



SPEC CPU®2017 Integer Rate Result

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Esconet Technologies Ltd.

Hexadata HDR-RM2386212I Ver: RLX
(Intel Xeon E-2434)

SPECrate®2017_int_base = 51.2

SPECrate®2017_int_peak = 53.1

CPU2017 License: 6523

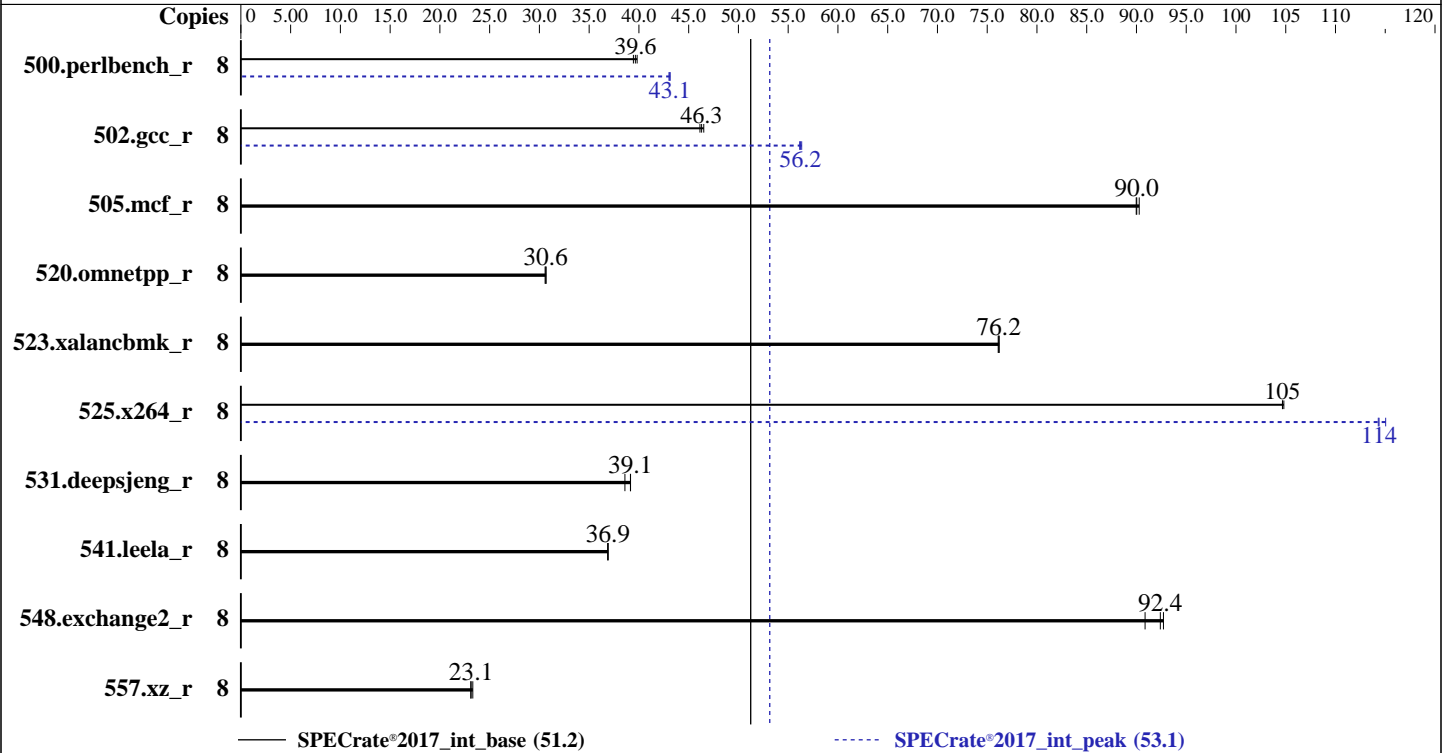
Test Sponsor: Esconet Technologies Ltd.

Tested by: Esconet Technologies Ltd.

Test Date: Feb-2025

Hardware Availability: May-2024

Software Availability: Jun-2024



Hardware

CPU Name: Intel Xeon E-2434
 Max MHz: 5000
 Nominal: 3400
 Enabled: 4 cores, 1 chip, 2 threads/core
 Orderable: 1 chip
 Cache L1: 32 KB I + 48 KB D on chip per core
 L2: 2 MB I+D on chip per core
 L3: 12 MB I+D on chip per chip
 Other: None
 Memory: 128 GB (4 x 32 GB 2Rx8 PC5-4800B-E, running at 4400)
 Storage: 1 x 1920 GB SATA SSD
 Other: CPU Cooling: Air

