## SPEC CPU®2017 Integer Rate Result

**Hewlett Packard Enterprise**  
(Test Sponsor: HPE)  
ProLiant DL380 Gen11  
(2.10 GHz, Intel Xeon Gold 6530)

**SPECraten®2017_int_base = 543**  
**SPECraten®2017_int_peak = 559**

<table>
<thead>
<tr>
<th>Test Sponsor: HPE</th>
<th>CPU2017 License: 3</th>
<th>Test Date: Feb-2024</th>
<th>Hardware Availability: Feb-2024</th>
</tr>
</thead>
</table>

### Hardware

<table>
<thead>
<tr>
<th>CPU Name: Intel Xeon Gold 6530</th>
<th>Max MHz: 4000</th>
<th>Nominal: 2100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enabled: 64 cores, 2 chips, 2 threads/core</td>
<td>Orderable: 1, 2 chip(s)</td>
<td>Cache L1: 32 KB I + 48 KB D on chip per core</td>
</tr>
<tr>
<td>L2: 2 MB I+D on chip per core</td>
<td>Other: None</td>
<td>Cache L3: 160 MB I+D on chip per chip</td>
</tr>
<tr>
<td>Memory: 512 GB (16 x 32 GB 2Rx8 PC5-5600B-R, running at 4800)</td>
<td>Storage: 1 x 3.2 TB NVMe SSD</td>
<td>Other: None</td>
</tr>
</tbody>
</table>

### Software

<table>
<thead>
<tr>
<th>OS: SUSE Linux Enterprise Server 15 SP5</th>
<th>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;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parallel: No</td>
<td>Firmware: HPE BIOS Version v2.12 12/13/2023 released Dec-2023</td>
</tr>
<tr>
<td>File System: xfs</td>
<td>System State: Run level 3 (multi-user)</td>
</tr>
<tr>
<td>Base Pointers: 64-bit</td>
<td>Peak Pointers: 32/64-bit</td>
</tr>
<tr>
<td>Other: jemalloc memory allocator V5.0.1</td>
<td>Power Management: BIOS and OS set to prefer performance at the cost of additional power usage</td>
</tr>
</tbody>
</table>
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CPU2017 License: 3
Test Sponsor: HPE
Tested by: HPE

Results Table

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Copies</th>
<th>Base Seconds</th>
<th>Base Ratio</th>
<th>Peak Seconds</th>
<th>Peak Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>500.perlbench_r</td>
<td>128</td>
<td>483</td>
<td>421</td>
<td>483</td>
<td>422</td>
</tr>
<tr>
<td>502.gcc_r</td>
<td>128</td>
<td>376</td>
<td>483</td>
<td>375</td>
<td>483</td>
</tr>
<tr>
<td>505.mcf_r</td>
<td>128</td>
<td>231</td>
<td>896</td>
<td>231</td>
<td>894</td>
</tr>
<tr>
<td>520.omnetpp_r</td>
<td>128</td>
<td>431</td>
<td>390</td>
<td>432</td>
<td>391</td>
</tr>
<tr>
<td>523.xalancbmk_r</td>
<td>128</td>
<td>181</td>
<td>745</td>
<td>181</td>
<td>746</td>
</tr>
<tr>
<td>525.x264_r</td>
<td>128</td>
<td>215</td>
<td>1040</td>
<td>215</td>
<td>1040</td>
</tr>
<tr>
<td>531.deepsjeng_r</td>
<td>128</td>
<td>396</td>
<td>371</td>
<td>396</td>
<td>371</td>
</tr>
<tr>
<td>541.leela_r</td>
<td>128</td>
<td>585</td>
<td>362</td>
<td>579</td>
<td>366</td>
</tr>
<tr>
<td>548.exchange2_r</td>
<td>128</td>
<td>304</td>
<td>1100</td>
<td>304</td>
<td>1100</td>
</tr>
<tr>
<td>557.xz_r</td>
<td>128</td>
<td>507</td>
<td>273</td>
<td>507</td>
<td>273</td>
</tr>
</tbody>
</table>

