## Lenovo Global Technology

**ThinkSystem SR250**  
(4.00 GHz, Intel Xeon E-2286G)

### SPEC CPU®2017 Integer Rate Result

**SPECraten®2017_int_base = 52.7**  
**SPECraten®2017_int_peak = 54.6**

<table>
<thead>
<tr>
<th>Software</th>
<th>CPU Name: Intel Xeon E-2286G</th>
<th>Max MHz: 4900</th>
<th>Nominal: 4000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Enabled: 6 cores, 1 chip, 2 threads/core</td>
<td>Orderable: 1 chip</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cache L1: 32 KB I + 32 KB D on chip per core</td>
<td>Cache L2: 256 KB I+D on chip per core</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cache L3: 12 MB I+D on chip per chip</td>
<td>Other: None</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Memory: 128 GB (4 x 32 GB 2Rx4 PC4-2666V-E)</td>
<td>Storage: 1 x 480 GB SATA SSD</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other: None</td>
<td>Power Management: BIOS set to prefer performance at the cost of additional power usage</td>
<td></td>
</tr>
</tbody>
</table>

### Hardware

**Test Date:** May-2020  
**Hardware Availability:** Mar-2020  
**Test Sponsor:** Lenovo Global Technology  
**Software Availability:** Apr-2020  
**Tested by:** Lenovo Global Technology

### SPECrate®2017 Int Rate Performance

<table>
<thead>
<tr>
<th>SPECrate®2017_int_base</th>
<th>SPECrate®2017_int_peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>54.6</td>
<td>52.7</td>
</tr>
</tbody>
</table>

### Test Details

- **CPU2017 License:** 9017
- **Hardware: Lenovo Global Technology**  
  **Lenovo Global Technology**  
  **ThinkSystem SR250**  
  **(4.00 GHz, Intel Xeon E-2286G)**  
  **Test Date:** May-2020  
  **Hardware Availability:** Mar-2020  
  **Test Sponsor:** Lenovo Global Technology  
  **Software Availability:** Apr-2020

### Benchmark Scores

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>perlbench_r</td>
<td>38.0</td>
</tr>
<tr>
<td>gcc_r</td>
<td>38.3</td>
</tr>
<tr>
<td>mcf_r</td>
<td>44.9</td>
</tr>
<tr>
<td>omnetpp_r</td>
<td>29.6</td>
</tr>
<tr>
<td>xalancbmk_r</td>
<td>62.1</td>
</tr>
<tr>
<td>x264_r</td>
<td>75.5</td>
</tr>
<tr>
<td>deepsjeng_r</td>
<td>45.6</td>
</tr>
<tr>
<td>leela_r</td>
<td>42.2</td>
</tr>
<tr>
<td>exchange2_r</td>
<td>32.4</td>
</tr>
<tr>
<td>xz_r</td>
<td>32.1</td>
</tr>
</tbody>
</table>
## Results Table

