# SPEC CPU®2017 Integer Rate Result

## Lenovo Global Technology

ThinkSystem SR950 V3 (2.20 GHz, Intel Xeon Platinum 8460H)

**SPECrate®2017_int_base = 2790**

**SPECrate®2017_int_peak = Not Run**

## Hardware

**CPU Name:** Intel Xeon Platinum 8460H  
**Max MHz:** 3800  
**Nominal:** 2200  
**Enabled:** 320 cores, 8 chips, 2 threads/core  
**Orderable:** 8 chips  
**Cache L1:** 32 KB I + 48 KB D on chip per core  
**L2:** 2 MB I+D on chip per core  
**L3:** 105 MB I+D on chip per chip  
**Memory:** 4 TB (64 x 64 GB 2Rx4 PC5-4800B-R)  
**Storage:** 1 x 480 GB SATA SSD  
**Other:** None

## Software

**OS:** SUSE Linux Enterprise Server 15 SP5  
**Kernel:** 5.14.21-150500.53-default  
**Compiler:** C/C++: Version 2023.2.3 of Intel oneAPI DPC++/C++ Compiler for Linux;  
**Fortran:** Version 2023.2.3 of Intel Fortran Compiler for Linux;  
**Parallel:** No  
**Firmware:** Lenovo BIOS Version EBE103M 1.10 released Oct-2023  
**File System:** xfs  
**System State:** Run level 3 (multi-user)  
**Base Pointers:** 64-bit  
**Peak Pointers:** Not Applicable  
**Other:** None  
**Power Management:** BIOS and OS set to prefer performance at the cost of additional power usage

<table>
<thead>
<tr>
<th>Program</th>
<th>Copies</th>
<th>SPECrate®2017_int_base (2790)</th>
</tr>
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<tbody>
<tr>
<td>500.perlbench_r</td>
<td>640</td>
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<td>502.gcc_r</td>
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<tr>
<td>557.xz_r</td>
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**Test Date:** Dec-2023  
**Hardware Availability:** Oct-2023  
**Software Availability:** Dec-2023
### Lenovo Global Technology

ThinkSystem SR950 V3  
(2.20 GHz, Intel Xeon Platinum 8460H)  

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

#### Results Table

<table>
<thead>
<tr>
<th>Benchmark</th>
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</tbody>
</table>

**SPECrate®2017_int_base = 2790**  
**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:

```bash
LD_LIBRARY_PATH = 
"/home/cpu2017-1.1.9-ic2023.2.3/lib/intel64:/home/cpu2017-1.1.9-ic2023.2.3/lib/ia32:/home/cpu2017-1.1.9-ic2023.2.3/je5.0.1-32"
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:

```bash
sync; echo 3 > /proc/sys/vm/drop_caches
```

runcpu command invoked through numactl i.e.:

```bash
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.

(Continued on next page)
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.

Platform Notes

BIOS configuration:
Choose Operating Mode set to Maximum Performance and then set it to Custom Mode
C-States set to Legacy
SNC set to SNC4
LLC Prefetch set to Disabled

Sysinfo program /home/cpu2017-1.1.9-ic2023.2.3/bin/sysinfo
Rev: r6732 of 2022-11-07 fe91c89b7ed5c36ae2c92cc097bec197
running on localhost Wed Dec 13 20:44:50 2023

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

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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/klhugepaged
18. OS release
19. Disk information
20. /sys/devices/virtual/dmi/id
21. dmidecode
22. BIOS

1. uname -a
   Linux localhost 5.14.21-150500.53-default #1 SMP PREEMPT_DYNAMIC Wed May 10 07:56:26 UTC 2023 (b630043) x86_64 x86_64 x86_64 GNU/Linux

2. w
   20:44:50 up 3 min, 1 user, load average: 0.04, 0.11, 0.06
   USER   TTY     FROM       LOGIN@     IDLE   JCPU   PCPU WHAT
   root    tty1    -          20:42       10.00s  1.08s  0.01s /bin/bash ./speccpu_rock.sh

3. Username
   From environment variable $USER: root

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**Platform Notes (Continued)**

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 (-l) 16511674
   - max locked memory (kbytes, -l) 64
   - 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) 16511674
   - virtual memory (kbytes, -v) unlimited
   - file locks (-x) unlimited