SPECrate®2017_int_base = 543
SPECrate®2017_int_peak = 559

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"
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>
tuned-adm profile was set to throughput-performance using "tuned-adm profile throughput-performance"

Environment Variables Notes

Environment variables set by runcpu before the start of the run:
LD_LIBRARY_PATH = */home/cpu2017/lib/intel64:/home/cpu2017/lib/ia32:/home/cpu2017/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
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)
General Notes (Continued)

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

Platform Notes

The system ROM used for this result contains Intel microcode version 0x21000200 for
the Intel Xeon Gold 6530 processor.
BIOS Configuration:
Workload Profile set to General Throughput Compute
Memory Patrol Scrubbing set to Disabled
Last Level Cache (LLC) Dead Line Allocation set to Disabled
Intel UPI Link Enablement set to Single Link
Sub-NUMA Clustering (SNC) set to Enable SNC2(2-clusters)
Enhanced Processor Performance Profile set to Aggressive
Thermal Configuration set to Maximum Cooling
Workload Profile set to Custom
DCU Stream Prefetcher set to Disabled
Adjacent Sector Prefetch set to Disabled
Intel UPI Link Power Management set to Enabled
Sysinfo program /home/cpu2017/bin/sysinfo
Rev: r6732 of 2022-11-07 fe91c89b7ed5c36ae2c92cc097bec197
running on localhost Wed Feb 14 03:03:02 2024

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

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4. ulimit -a
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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. tuned-adm active
16. sysct1
17. /sys/kernel/mm/transparent_hugepage
18. /sys/kernel/mm/transparent_hugepage/klugepaged
19. OS release
20. Disk information
21. /sys/devices/virtual/dmi/id
22. dmidecode
23. 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)

(Continued on next page)
Platform Notes (Continued)

x86_64 x86_64 x86_64 GNU/Linux

-----------------------------------------------
2. w
  03:03:02 up 0 min, 0 users, load average: 0.37, 0.13, 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 (-l) 2062640
  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) 2062640
  virtual memory (kbytes, -v) unlimited
  file locks (-x) unlimited
-----------------------------------------------
5. sysinfo process ancestry
/usr/lib/systemd/systemd --switched-root --system --deserialize 29
sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups
sshd: root@notty
bash -c cd $SPEC/ && $SPEC/intrateTP.sh
runcpu --nobuild --action validate --define default-platform-flags --define numcopies=128 --c
ic2023.2.3-lin-sapphirerapids-rate-20231121.cfg --define smt-on --define cores=64 --define physicalfirst
--define invoke_with_interleave --define drop_caches --tune base,peak -o all intrate
runcpu --nobuild --action validate --define default-platform-flags --define numcopies=128 --configfile
ic2023.2.3-lin-sapphirerapids-rate-20231121.cfg --define smt-on --define cores=64 --define physicalfirst
--define invoke_with_interleave --define drop_caches --tune base,peak --output_format all --nopower
--runmode rate --tune base:peak --size refrate intrate --nopreenv --note-preenv --logfile
$SPEC/tmp/CPU2017.001/templogs/preenv.intrate.001.0.log --lognum 001.0 --from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /home/cpu2017
-----------------------------------------------
6. /proc/cpuinfo
  model name : INTEL(R) XEON(R) GOLD 6530
  vendor_id : GenuineIntel
  cpu family : 6
  model : 207
  stepping : 2
  microcode : 0x21000200
  bugs : spectre_v1 spectre_v2 spec_store_bypass swapgs ebbrs_pbrsb
  cpu cores : 32
  siblings : 64
  2 physical ids (chips)
  128 processors (hardware threads)