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Copies</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Copies</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>500.perlbench_r</td>
<td>12</td>
<td>502</td>
<td>38.0</td>
<td>505</td>
<td>37.8</td>
<td>501</td>
<td>38.1</td>
<td>12</td>
<td>424</td>
<td>45.0</td>
<td>421</td>
<td>45.4</td>
</tr>
<tr>
<td>502.mcf_r</td>
<td>12</td>
<td>445</td>
<td>38.2</td>
<td>443</td>
<td>38.3</td>
<td>444</td>
<td>38.3</td>
<td>12</td>
<td>378</td>
<td>45.0</td>
<td>379</td>
<td>44.8</td>
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<tr>
<td>505.mcf_r</td>
<td>12</td>
<td>256</td>
<td>75.7</td>
<td>257</td>
<td>75.5</td>
<td>259</td>
<td>74.9</td>
<td>12</td>
<td>256</td>
<td>75.7</td>
<td>257</td>
<td>75.5</td>
</tr>
<tr>
<td>520.omnetpp_r</td>
<td>12</td>
<td>532</td>
<td>29.6</td>
<td>530</td>
<td>29.7</td>
<td>531</td>
<td>29.6</td>
<td>12</td>
<td>532</td>
<td>29.6</td>
<td>530</td>
<td>29.7</td>
</tr>
<tr>
<td>523.xalancbmk_r</td>
<td>12</td>
<td>204</td>
<td>62.1</td>
<td>204</td>
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<td>204</td>
<td>62.1</td>
<td>204</td>
<td>62.2</td>
</tr>
<tr>
<td>525.x264_r</td>
<td>12</td>
<td>177</td>
<td>119</td>
<td>176</td>
<td>119</td>
<td>176</td>
<td>120</td>
<td>12</td>
<td>170</td>
<td>123</td>
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<tr>
<td>531.deepsjeng_r</td>
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<td>302</td>
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<td>45.6</td>
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<td>42.2</td>
<td>470</td>
<td>42.3</td>
<td>471</td>
<td>42.2</td>
<td>12</td>
<td>471</td>
<td>42.2</td>
<td>470</td>
<td>42.3</td>
</tr>
<tr>
<td>548.exchange2_r</td>
<td>12</td>
<td>285</td>
<td>110</td>
<td>286</td>
<td>110</td>
<td>286</td>
<td>110</td>
<td>12</td>
<td>285</td>
<td>110</td>
<td>286</td>
<td>110</td>
</tr>
<tr>
<td>557.xz_r</td>
<td>12</td>
<td>400</td>
<td>32.4</td>
<td>402</td>
<td>32.2</td>
<td>400</td>
<td>32.4</td>
<td>12</td>
<td>403</td>
<td>32.1</td>
<td>403</td>
<td>32.2</td>
</tr>
</tbody>
</table>

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

## Compiler Notes

The inconsistent Compiler version information under Compiler Version section is due to a discrepancy in Intel Compiler. The correct version of C/C++ compiler is: Version 19.1.1.217 Build 20200306 Compiler for Linux 
The correct version of Fortran compiler is: Version 19.1.1.217 Build 20200306 Compiler for Linux

## Submit Notes

The taskset mechanism was used to bind copies to processors. The config file option 'submit' was used to generate taskset 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/cpu2017-1.1.0-ic19.1.1/lib/intel64:/home/cpu2017-1.1.0-ic19.1.1/lib/ia32:/home/cpu2017-1.1.0-ic19.1.1/je5.0.1-32"
MALLOCONF = "retain:true"`
SPEC CPU®2017 Integer Rate Result

Copyright 2017-2020 Standard Performance Evaluation Corporation

Lenovo Global Technology
ThinkSystem SR250
(4.00 GHz, Intel Xeon E-2286G)

SPECrate®2017_int_base = 52.7
SPECrate®2017_int_peak = 54.6

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

Test Date: May-2020
Hardware Availability: Mar-2020
Software Availability: Apr-2020

General Notes

Binaries compiled on a system with 1x Intel Core i9-7980XE CPU + 64GB 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
Yes: 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.
Yes: The test sponsor attests, as of date of publication, that CVE-2018-3640 (Spectre variant 3a) is mitigated in the system as tested and documented.
Yes: The test sponsor attests, as of date of publication, that CVE-2018-3639 (Spectre variant 4) 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
Energy Efficient Turbo set to Enable
Zero Output set to Advanced Mode
Intel Virtualization Technology set to Disable
Hardware Prefetcher set to Disable
Adjacent Cache Prefetch set to Disable

Sysinfo program /home/cpu2017-1.1.0-ic19.1.1/bin/sysinfo
Rev: r6365 of 2019-08-21 295195f888a3d7edbbe6e46a485a0011
running on linux-jecn Thu Feb 14 22:21:57 2019

SUT (System Under Test) info as seen by some common utilities.
For more information on this section, see https://www.spec.org/cpu2017/Docs/config.html#sysinfo