5. `sysinfo process ancestry`
   - `/usr/lib/systemd/systemd --switched-root --system --deserialize 30`
   - `login -- root`
   - `-bash`
   - `/bin/bash ./speccpu_rock.sh`
   - `/bin/bash ./speccpu_rock.sh`

   `runcpu --nobuild --action validate --define default-platform-flags --define numcopies=640 -c`
   - ic2023.2.3-lin-sapphireraids-rate-20231121.cfg --define smt-on --define cores=320 --define physicalfirst
     --define invoke_with_interleave --define drop_caches --tune base -o all intrate`

   `runcpu --nobuild --action validate --define default-platform-flags --define numcopies=640 --configfile`
   - ic2023.2.3-lin-sapphireraids-rate-20231121.cfg --define smt-on --define cores=320 --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/CPU2017.177/templogs/preenv.intrate.177.0.log --lognum 177.0 --from_runcpu 2`
   - `specperl $SPEC/bin/sysinfo`
   - `SPEC = /home/cpu2017-1.1.9-ic2023.2.3`

6. `/proc/cpuinfo`
   - model name: Intel(R) Xeon(R) Platinum 8460H
   - vendor_id: GenuineIntel
   - cpu family: 6
   - model: 143
   - stepping: 8
   - microcode: 0x2b0004b1
   - bugs: spectre_v1 spectre_v2 spec_store_bypass swapgs eibrs_pbrsb
   - cpu cores: 40
   - siblings: 80
   - 8 physical ids (chips)
   - 640 processors (hardware threads)
   - physical id 0: core ids 0-39
   - physical id 1: core ids 0-39
   - physical id 2: core ids 0-39
   - physical id 3: core ids 0-39
   - physical id 4: core ids 0-39
   - physical id 5: core ids 0-39
   - physical id 6: core ids 0-39
   - physical id 7: core ids 0-39
   - physical id 0: apicids 0-79
   - physical id 1: apicids 128-207

(Continued on next page)
Platform Notes (Continued)

physical id 2: apicids 256-335
physical id 3: apicids 384-463
physical id 4: apicids 512-591
physical id 5: apicids 640-719
physical id 6: apicids 768-847
physical id 7: apicids 896-975
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
CPU op-mode(s):          32-bit, 64-bit
Address sizes:           46 bits physical, 57 bits virtual
Byte Order:              Little Endian
CPU(s):                 640
On-line CPU(s) list:     0-639
Vendor ID:               GenuineIntel
Model name:              Intel(R) Xeon(R) Platinum 8460H
CPU family:              6
Model:                   143
Thread(s) per core:      2
Core(s) per socket:      40
Socket(s):               8
Stepping:                8
CPU max MHz:             3800.0000
CPU min MHz:             800.0000
BogoMIPS:                4400.00
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 xtopology
nonstop_tsc cpuid aperfmperf tsc_known_freq pni pclmulqdq dtes64 monitor
cpu_set apic cpuidokedex
lahf_lm abm 3dnowprefetch cpuid fault epb cat_13 cat_12 cd813
invpcid_single intel_puin cd812 sbbd mba ibrs ibp bb ibrs Enhanced
trshadow vmx flexpriority ept vpid ept_ad fsgsbase tsc_adjust bmis1 hle
avx2 smep bmi2 emms invpcid rtm cqm rdt_a avx512f rdseed adx smap
avx512ifma vcltushopt cllb intel_pt avx512cd sha ni avx512bw avx512vl
xsaveopt xsave vxtexh vxeqbtv1 xsavec cqm_llc cqm_occup_llc cqm_bb_total
cqm_bb_local split_lock_detect avx_vnni avx512_5f16 vmbondvd dtherm ida
arat pln pts avx512vbmi umip pku ospe waitpkg avx512_vbm2 gfn vaes
vpclmulqdq avx512_vnni avx512_bitalg tme avx512_vpmpctdq 1a57 rdpid
bus_lock_detect cldemote movdiri movdir64b epcmcmd form md_clear serialize
tsxldtrk pconfi arch_lbr avx512_fp16 smx Tile flush_lid arch_capabilities

