SPEC CPU®2017 Integer Rate Result

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Lenovo Global Technology

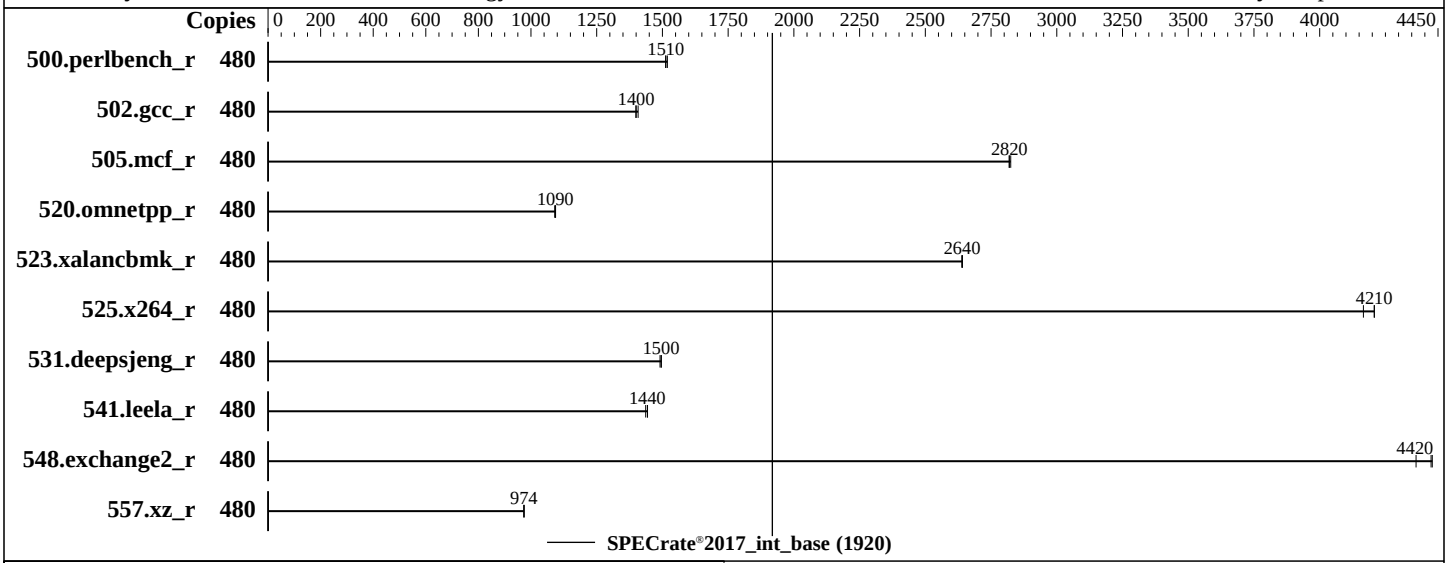
ThinkSystem SR860 V3
(1.90 GHz, Intel Xeon Platinum 8490H)

SPECrate®2017_int_base = 1920

SPECrate®2017_int_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, 2 threads/core
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:	No
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:	None
Power Management:	BIOS set to prefer performance at the cost of additional power usage

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Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
500.perlbench_r	480	503	1520	**505**	**1510**	505	1510							
502.gcc_r	480	**485**	**1400**	483	1410	486	1400							
505.mcf_r	480	**275**	**2820**	275	2820	275	2820							
520.omnetpp_r	480	576	1090	**576**	**1090**	578	1090							
523.xalancbmk_r	480	192	2640	**192**	**2640**	192	2640							
525.x264_r	480	**200**	**4210**	200	4210	202	4170							
531.deepsjeng_r	480	369	1490	368	1500	**368**	**1500**							
541.leela_r	480	**551**	**1440**	551	1440	553	1440							
548.exchange2_r	480	288	4370	**284**	**4420**	284	4430							
557.xz_r	480	532	974	**532**	**974**	533	973							

SPECrate®2017_int_base = 1920

SPECrate®2017_int_peak = Not Run

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/cpu2017-1.1.9-ic2026.0/lib/intel64:/home/cpu2017-1.1.9-ic2026.0/lib/ia32"
MALLOC_CONF = "retain:true"
```

General Notes

```
 Binaries compiled on a system with 2x Intel Xeon Platinum 8280M CPU + 384GB RAM
 memory using Red Hat Enterprise Linux 8.4
 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>
NA: The test sponsor attests, as of date of publication, that CVE-2017-5754 (Meltdown)
is mitigated in the system as tested and documented.
Yes: The test sponsor attests, as of date of publication, that CVE-2017-5753 (Spectre variant 1)
is mitigated in the system as tested and documented.
Yes: The test sponsor attests, as of date of publication, that CVE-2017-5715 (Spectre variant 2)
is mitigated in the system as tested and documented.
```

Platform Notes