From /proc/cpuinfo
    model name : Intel(R) Xeon(R) E-2286G CPU @ 4.00GHz
    1 "physical id"s (chips)
    12 "processors"
cores, siblings (Caution: counting these is hw and system dependent. The following excerpts from /proc/cpuinfo might not be reliable. Use with caution.)
    cpu cores : 6
    siblings : 12

(Continued on next page)
# SPEC CPU®2017 Integer Rate Result

**Lenovo Global Technology**  
ThinkSystem SR250  
(4.00 GHz, Intel Xeon E-2286G)

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<tr>
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**CPU2017 License:** 9017  
**Test Sponsor:** Lenovo Global Technology  
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**Test Date:** May-2020  
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**Software Availability:** Apr-2020

---

## Platform Notes (Continued)

physical 0: cores 0 1 2 3 4 5

```
From lscpu:
Architecture: x86_64
CPU op-mode(s): 32-bit, 64-bit
Byte Order: Little Endian
Address sizes: 39 bits physical, 48 bits virtual
CPU(s): 12
On-line CPU(s) list: 0-11
Thread(s) per core: 2
Core(s) per socket: 6
Socket(s): 1
NUMA node(s): 1
Vendor ID: GenuineIntel
CPU family: 6
Model: 158
Model name: Intel(R) Xeon(R) E-2286G CPU @ 4.00GHz
Stepping: 10
CPU MHz: 4000.000
CPU max MHz: 4900.0000
CPU min MHz: 800.0000
BogoMIPS: 8016.00
Virtualization: VT-x
L1d cache: 32K
L1i cache: 32K
L2 cache: 256K
L3 cache: 12288K
NUMA node0 CPU(s): 0-11
Flags: fpu vme de pse tsc msr pae mca cmov pat pse36 clflush dts acpi mmx fxsr sse sse2 ss ht tm pbe syscall nx pdpe1gb rdtscp lm constant_tsc arch_perfmon pebs bts rep_good nopl tsc mrte pme pts cmov停电 unp ce x8apic movbe sam eferm perfkey tsc_deadline_timer aes xsave avx f16c rdrand lahf_lm abm 3nowprefetch cpuid_fault epb invpcid_single pti ssbd ibrs ibpb stibp tpr_shadow vnmi flexpriority ept vpid fsgsbase tsc_adjust bmi1 hle avx2 smep bmi2 erms invpcm rtm mpx rdseed adx smap clflushopt intel_pt xsaveopt xsavec xgetbv1 xsaves dtherm ida arat pln pts hwp hwp_notify hwp_act_window hwp_epp md clears flush_l1d
```

/proc/cpuinfo cache data

cache size : 12288 KB

From numactl --hardware  WARNING: a numactl 'node' might or might not correspond to a physical chip.

available: 1 nodes (0)
node 0 cpus: 0 1 2 3 4 5 6 7 8 9 10 11
node 0 size: 128865 MB

(Continued on next page)
Lenovo Global Technology
ThinkSystem SR250
(4.00 GHz, Intel Xeon E-2286G)

SPECrate®2017_int_base = 52.7
SPECrate®2017_int_peak = 54.6

Platform Notes (Continued)

node 0 free: 128354 MB
node distances:
node  0
  0:  10

From /proc/meminfo
  MemTotal:       131957908 kB
  HugePages_Total:       0
  Hugepagesize:       2048 kB

/usr/bin/lsb_release -d
SUSE Linux Enterprise Server 15 SP1

From /etc/*release* /etc/*version*
  os-release:
    NAME="SLES"
    VERSION="15-SP1"
    VERSION_ID="15.1"
    PRETTY_NAME="SUSE Linux Enterprise Server 15 SP1"
    ID="sles"
    ID_LIKE="suse"
    ANSI_COLOR="0;32"
    CPE_NAME="cpe:/o:suse:sles:15:sp1"

uname -a:
  Linux linux-jecn 4.12.14-195-default #1 SMP Tue May 7 10:55:11 UTC 2019 (8fba516)
  x86_64 x86_64 x86_64 GNU/Linux