Software

OS: SUSE Linux Enterprise Server 15 SP6
 6.4.0-150600.21-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: Version 1.19 released Jan-2024
 File System: xfs
 System State: Run level 3 (multi-user)
 Base Pointers: 64-bit
 Peak Pointers: 32/64-bit
 Other: jemalloc memory allocator V5.0.1
 Power Management: OS and 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	8	320	39.8	323	39.4	<u>321</u>	<u>39.6</u>	8	<u>296</u>	<u>43.1</u>	295	43.1	296	43.0
502.gcc_r	8	246	46.1	244	46.5	<u>245</u>	<u>46.3</u>	8	<u>201</u>	<u>56.2</u>	201	56.4	202	56.2
505.mcf_r	8	143	90.3	<u>144</u>	<u>90.0</u>	144	90.0	8	143	90.3	<u>144</u>	<u>90.0</u>	144	90.0
520.omnetpp_r	8	<u>343</u>	<u>30.6</u>	342	30.7	343	30.6	8	<u>343</u>	<u>30.6</u>	342	30.7	343	30.6
523.xalancbmk_r	8	<u>111</u>	<u>76.2</u>	111	76.1	111	76.2	8	<u>111</u>	<u>76.2</u>	111	76.1	111	76.2
525.x264_r	8	<u>134</u>	<u>105</u>	134	105	134	105	8	122	115	123	114	<u>122</u>	<u>114</u>
531.deepsjeng_r	8	238	38.6	234	39.2	<u>234</u>	<u>39.1</u>	8	238	38.6	234	39.2	<u>234</u>	<u>39.1</u>
541.leela_r	8	<u>359</u>	<u>36.9</u>	359	36.9	359	36.9	8	<u>359</u>	<u>36.9</u>	359	36.9	359	36.9
548.exchange2_r	8	226	92.7	<u>227</u>	<u>92.4</u>	231	90.9	8	226	92.7	<u>227</u>	<u>92.4</u>	231	90.9
557.xz_r	8	<u>373</u>	<u>23.1</u>	374	23.1	371	23.3	8	<u>373</u>	<u>23.1</u>	374	23.1	371	23.3

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

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"
OS set to performance mode via cpupower frequency-set -g performance

Environment Variables Notes

Environment variables set by runcpu before the start of the run:
LD_LIBRARY_PATH = "/home/cpul7/lib/intel64:/home/cpul7/lib/ia32:/home/cpul7/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:
sync; echo 3> /proc/sys/vm/drop_caches
jemalloc, a general purpose malloc implementation
built with the RedHat Enterprise 7.5, and the system compiler gcc 4.8.5
sources available from jemalloc.net or https://github.com/jemalloc/jemalloc/releases
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)

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General Notes (Continued)

is mitigated in the system as tested and documented.

Platform Notes

BIOS Configuration:

VT-d = Disabled
CPU C States Support = Disabled
AES = Disabled
Intel (VMX) Virtualization Technology = Disabled
DRAM frequency = DDR5-4400 (4400MHz)
SATA Controller ALPM = Disabled

Sysinfo program /home/cpul7/bin/sysinfo
Rev: r6732 of 2022-11-07 fe91c89b7ed5c36ae2c92cc097bec197
running on localhost Tue Feb 25 14:26:27 2025

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 (254.10+suse.84.ge8d77af424)
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 6.4.0-150600.21-default #1 SMP PREEMPT_DYNAMIC Thu May 16 11:09:22 UTC 2024 (36c1e09)
x86_64 x86_64 x86_64 GNU/Linux

2. w
14:26:27 up 8 min, 1 user, load average: 0.24, 0.09, 0.06
USER TTY FROM LOGIN@ IDLE JCPU PCPU WHAT
root tty1 - 14:23 3.00s 0.77s 0.01s sh
reportable-ic2023.2.3-lin-core-avx2-rate-smt-on-20231121.sh

3. Username

(Continued on next page)



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Platform Notes (Continued)

From environment variable \$USER: root

```

-----
4. ulimit -a
   core file size          (blocks, -c) unlimited
   data seg size           (kbytes, -d) unlimited
   scheduling priority      (-e) 0
   file size               (blocks, -f) unlimited
   pending signals         (-i) 512962
   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) 512962
   virtual memory          (kbytes, -v) unlimited
   file locks              (-x) unlimited

```

```

-----
5. sysinfo process ancestry
/usr/lib/systemd/systemd --switched-root --system --deserialize=31
login -- root
-bash
sh reportable-ic2023.2.3-lin-core-avx2-rate-smt-on-20231121.sh
runcpu --nobuild --action validate --define default-platform-flags --define numcopies=8 -c
  ic2023.2.3-lin-core-avx2-rate-20231121.cfg --define smt-on --define cores=4 --define physicallogical
  --define no-numa --tune base,peak -o all --define drop_caches intrate
runcpu --nobuild --action validate --define default-platform-flags --define numcopies=8 --configfile
  ic2023.2.3-lin-core-avx2-rate-20231121.cfg --define smt-on --define cores=4 --define physicallogical
  --define no-numa --tune base,peak --output_format all --define drop_caches --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/cpul7