(Continued on next page)
Platform Notes (Continued)

physical id 0: core ids 0-31
physical id 1: core ids 0-31
physical id 0: apicids 0-63
physical id 1: apicids 128-191
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): 128
On-line CPU(s) list: 0-127
Vendor ID: GenuineIntel
Model name: INTEL(R) XEON(R) GOLD 6530
CPU family: 6
Model: 207
Thread(s) per core: 2
Core(s) per socket: 32
Socket(s): 2
Stepping: 2
BogoMIPS: 4200.00

Flags:
fpu vme de pse tsc msr pae mce cmov pat pse36
clflush dtscache 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
ds_cpl vmx smx est tm2 ssse3 sse3disable fma cx16 xtpr pdcm pclmulqdq dca
sse4_1 x2apic movbe popcnt tsc_deadline_timer aes xsave avx f16c rdrand
lahf_lm abm 3nowprefetch cpuid_fault epb cat13 cat12 cpd13
invpcid_single cpd12 ssbd mba ibrs ibpb ibrs_lonely ibrsenhanced tpr_shadow
vmx flexpriority ept vpid ept_ad fsgsbase tsc_adjust bm1l he avx2 smep
bmi2 erms invpcid rtm cmp mcmip md12 emms invpcid rtm cxm rmm mcr mmr
avx512ifma clflushopt clwb intel_pt avx512cd sha ni avx512bw avx512vl
xsaveopt xsaves xgetbv1 xsaves qcogmuc qcm_occup llc qcm_mmm_total
qcm_mmm_local avx_vnni avx512_bit64 t供m avx512_vpopcntdq lac77 rdpd bus_lock_detect
ldemote movdint movdir64b enqcmd fasm md_clear serialize tsslptrak pconf
arch_llcr avx512_f16 amx_tile flush_lld arch_capabilities

Virtualization: VT-x
L1d cache: 3 MiB (64 instances)
L1i cache: 2 MiB (64 instances)
L2 cache: 128 MiB (64 instances)
L3 cache: 320 MiB (2 instances)
NUMA node(s):
NUMA node0 CPU(s): 0-15, 64-79
NUMA node1 CPU(s): 16-31, 80-95
NUMA node2 CPU(s): 32-47, 96-111
NUMA node3 CPU(s): 48-63, 112-127
Vulnerability Itlb_multihit: Not affected
Vulnerability L1tf: Not affected
Vulnerability Mds: Not affected
Vulnerability Meltdown: Not affected
Vulnerability Mmio stale data: Not affected
Vulnerability Retbleed: Not affected
Vulnerability Spec store bypass: Mitigation; Speculative Store Bypass disabled via prctl and seccomp

(Continued on next page)
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Platform Notes (Continued)

Vulnerability Spectre v1: Mitigation; usercopy/swaps barriers and __user pointer sanitization
Vulnerability Spectre v2: Mitigation; Enhanced IBRS, IBFS conditional, RSB filling, PBRSE-eIBRS SW sequence
Vulnerability Srbd: Not affected
Vulnerability Tsz 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>
<th>PHY-LINE</th>
<th>COHERENCY-SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1d</td>
<td>48K</td>
<td>3M</td>
<td>12</td>
<td>Data</td>
<td>1</td>
<td>64</td>
<td>1</td>
<td>64</td>
</tr>
<tr>
<td>L1i</td>
<td>32K</td>
<td>2M</td>
<td>8</td>
<td>Instruction</td>
<td>1</td>
<td>64</td>
<td>1</td>
<td>64</td>
</tr>
<tr>
<td>L2</td>
<td>2M</td>
<td>128M</td>
<td>16</td>
<td>Unified</td>
<td>2</td>
<td>2048</td>
<td>1</td>
<td>64</td>
</tr>
<tr>
<td>L3</td>
<td>160M</td>
<td>320M</td>
<td>20</td>
<td>Unified</td>
<td>3</td>
<td>131072</td>
<td>1</td>
<td>64</td>
</tr>
</tbody>
</table>

8. numactl --hardware
NOTE: a numactl 'node' might or might not correspond to a physical chip.

