2026-06-02.