```

```

-----
6. /proc/cpuinfo
   model name      : Intel(R) Xeon(R) E E-2434
   vendor_id       : GenuineIntel
   cpu family      : 6
   model           : 183
   stepping        : 1
   microcode       : 0x122
   bugs            : spectre_v1 spectre_v2 spec_store_bypass swapgs eibrs_pbrsb bhi
   cpu cores       : 4
   siblings        : 8
   1 physical ids (chips)
   8 processors (hardware threads)
   physical id 0: core ids 0-3
   physical id 0: apicids 0-7
   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 2.39.3:

```

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Platform Notes (Continued)

```

Architecture:                x86_64
CPU op-mode(s):              32-bit, 64-bit
Address sizes:                42 bits physical, 48 bits virtual
Byte Order:                   Little Endian
CPU(s):                       8
On-line CPU(s) list:         0-7
Vendor ID:                    GenuineIntel
BIOS Vendor ID:              Intel(R) Corporation
Model name:                   Intel(R) Xeon(R) E E-2434
BIOS Model name:              Intel(R) Xeon(R) E E-2434 To Be Filled By O.E.M. CPU @ 4.5GHz
BIOS CPU family:              179
CPU family:                    6
Model:                        183
Thread(s) per core:           2
Core(s) per socket:           4
Socket(s):                     1
Stepping:                      1
Frequency boost:               enabled
CPU(s) scaling MHz:           118%
CPU max MHz:                   3401.0000
CPU min MHz:                   800.0000
BogoMIPS:                      6835.20
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 monitor ds_cpl smx est tm2 ssse3 sdbg fma cx16 xtpr
                                pdcm sse4_1 sse4_2 x2apic movbe popcnt tsc_deadline_timer xsave avx
                                f16c rdrand lahf_lm abm 3dnowprefetch cpuid_fault epb ssbd ibrs ibpb
                                stibp ibrs_enhanced fsgsbase tsc_adjust bmi1 avx2 smep bmi2 erms
                                invpcid rdseed adx smap clflushopt clwb intel_pt sha_ni xsaveopt
                                xsaves xgetbv1 xsaves split_lock_detect user_shstk avx_vnni dtherm
                                ida arat pln pts hfi umip pku ospke waitpkg gfni vpcmlmulqdq tme rdpid
                                movdiri movdir64b fsrm md_clear serialize pconfig arch_lbr ibt
                                flush_lld arch_capabilities
L1d cache:                    192 KiB (4 instances)
L1i cache:                    128 KiB (4 instances)
L2 cache:                      8 MiB (4 instances)
L3 cache:                      12 MiB (1 instance)
NUMA node(s):                  1
NUMA node0 CPU(s):            0-7
Vulnerability Gather data sampling: Not affected
Vulnerability Itlb multihit:   Not affected
Vulnerability Lltf:            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;
                                PBRSE-eIBRS SW sequence; BHI BHI_DIS_S
Vulnerability Srbds:            Not affected
Vulnerability Tsx async abort:  Not affected

```

```

From lscpu --cache:
NAME ONE-SIZE ALL-SIZE WAYS TYPE LEVEL SETS PHY-LINE COHERENCY-SIZE
L1d 48K 192K 12 Data 1 64 1 64

```

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Platform Notes (Continued)

L1i	32K	128K	8 Instruction	1	64	1	64
L2	2M	8M	16 Unified	2	2048	1	64
L3	12M	12M	6 Unified	3	32768	1	64

8. numactl --hardware

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

```

available: 1 nodes (0)
node 0 cpus: 0-7
node 0 size: 128265 MB
node 0 free: 127484 MB
node distances:
node 0
0: 10

```

9. /proc/meminfo

MemTotal: 131344268 kB

10. who -r

run-level 3 Feb 25 14:18

11. Systemd service manager version: systemd 254 (254.10+suse.84.ge8d77af424)

```

Default Target Status
multi-user      running

```

12. Services, from systemctl list-unit-files

```

STATE UNIT FILES
enabled apparmor auditd cron firewalld getty@ irqbalance issue-generator kbdsettings kdump
kdump-early kdump-notify postfix purge-kernels rollback sshd systemd-pstore wicked
wickedd-auto4 wickedd-dhcp4 wickedd-dhcp6 wickedd-nanny
enabled-runtime systemd-remount-fs
disabled boot-sysctl ca-certificates chrony-wait chronyd console-getty debug-shell ebttables fsidd
grub2-once haveged issue-add-ssh-keys kexec-load lunmask nfs nfs-blkmap rpcbind
rpmconfigcheck serial-getty@ systemd-boot-check-no-failures systemd-confext
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-6.4.0-150600.21-default
root=UUID=0d9e72ce-443d-4279-9cbd-11b76fe0fa66
splash=silent
resume=/dev/disk/by-uuid/3a60289d-c070-402f-bb86-52386ad57a3d
mitigations=auto
quiet
security=apparmor
crashkernel=342M,high
crashkernel=72M,low