9. /proc/meminfo
MemTotal: 528059732 kB

10. who -r
run-level 3 Feb 14 03:02

11. Systemd service manager version: systemd 249 (249.16+suse.171.gdad0071f15)

12. Services, from systemctl list-unit-files
STATE
apparmor auditd cron getty@ irqbalance issue-generator kbdsettings nvmefc-boot-connections postfix purge-kernels rollback sshd systemd-pstore wicked wickedd-auto4 wickedd-dhcp4 wickedd-dhcpc6 wickedd-nanny

 enabled-runtime systemd-remount-fs

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Tested by: HPE

Platform Notes (Continued)

indirect wickedd

13. Linux kernel boot-time arguments, from /proc/cmdline
   BOOT_IMAGE=/boot/vmlinuz-5.14.21-150500.53-default
   root=UUID=a806a23c-58ee-4027-a60d-04b4da1323d6
   splash=silent
   resume=/dev/disk/by-uuid/ebbabfc7-d0cb-4aac-aedd-3d2c035d5d16
   mitigations=auto
   quiet
   security=apparmor

14. cpupower frequency-info
   analyzing CPU 0:
   boost state support:
      Supported: yes
      Active: yes

15. tuned-adm active
   Current active profile: throughput-performance

16. sysctl
   kernel.numa_balancing               1
   kernel.randomize_va_space            2
   vm.compaction_proactiveness          20
   vm.dirty_background_bytes            0
   vm.dirty_background_ratio            10
   vm.dirty_bytes                       0
   vm.dirty_expire_centisecs            3000
   vm.dirty_ratio                       20
   vm.dirty_writeback_centisecs         500
   vm.dirtytime_expire_seconds         43200
   vm.extrfrag_threshold               500
   vm.min_unmapped_ratio                1
   vm.nr_hugepages                     0
   vm.nr_hugepages_mempolicy           0
   vm.nr_overcommit_hugepages           0
   vm.swappiness                      10
   vm.watermark_boost_factor           15000
   vm.watermark_scale_factor           10
   vm.zone_reclaim_mode                0

17. /sys/kernel/mm/transparent_hugepage
   defrag always defer+madvice [madvice] never
   enabled [always] madvice never
   hpage_pmd_size 2097152
   shmem_enabled always within_size advise [never] deny force

18. /sys/kernel/mm/transparent_hugepage/khugepaged
   alloc_sleep millisecs 60000
   defrag 1
   max_ptes_none 511
   max_ptes_shared 256
   max_ptes_swap 64

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Platform Notes (Continued)

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

20. Disk information
   SPEC is set to: /home/cpu2017
   Filesystem Type Size Used Avail Use% Mounted on
   /dev/nvme0n1p3 xfs 2.5T 112G 2.3T 5% /home

21. /sys/devices/virtual/dmi/id
   Vendor: HPE
   Product: ProLiant DL380 Gen11
   Product Family: ProLiant
   Serial: CNX21000G3

22. 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:
   16x Hynix HMCG88AGBRA193N 32 GB 2 rank 5600, configured at 4800

23. BIOS
   (This section combines info from /sys/devices and dmidecode.)
   BIOS Vendor: HPE
   BIOS Version: 2.12
   BIOS Date: 12/13/2023
   BIOS Revision: 2.12
   Firmware Revision: 1.52

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Compiler Version Notes

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C | 502.gcc_r(peak)

Intel(R) oneAPI DPC+/C++ Compiler for applications running on IA-32, Version 2023.2.3 Build x
Copyright (C) 1985-2023 Intel Corporation. All rights reserved.