Virtualization:          VT-x
L1d cache:               15 MiB (320 instances)
L1i cache:               10 MiB (320 instances)
L2 cache:                640 MiB (320 instances)
L3 cache:                840 MiB (8 instances)
NUMA node(s):            32
NUMA node0 CPU(s):       0-9,320-329
NUMA node1 CPU(s):       10-19,330-339
NUMA node2 CPU(s):       20-29,340-349
NUMA node3 CPU(s):       30-39,350-359
NUMA node4 CPU(s):       40-49,360-369
NUMA node5 CPU(s):       50-59,370-379
NUMA node6 CPU(s):       60-69,380-389

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### Lenovo Global Technology

**ThinkSystem SR950 V3 (2.20 GHz, Intel Xeon Platinum 8460H)**

<table>
<thead>
<tr>
<th>CPU2017 License:</th>
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</tr>
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<tr>
<td>Test Sponsor:</td>
<td>Lenovo Global Technology</td>
</tr>
<tr>
<td>Test Date:</td>
<td>Dec-2023</td>
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<tr>
<td>Hardware Availability:</td>
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</tbody>
</table>

**SPECrate®2017_int_base = 2790**  
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### Platform Notes (Continued)

NUMA node7 CPU(s): 70-79, 390-399  
NUMA node8 CPU(s): 80-89, 400-409  
NUMA node9 CPU(s): 90-99, 410-419  
NUMA node10 CPU(s): 100-109, 420-429  
NUMA node11 CPU(s): 110-119, 430-439  
NUMA node12 CPU(s): 120-129, 440-449  
NUMA node13 CPU(s): 130-139, 450-459  
NUMA node14 CPU(s): 140-149, 460-469  
NUMA node15 CPU(s): 150-159, 470-479  
NUMA node16 CPU(s): 160-169, 480-489  
NUMA node17 CPU(s): 170-179, 490-499  
NUMA node18 CPU(s): 180-189, 500-509  
NUMA node19 CPU(s): 190-199, 510-519  
NUMA node20 CPU(s): 200-209, 520-529  
NUMA node21 CPU(s): 210-219, 530-539  
NUMA node22 CPU(s): 220-229, 540-549  
NUMA node23 CPU(s): 230-239, 550-559  
NUMA node24 CPU(s): 240-249, 560-569  
NUMA node25 CPU(s): 250-259, 570-579  
NUMA node26 CPU(s): 260-269, 580-589  
NUMA node27 CPU(s): 270-279, 590-599  
NUMA node28 CPU(s): 280-289, 600-609  
NUMA node29 CPU(s): 290-299, 610-619  
NUMA node30 CPU(s): 300-309, 620-629  
NUMA node31 CPU(s): 310-319, 630-639  
Vulnerability Itlb multihit: Not affected  
Vulnerability L1tf: Not affected  
Vulnerability Mds: Not affected  
Vulnerability Meltdown: Not affected  
Vulnerability Retbleed: Not affected  
Vulnerability Spec store bypass: Mitigation; Speculative Store Bypass disabled via prctl and seccomp  
Vulnerability Spectre v1: Mitigation; usercopy/swapgs barriers and __user pointer sanitization  
Vulnerability Spectre v2: Mitigation; Enhanced IBRS, IBPB conditional, RSB filling, PBRSB-eIBRS SW sequence  
Vulnerability Srbds: Not affected  
Vulnerability Tsx async abort: Not affected

From `lscpu --cache`

<table>
<thead>
<tr>
<th>NAME</th>
<th>ONE-SIZE</th>
<th>ALL-SIZE</th>
<th>WAYS</th>
<th>TYPE</th>
<th>LEVEL</th>
<th>SETS</th>
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<td>48K</td>
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<td>64</td>
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<td>10M</td>
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<td>640M</td>
<td>16 Unified</td>
<td>2</td>
<td>2048</td>
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<td>840M</td>
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<td>114688</td>
<td>1</td>
<td>64</td>
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</tr>
</tbody>
</table>

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8. numactl --hardware  
**NOTE**: a numactl 'node' might or might not correspond to a physical chip.  
available: 32 nodes (0-31)

node 0 cpus: 0-9, 320-329  
nodex size: 128547 MB  
nodex free: 127842 MB  
nodex 1 cpus: 10-19, 330-339  
nodex size: 129018 MB  
nodex free: 128498 MB  
nodex 2 cpus: 20-29, 340-349  
nodex size: 129018 MB  
nodex free: 128559 MB  
nodex 3 cpus: 30-39, 350-359  
nodex size: 129018 MB