```

14. cpupower frequency-info

```

analyzing CPU 2:
current policy: frequency should be within 800 MHz and 3.40 GHz.
The governor "performance" may decide which speed to use
within this range.
boost state support:

```

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Platform Notes (Continued)

Supported: yes
Active: yes

```

-----
15. sysctl
kernel.numa_balancing          0
kernel.randomize_va_space     2
vm.compaction_proactiveness    20
vm.dirty_background_bytes      0
vm.dirty_background_ratio      10
vm.dirty_bytes                 0
vm.dirty_expire_centisecs     3000
vm.dirty_ratio                 20
vm.dirty_writeback_centisecs   500
vm.dirtytime_expire_seconds    43200
vm.extfrag_threshold           500
vm.min_unmapped_ratio          1
vm.nr_hugepages                0
vm.nr_hugepages_mempolicy      0
vm.nr_overcommit_hugepages     0
vm.swappiness                  60
vm.watermark_boost_factor      15000
vm.watermark_scale_factor      10
vm.zone_reclaim_mode           0

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

-----
17. /sys/kernel/mm/transparent_hugepage/khugepaged
alloc_sleep_millisecs  60000
defrag                 1
max_ptes_none          511
max_ptes_shared        256
max_ptes_swap          64
pages_to_scan          4096
scan_sleep_millisecs   10000

-----
18. OS release
From /etc/*-release /etc/*-version
os-release SUSE Linux Enterprise Server 15 SP6

-----
19. Disk information
SPEC is set to: /home/cpu17
Filesystem      Type      Size  Used Avail Use% Mounted on
/dev/sda3       xfs       728G  46G  683G   7% /home

-----
20. /sys/devices/virtual/dmi/id
Vendor:          HEXADATA
Product:         HDR-RM2386212I
Serial:          H5FSYR003208

```

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Platform Notes (Continued)

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:

4x V-Color Technology Inc TE532G48D840 32 GB 2 rank 4800, configured at 4400

22. BIOS

(This section combines info from /sys/devices and dmidecode.)

BIOS Vendor: American Megatrends International, LLC.
BIOS Version: 1.19
BIOS Date: 01/05/2024
BIOS Revision: 5.27

Compiler Version Notes

=====
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.
=====

=====
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
Copyright (C) 1985-2023 Intel Corporation. All rights reserved.
=====

=====
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.
=====

=====
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
Copyright (C) 1985-2023 Intel Corporation. All rights reserved.
=====

=====
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
Copyright (C) 1985-2023 Intel Corporation. All rights reserved.
=====

=====
Fortran | 548.exchange2_r(base, peak)
=====

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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
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
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 -xCORE-AVX2 -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 -xCORE-AVX2 -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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SPECrate®2017_int_peak = 53.1

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Test Sponsor: Esconet Technologies Ltd.

Tested by: Esconet Technologies Ltd.

Test Date: Feb-2025

Hardware Availability: May-2024

Software Availability: Jun-2024

Base Optimization Flags (Continued)

Fortran benchmarks:

```
-w -m64 -Wl,-z,muldefs -xCORE-AVX2 -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
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 -flto
```

(Continued on next page)



SPEC CPU®2017 Integer Rate Result

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Hexadata HDR-RM2386212I Ver: RLX
(Intel Xeon E-2434)

SPECrate®2017_int_base = 51.2

SPECrate®2017_int_peak = 53.1

CPU2017 License: 6523

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Test Date: Feb-2025

Hardware Availability: May-2024

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Peak Optimization Flags (Continued)

500.perlbench_r (continued):

```
-Ofast -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  
-lqkmallo
```

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.profddata(pass 2) -xCORE-AVX2 -flto  
-Ofast -ffast-math -mfpmath=sse -funroll-loops  
-qopt-mem-layout-trans=4 -L/usr/local/jemalloc32-5.0.1/lib  
-ljemallo
```

505.mcf_r: basepeak = yes

```
525.x264_r: -w -std=c11 -m64 -Wl,-z,muldefs -xCORE-AVX2 -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  
-lqkmallo
```

557.xz_r: basepeak = yes

C++ benchmarks:

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/Hexadata-Platform-Flags-Intel-rev1.7.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/Hexadata-Platform-Flags-Intel-rev1.7.xml>



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