Kernel self-reported vulnerability status:

CVE-2018-3620 (L1 Terminal Fault): Mitigation: PTE Inversion; VMX: conditional
cache flushes, SMT vulnerable
Microarchitectural Data Sampling: Mitigation: Clear CPU buffers; SMT vulnerable
CVE-2017-5754 (Meltdown): Mitigation: PTI
CVE-2018-3639 (Speculative Store Bypass): Mitigation: Speculative Store Bypass disabled
via prctl and seccomp
CVE-2017-5753 (Spectre variant 1): Mitigation: __user pointer sanitization
CVE-2017-5715 (Spectre variant 2): Mitigation: Indirect Branch Restricted
Speculation, IBPB: conditional, IBRS_FW, STIBP: conditional, RSB filling

run-level 3 Feb 14 22:21

SPEC is set to: /home/cpu2017-1.1.0-ic19.1.1

(Continued on next page)
Lenovo Global Technology
ThinkSystem SR250 (4.00 GHz, Intel Xeon E-2286G)

SPEC CPU®2017 Integer Rate Result

SPECRate®2017_int_base = 52.7
SPECRate®2017_int_peak = 54.6

CPU2017 License: 9017
Test Sponsor: Lenovo Global Technology
Test Date: May-2020
Tested by: Lenovo Global Technology
Hardware Availability: Mar-2020
Software Availability: Apr-2020

Platform Notes (Continued)

From /sys/devices/virtual/dmi/id
BIOS: Lenovo -[ISE115D-2.10]- 04/24/2020
Vendor: Lenovo
Product: ThinkSystem SR250 -[7Y51CT00WW]-
Product Family: ThinkSystem
Serial: 1234567890

Additional information from dmidecode 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:
4x SK Hynix HMAA4GU7AJR8N-VK 32767 MB 2 rank 2666

(End of data from sysinfo program)

Compiler Version Notes

==============================================================================
C | 502.gcc_r(peak)
------------------------------------------------------------------------------
Intel(R) C Compiler for applications running on IA-32, Version 2021.1 NextGen
Build 20200304
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.
------------------------------------------------------------------------------

==============================================================================
C | 500.perlbench_r(base) 502.gcc_r(base) 505.mcf_r(base, peak) 525.x264_r(base, peak) 557.xz_r(base)
------------------------------------------------------------------------------
Intel(R) C Compiler for applications running on Intel(R) 64, Version 2021.1
NextGen Build 20200304
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.
------------------------------------------------------------------------------

==============================================================================
C | 500.perlbench_r(peak) 557.xz_r(peak)
------------------------------------------------------------------------------
Intel(R) C Intel(R) 64 Compiler for applications running on Intel(R) 64,
Version 19.1.1.217 Build 20200306
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.
------------------------------------------------------------------------------

==============================================================================
C | 502.gcc_r(peak)
(Continued on next page)
Lenovo Global Technology
ThinkSystem SR250
(4.00 GHz, Intel Xeon E-2286G)

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

SPECrater®2017_int_base = 52.7
SPECrater®2017_int_peak = 54.6

Test Date: May-2020
Hardware Availability: Mar-2020
Software Availability: Apr-2020

Compiler Version Notes (Continued)