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Software Availability: Dec-2023

Platform Notes (Continued)

node 3 free: 128609 MB
node 4 cpus: 40-49, 360-369
node 4 size: 129018 MB
node 4 free: 128776 MB
node 5 cpus: 50-59, 370-379
node 5 size: 129018 MB
node 5 free: 128821 MB
node 6 cpus: 60-69, 380-389
node 6 size: 129018 MB
node 6 free: 128783 MB
node 7 cpus: 70-79, 390-399
node 7 size: 129018 MB
node 7 free: 128739 MB
node 8 cpus: 80-89, 400-409
node 8 size: 129018 MB
node 8 free: 128718 MB
node 9 cpus: 90-99, 410-419
node 9 size: 129018 MB
node 9 free: 128832 MB
node 10 cpus: 100-109, 420-429
node 10 size: 129018 MB
node 10 free: 128881 MB
node 11 cpus: 110-119, 430-439
node 11 size: 129018 MB
node 11 free: 128743 MB
node 12 cpus: 120-129, 440-449
node 12 size: 129018 MB
node 12 free: 128465 MB
node 13 cpus: 130-139, 450-459
node 13 size: 129018 MB
node 13 free: 128640 MB
node 14 cpus: 140-149, 460-469
node 14 size: 128984 MB
node 14 free: 128606 MB
node 15 cpus: 150-159, 470-479
node 15 size: 129018 MB
node 15 free: 128633 MB
node 16 cpus: 160-169, 480-489
node 16 size: 129018 MB
node 16 free: 128592 MB
node 17 cpus: 170-179, 490-499
node 17 size: 129018 MB
node 17 free: 128602 MB
node 18 cpus: 180-189, 500-509
node 18 size: 129018 MB
node 18 free: 128622 MB
node 19 cpus: 190-199, 510-519
node 19 size: 129018 MB
node 19 free: 128708 MB
node 20 cpus: 200-209, 520-529
node 20 size: 129018 MB
node 20 free: 128327 MB
node 21 cpus: 210-219, 530-539
node 21 size: 129018 MB
node 21 free: 128486 MB
node 22 cpus: 220-229, 540-549
node 22 size: 129018 MB
node 22 free: 128531 MB
node 23 cpus: 230-239, 550-559
node 23 size: 129018 MB

(Continued on next page)
Platform Notes (Continued)

node 23 free: 128552 MB
node 24 cpus: 240-249,560-569
node 24 size: 129018 MB
node 24 free: 128792 MB
node 25 cpus: 250-259,570-579
node 25 size: 129018 MB
node 25 free: 128815 MB
node 26 cpus: 260-269,580-589
node 26 size: 129018 MB
node 26 free: 128824 MB
node 27 cpus: 270-279,590-599
node 27 size: 129018 MB
node 27 free: 128792 MB
node 28 cpus: 280-289,600-609
node 28 size: 129018 MB
node 28 free: 128597 MB
node 29 cpus: 290-299,610-619
node 29 size: 129018 MB
node 29 free: 128629 MB
node 30 cpus: 300-309,620-629
node 30 size: 129018 MB
node 30 free: 128664 MB
node 31 cpus: 310-319,630-639
node 31 size: 128871 MB
node 31 free: 128472 MB
node distances:

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CPU2017 License: 9017
Test Sponsor: Lenovo Global Technology
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Platform Notes (Continued)

9. /proc/meminfo
   MemTotal: 4227020876 kB

10. who -r
    run-level 3 Dec 13 20:42

11. Systemd service manager version: systemd 249 (249.16+suse.171.gdad0071f15)
    Default Target Status
    multi-user running

12. Services, from systemctl list-unit-files
    STATE   UNIT FILES
    enabled  YaST2-Firstboot YaST2-Second-Stage apparmor audited cron getty@ irqbalance issue-generator
             kbdsettings klog lvm2-monitor nscd nvme-boot-connections postfix purge-kernels rollback
             rsyslog smartd sshd systemd-patore wicked wicked-auto4 wicked-dhcp4 wicked-dhcp6
             wicked-nanny
    enabled-runtime systemd-remount-fs
    disabled  autofs autostart-initscripts blk-availability boot-sysctl ca-certificates chrony-wait
                chronyd console-getty cups cups-browsed debug-shell ebtables exchange-bmc-os-info
                firewall gpm grub2-_once havedev-switch-root ipmi ipmiedv issue-add-ssh-keys
                kexec-load lumnask man-db-create multipathd nfs nfs-blkmap nmb nvme-udevd
                osinfo rpmconfigcheck rsyncd serial-getty@ smbd Generateopts snmp snmptrapd
                systemd-boot-check-no-failures systemd-network-generator systemd-sysext