```
BIOS configuration:
Choose Operating Mode set to Maximum Performance and then set it to Custom Mode
SNC set to SNC4
Adjacent Cache Prefetch set to Disabled
DCU Streamer Prefetcher set to Disabled
UPI Link Disable set to Minimum Number of Links Enabled
Misc set to Option4

 Sysinfo program /home/cpu2017-1.1.9-ic2026.0/bin/sysinfo
 Rev: r6732 of 2022-11-07 fe91c89b7ed5c36ae2c92cc097bec197
 running on localhost Sat May 16 04:37:13 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
    04:37:13 up  3:36,  1 user,  load average: 158.20, 382.02, 441.15
   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
```

(Continued on next page)

Platform Notes (Continued)

```
   file size               (blocks, -f) unlimited
   pending signals                 (-i) 4126060
   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) 4126060
   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 Run302-compliant-ic2026.0-lin-graniterapids-rateint-base-smt-on-20260429.sh
 runcpu --nobuild --action validate --define default-platform-flags --define numcopies=480 -c
   ic2026.0-lin-graniterapids-rate-20260429.cfg --define smt-on --define cores=240 --define physicalfirst
   --define invoke_with_interleave --define drop_caches --tune base -o all intrate
 runcpu --nobuild --action validate --define default-platform-flags --define numcopies=480 --configfile
   ic2026.0-lin-graniterapids-rate-20260429.cfg --define smt-on --define cores=240 --define physicalfirst
   --define invoke_with_interleave --define drop_caches --tune base --output_format all --nopower --runmode
   rate --tune base --size refrate intrate --nopreenv --note-preenv --logfile
   $SPEC/tmp/CPU2017.029/templogs/preenv.intrate.029.0.log --lognum 029.0 --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        : 120
    4 physical ids (chips)
    480 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 0-119
    physical id 1: apicids 128-247
    physical id 2: apicids 256-375
    physical id 3: apicids 384-503
  Caution: /proc/cpuinfo data regarding chips, cores, and threads is not necessarily reliable, especially for
  virtualized systems.  Use the above data carefully.

------------------------------------------------------------
7. lscpu
```

(Continued on next page)

Platform Notes (Continued)

```
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):                               480
  On-line CPU(s) list:                  0-479
  Vendor ID:                            GenuineIntel
  Model name:                           Intel(R) Xeon(R) Platinum 8490H
  CPU family:                           6
  Model:                                143
  Thread(s) per core:                   2
  Core(s) per socket:                   60
  Socket(s):                            4
  Stepping:                             8
  CPU(s) scaling MHz:                   24%
  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
                                        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:                            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):                         16
  NUMA node0 CPU(s):                    0-14,240-254
  NUMA node1 CPU(s):                    15-29,255-269
  NUMA node2 CPU(s):                    30-44,270-284
  NUMA node3 CPU(s):                    45-59,285-299
  NUMA node4 CPU(s):                    60-74,300-314
  NUMA node5 CPU(s):                    75-89,315-329
  NUMA node6 CPU(s):                    90-104,330-344
  NUMA node7 CPU(s):                    105-119,345-359
  NUMA node8 CPU(s):                    120-134,360-374
  NUMA node9 CPU(s):                    135-149,375-389
  NUMA node10 CPU(s):                   150-164,390-404
  NUMA node11 CPU(s):                   165-179,405-419
  NUMA node12 CPU(s):                   180-194,420-434
  NUMA node13 CPU(s):                   195-209,435-449
  NUMA node14 CPU(s):                   210-224,450-464
  NUMA node15 CPU(s):                   225-239,465-479
```

(Continued on next page)

Platform Notes (Continued)

```
  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 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: 16 nodes (0-15)
  node 0 cpus: 0-14,240-254
  node 0 size: 64101 MB
  node 0 free: 62820 MB
  node 1 cpus: 15-29,255-269
  node 1 size: 64503 MB
  node 1 free: 63427 MB
  node 2 cpus: 30-44,270-284
  node 2 size: 64503 MB
  node 2 free: 63426 MB
  node 3 cpus: 45-59,285-299
  node 3 size: 64503 MB
  node 3 free: 63382 MB
  node 4 cpus: 60-74,300-314
  node 4 size: 64503 MB
  node 4 free: 63369 MB
  node 5 cpus: 75-89,315-329
  node 5 size: 64503 MB
  node 5 free: 63417 MB
  node 6 cpus: 90-104,330-344
  node 6 size: 64503 MB
  node 6 free: 63435 MB
  node 7 cpus: 105-119,345-359
  node 7 size: 64503 MB
  node 7 free: 63384 MB
  node 8 cpus: 120-134,360-374
  node 8 size: 64503 MB
  node 8 free: 63416 MB
  node 9 cpus: 135-149,375-389
  node 9 size: 64503 MB
  node 9 free: 63417 MB
  node 10 cpus: 150-164,390-404
  node 10 size: 64503 MB
  node 10 free: 63402 MB
```

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Platform Notes (Continued)