Intel(R) C Compiler for applications running on IA-32, Version 2021.1 NextGen
Build 20200304
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.
------------------------------------------------------------------------------
==============================================================================
C       | 500.perlbench_r(base) 502.gcc_r(base) 505.mcf_r(base, peak)
        | 525.x264_r(base, peak) 557.xz_r(base)
------------------------------------------------------------------------------
Intel(R) C Compiler for applications running on Intel(R) 64, Version 2021.1
NextGen Build 20200304
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.
------------------------------------------------------------------------------
==============================================================================
C       | 500.perlbench_r(peak) 557.xz_r(peak)
------------------------------------------------------------------------------
Intel(R) C Intel(R) 64 Compiler for applications running on Intel(R) 64,
Version 19.1.1.217 Build 20200306
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.
------------------------------------------------------------------------------
==============================================================================
C       | 502.gcc_r(peak)
------------------------------------------------------------------------------
Intel(R) C Compiler for applications running on IA-32, Version 2021.1 NextGen
Build 20200304
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.
------------------------------------------------------------------------------
==============================================================================
C       | 500.perlbench_r(base) 502.gcc_r(base) 505.mcf_r(base, peak)
        | 525.x264_r(base, peak) 557.xz_r(base)
------------------------------------------------------------------------------
Intel(R) C Compiler for applications running on Intel(R) 64, Version 2021.1
NextGen Build 20200304
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------------------------------------------------------------------------------
==============================================================================
C       | 500.perlbench_r(peak) 557.xz_r(peak)
------------------------------------------------------------------------------
Intel(R) C Intel(R) 64 Compiler for applications running on Intel(R) 64,
Version 19.1.1.217 Build 20200306
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Lenovo Global Technology
ThinkSystem SR250
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CPU2017 License: 9017
Test Sponsor: Lenovo Global Technology
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Test Date: May-2020
Hardware Availability: Mar-2020
Software Availability: Apr-2020

Compiler Version Notes (Continued)
==============================================================================
| C++     | 520.omnetpp_r(base, peak) 523.xalancbmk_r(base, peak) |
|         | 531.deepsjeng_r(base, peak) 541.leela_r(base, peak)    |
-----------------------------------------------------------------------------
Intel(R) C++ Compiler for applications running on Intel(R) 64, Version 2021.1
NextGen Build 20200304
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.
==============================================================================
| Fortran | 548.exchange2_r(base, peak) |
-----------------------------------------------------------------------------
Intel(R) Fortran Intel(R) 64 Compiler for applications running on Intel(R)
64, Version 19.1.1.217 Build 20200306
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.
==============================================================================

Base Compiler Invocation
C benchmarks:
icc
C++ benchmarks:
icpc
Fortran benchmarks:
ifort

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
Lenovo Global Technology
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Base Optimization Flags

C benchmarks:
-m64 -qnextgen -std=c11
-Wl,-plugin-opt=-x86-branches-within-32B-boundaries -Wl,-z,muldefs
-xCORE-AVX2 -O3 -ffast-math -flto -mfpmath=sse -funroll-loops
-fuse-ld=gold -qopt-mem-layout-trans=4
-L/usr/local/IntelCompiler19/compilers_and_libraries_2020.1.217/linux/compiler/lib/intel64_lin
-lqkmalloc

C++ benchmarks:
-m64 -qnextgen -Wl,-plugin-opt=-x86-branches-within-32B-boundaries
-Wl,-z,muldefs -xCORE-AVX2 -O3 -ffast-math -flto -mfpmath=sse
-funroll-loops -fuse-ld=gold -qopt-mem-layout-trans=4
-L/usr/local/IntelCompiler19/compilers_and_libraries_2020.1.217/linux/compiler/lib/intel64_lin
-lqkmalloc

Fortran benchmarks:
-m64 -Wl,-plugin-opt=-x86-branches-within-32B-boundaries -Wl,-z,muldefs
-xCORE-AVX2 -O3 -ipo -no-prec-div -qopt-mem-layout-trans=4
-nostandard-realloc-lhs -align array32byte -auto
-mbranches-within-32B-boundaries
-L/usr/local/IntelCompiler19/compilers_and_libraries_2020.1.217/linux/compiler/lib/intel64_lin
-lqkmalloc

Peak Compiler Invocation

C benchmarks:
icc

C++ benchmarks:
icpc

Fortran benchmarks:
ifort

Peak Portability Flags

500.perlbench_r: -DSPEC_LP64 -DSPEC_LINUX_X64
502.gcc_r: -D_FILE_OFFSET_BITS=64
505.mcf_r: -DSPEC_LP64
520.omnetpp_r: -DSPEC_LP64
523.xalancbmk_r: -DSPEC_LP64 -DSPEC_LINUX