(Continued on next page)
**Platform Notes (Continued)**

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

```
BOOT_IMAGE=/boot/vmlinuz-5.14.21-150500.53-default
root=UUID=b994fb3e-4843-44ed-8f13-53774aaafe18
splash=silent
mitigations=auto
quiet
security=apparmor
```

14. cpupower frequency-info

```
analyzing CPU 0:
current policy: frequency should be within 800 MHz and 3.80 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 150000
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
```

(Continued on next page)
Lenovo Global Technology
ThinkSystem SR950 V3
(2.20 GHz, Intel Xeon Platinum 8460H)

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

SPECrate®2017_int_base = 2790
SPECrate®2017_int_peak = Not Run

Test Date: Dec-2023
Hardware Availability: Oct-2023
Software Availability: Dec-2023

Platform Notes (Continued)

18. OS release
From /etc/*-release /etc/*-version
os-release SUSE Linux Enterprise Server 15 SP5

19. Disk information
SPEC is set to: /home/cpu2017-1.1.9-ic2023.2.3
Filesystem Type Size Used Avail Use% Mounted on
/dev/sdc3 xfs 445G 82G 363G 19% /

20. /sys/devices/virtual/dmi/id
Vendor: Lenovo
Product: ThinkSystem SR950 V3
Product Family: ThinkSystem
Serial: BLRSDV044

21. dmidecode
Additional information from dmidecode 3.4 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:
41x SK Hynix HMCG94AEBRA102N 64 GB 2 rank 4800
14x SK Hynix HMCG94AEBRA109N 64 GB 2 rank 4800
9x SK Hynix HMCG94AEBRA123N 64 GB 2 rank 4800

22. BIOS
(This section combines info from /sys/devices and dmidecode.)
BIOS Vendor: Lenovo
BIOS Version: EBE103M-1.10
BIOS Date: 10/10/2023
BIOS Revision: 1.10
Firmware Revision: 1.10

Compiler Version Notes

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(Continued on next page)
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Compiler Version Notes (Continued)

Intel(R) Fortran Compiler for applications running on Intel(R) 64, Version 2023.2.3 Build x
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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.z8_r: -DSPEC_LP64

Base Optimization Flags

C benchmarks:
  -w -std=c11 -m64 -Wl,-z,muldefs -xsapphirerapids -O3 -ffast-math
  -flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4
  -L/home/specdev/new_compilers/ic2023.2.3/compiler/lib/intel64_lin
  -lqkmalloc

C++ benchmarks:
  -w -std=c++14 -m64 -Wl,-z,muldefs -xsapphirerapids -O3 -ffast-math
  -flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4
  -L/home/specdev/new_compilers/ic2023.2.3/compiler/lib/intel64_lin
  -lqkmalloc

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### Lenovo Global Technology

ThinkSystem SR950 V3
(2.20 GHz, Intel Xeon Platinum 8460H)

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**Test Date:** Dec-2023

**Test Sponsor:** Lenovo Global Technology

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**Base Optimization Flags (Continued)**

Fortran benchmarks:
- `-w` `-m64` `-Wl,-z,muldefs` `-xsapphirerapids` `-O3` `-ffast-math` `-flto`
- `-mfpmath=sse` `-funroll-loops` `-gopt-mem-layout-trans=4`
- `-nostandard-realloc-lhs` `-align array32byte` `-auto`
- `-L/home/specdev/new_compilers/ic2023.2.3/compiler/lib/intel64_lin`
- `-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-AA.html

http://www.spec.org/cpu2017/flags/Intel-ic2023p2-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-AA.xml

http://www.spec.org/cpu2017/flags/Intel-ic2023p2-official-linux64.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 v1.1.9 on 2023-12-13 07:44:49-0500.


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