```
  node 11 cpus: 165-179,405-419
  node 11 size: 64503 MB
  node 11 free: 63393 MB
  node 12 cpus: 180-194,420-434
  node 12 size: 64503 MB
  node 12 free: 63389 MB
  node 13 cpus: 195-209,435-449
  node 13 size: 64503 MB
  node 13 free: 63406 MB
  node 14 cpus: 210-224,450-464
  node 14 size: 64465 MB
  node 14 free: 63335 MB
  node 15 cpus: 225-239,465-479
  node 15 size: 64425 MB
  node 15 free: 63321 MB
  node distances:
  node   0   1   2   3   4   5   6   7   8   9  10  11  12  13  14  15
    0:  10  12  12  12  21  21  21  21  31  31  31  31  21  21  21  21
    1:  12  10  12  12  21  21  21  21  31  31  31  31  21  21  21  21
    2:  12  12  10  12  21  21  21  21  31  31  31  31  21  21  21  21
    3:  12  12  12  10  21  21  21  21  31  31  31  31  21  21  21  21
    4:  21  21  21  21  10  12  12  12  21  21  21  21  31  31  31  31
    5:  21  21  21  21  12  10  12  12  21  21  21  21  31  31  31  31
    6:  21  21  21  21  12  12  10  12  21  21  21  21  31  31  31  31
    7:  21  21  21  21  12  12  12  10  21  21  21  21  31  31  31  31
    8:  31  31  31  31  21  21  21  21  10  12  12  12  21  21  21  21
    9:  31  31  31  31  21  21  21  21  12  10  12  12  21  21  21  21
   10:  31  31  31  31  21  21  21  21  12  12  10  12  21  21  21  21
   11:  31  31  31  31  21  21  21  21  12  12  12  10  21  21  21  21
   12:  21  21  21  21  31  31  31  31  21  21  21  21  10  12  12  12
   13:  21  21  21  21  31  31  31  31  21  21  21  21  12  10  12  12
   14:  21  21  21  21  31  31  31  31  21  21  21  21  12  12  10  12
   15:  21  21  21  21  31  31  31  31  21  21  21  21  12  12  12  10

------------------------------------------------------------
9. /proc/meminfo
   MemTotal:       1056300492 kB

------------------------------------------------------------
10. who -r
  run-level 3 May 16 01:01

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

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Platform Notes (Continued)

```
                  systemd-network-generator systemd-sysext systemd-time-wait-sync systemd-timesyncd
  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=7a0ea09d-0975-48e7-9598-0d39dc424077
  splash=silent
  mitigations=auto
  quiet
  security=apparmor

------------------------------------------------------------
14. cpupower frequency-info
  analyzing CPU 50:
    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+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
```

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Platform Notes (Continued)

```
------------------------------------------------------------
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       | 500.perlbench_r(base) 502.gcc_r(base) 505.mcf_r(base) 525.x264_r(base) 557.xz_r(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++     | 520.omnetpp_r(base) 523.xalancbmk_r(base) 531.deepsjeng_r(base) 541.leela_r(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 | 548.exchange2_r(base)
```

(Continued on next page)

Compiler Version Notes (Continued)

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

Base Portability Flags

500.perlbench_r: -DSPEC_LP64 -DSPEC_LINUX_X64
502.gcc_r: -DSPEC_LP64
505.mcf_r: -DSPEC_LP64
520.omnetpp_r: -DSPEC_LP64
523.xalancbmk_r: -DSPEC_LP64 -DSPEC_LINUX
525.x264_r: -DSPEC_LP64
531.deepsjeng_r: -DSPEC_LP64
541.leela_r: -DSPEC_LP64
548.exchange2_r: -DSPEC_LP64
557.xz_r: -DSPEC_LP64

Base Optimization Flags

C benchmarks:
-w -std=c11 -m64 -Wl,-z,muldefs -xgraniterapids -O3 -ffast-math
-flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4
-L/home/specdev/intel-compilers/compiler/latest/lib -lqkmalloc

C++ benchmarks:
-w -std=c++14 -m64 -Wl,-z,muldefs -xgraniterapids -O3 -ffast-math
-flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4
-fdelayed-template-parsing
-L/home/specdev/intel-compilers/compiler/latest/lib -lqkmalloc

(Continued on next page)

Base Optimization Flags (Continued)

Fortran benchmarks:
-w -m64 -Wl,-z,muldefs -xgraniterapids -O3 -ffast-math -flto
-mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4
-nostandard-realloc-lhs -align array32byte -auto
-L/home/specdev/intel-compilers/compiler/latest/lib -lqkmalloc

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

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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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