(Continued on next page)
### Lenovo Global Technology

**ThinkSystem SR250**  
(4.00 GHz, Intel Xeon E-2286G)  

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<tr>
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<tr>
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<tr>
<td>Test Sponsor: Lenovo Global Technology</td>
<td>Software Availability: Apr-2020</td>
</tr>
</tbody>
</table>

#### Peak Portability Flags (Continued)

- 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

#### Peak Optimization Flags

**C benchmarks:**

- 500.perlbench_r: -Wl,-z,muldefs -prof-gen(pass 1) -prof-use(pass 2)  
  -xCORE-AVX2 -ipo -O3 -no-prec-div  
  -qopt-mem-layout-trans=4 -fno-strict-overflow  
  -mbranches-within-32B-boundaries  
  -L/usr/local/IntelCompiler19/compilers_and_libraries_2020.1.217/linux/compiler/lib/intel64_lin  
  -lqkmalloc

- 502.gcc_r: -m32  
  -L/usr/local/IntelCompiler19/compilers_and_libraries_2020.1.217/linux/compiler/lib/ia32_lin  
  -std=gnu89  
  -Wl,-plugin-opt=-x86-branches-within-32B-boundaries  
  -Wl,-z,muldefs -fprofile-generate(pass 1)  
  -fprofile-use=default.profdata(pass 2) -xCORE-AVX2 -flto  
  -Ofast(pass 1) -O3 -ffast-math -qnextgen -fuse-ld=gold  
  -qopt-mem-layout-trans=4 -L/usr/local/jemalloc32-5.0.1/lib  
  -ljemalloc

- 505.mcf_r: basepeak = yes

- 525.x264_r: -m64 -qnextgen -std=c11  
  -Wl,-plugin-opt=-x86-branches-within-32B-boundaries  
  -Wl,-z,muldefs -xCORE-AVX2 -flto -O3 -ffast-math  
  -fuse-ld=gold -qopt-mem-layout-trans=4 -fno-alias  
  -L/usr/local/IntelCompiler19/compilers_and_libraries_2020.1.217/linux/compiler/lib/intel64_lin  
  -lqkmalloc

- 557.xz_r: -Wl,-z,muldefs -xCORE-AVX2 -ipo -O3 -no-prec-div  
  -qopt-mem-layout-trans=4 -mbranches-within-32B-boundaries  
  -L/usr/local/IntelCompiler19/compilers_and_libraries_2020.1.217/linux/compiler/lib/intel64_lin  
  -lqkmalloc

**C++ benchmarks:**

(Continued on next page)
Lenovo Global Technology
ThinkSystem SR250
(4.00 GHz, Intel Xeon E-2286G)

SPECrates®2017_int_base = 52.7
SPECrates®2017_int_peak = 54.6

CPU2017 License: 9017
Test Sponsor: Lenovo Global Technology
Tested by: Lenovo Global Technology
Test Date: May-2020
Hardware Availability: Mar-2020
Software Availability: Apr-2020

Peak Optimization Flags (Continued)

520.omnetpp_r: basepeak = yes
523.xalancbmk_r: basepeak = yes
531.deepsjeng_r: basepeak = yes
541.leela_r: basepeak = yes
Fortran benchmarks:
548.exchange2_r: basepeak = yes

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-SKL-J.html

You can also download the XML flags sources by saving the following links:
http://www.spec.org/cpu2017/flags/Intel-ic19.1u1-official-linux64_revA.xml
http://www.spec.org/cpu2017/flags/Lenovo-Platform-SPECcpu2017-Flags-V1.2-SKL-J.xml

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

Tested with SPEC CPU®2017 v1.1.0 on 2019-02-14 09:21:57-0500.
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