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C | 500.perlbench_r(base, peak) 502.gcc_r(base) 505.mcf_r(base, peak) 525.x264_r(base, peak)
557.xz_r(base, peak)

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2023.2.3 Build x
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C | 502.gcc_r(peak)

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Compiler Version Notes (Continued)

Intel(R) oneAPI DPC++/C++ Compiler for applications running on IA-32, Version 2023.2.3 Build x
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C          500.perlbench_r(base, peak) 502.gcc_r(base) 505.mcf_r(base, peak) 525.x264_r(base, peak)
          557.xz_r(base, peak)

---

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2023.2.3 Build x
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C++        520.omnetpp_r(base, peak) 523.xalancbmk_r(base, peak) 531.deepsjeng_r(base, peak)
          541.leela_r(base, peak)

---

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2023.2.3 Build x
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Fortran    548.exchange2_r(base, peak)

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Intel(R) Fortran Compiler for applications running on Intel(R) 64, Version 2023.2.3 Build x
Copyright (C) 1985-2023 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
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Base Portability Flags (Continued)

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 -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

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

Peak Compiler Invocation

C benchmarks:
icx

C++ benchmarks:
icpx

Fortran benchmarks:
ifx

Peak Portability Flags

500.perlbench_r: -DSPEC_LP64 -DSPEC_LINUX_X64

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<th>3</th>
</tr>
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<td>Test Sponsor:</td>
<td>HPE</td>
</tr>
<tr>
<td>Tested by:</td>
<td>HPE</td>
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<td>Test Date:</td>
<td>Feb-2024</td>
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<tr>
<td>Hardware Availability:</td>
<td>Feb-2024</td>
</tr>
<tr>
<td>Software Availability:</td>
<td>Dec-2023</td>
</tr>
</tbody>
</table>

Peak Portability Flags (Continued)

- 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
- 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: -w -std=c11 -m64 -Wl,-z,muldefs -fprofile-generate(pass 1)
- fprofile-use=default.profdata(pass 2) -xCORE-AVX2(pass 1)
- flto -Ofast -xCORE-AVX512 -ffast-math -mfpmath=sse
- funroll-loops -qopt-mem-layout-trans=4
- fno-strict-overflow
- L/home/specdev/new_compilers/ic2023.2.3/compiler/lib/intel64_lin
  -lqkmalloc

- 502.gcc_r: -m32
- L/home/specdev/new_compilers/ic2023.2.3/compiler/lib/ia32_lin
  -std=gnu89 -Wl,-z,muldefs -fprofile-generate(pass 1)
- fprofile-use=default.profdata(pass 2) -xCORE-AVX2(pass 1)
- flto -Ofast -xCORE-AVX512 -ffast-math -mfpmath=sse
- funroll-loops -qopt-mem-layout-trans=4
- L/usr/local/jemalloc32-5.0.1/lib -ljemalloc

- 505.mcf_r: basepeak = yes

- 525.x264_r: -w -std=c11 -m64 -Wl,-z,muldefs -xsapphirerapids -Ofast
  -ffast-math -flto -mfpmath=sse -funroll-loops
  -qopt-mem-layout-trans=4 -fno-alias
- L/home/specdev/new_compilers/ic2023.2.3/compiler/lib/intel64_lin
  -lqkmalloc

- 557.xz_r: basepeak = yes

C++ benchmarks:

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

Hewlett Packard Enterprise  
(Test Sponsor: HPE)  
ProLiant DL380 Gen11  
(2.10 GHz, Intel Xeon Gold 6530)  

CPU2017 License: 3  
Test Sponsor: HPE  
Tested by: HPE  

SPECrate®2017_int_base = 543  
SPECrate®2017_int_peak = 559  

Test Date: Feb-2024  
Hardware Availability: Feb-2024  
Software Availability: Dec-2023

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/Intel-ic2023p2-official-linux64.html
http://www.spec.org/cpu2017/flags/HPE-Platform-Flags-Intel-EMR-rev1.0.html

You can also download the XML flags sources by saving the following links:
http://www.spec.org/cpu2017/flags/Intel-ic2023p2-official-linux64.xml
http://www.spec.org/cpu2017/flags/HPE-Platform-Flags-Intel-EMR-rev1.0.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 2024-02-13 16:33:02-0500.
Report generated on 2024-03-18 10:05:49 by CPU2017 PDF formatter v6716.
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