SPEC® CPU2017 Integer Speed Result Copyright 2017-2020 Standard Performance Evaluation Corporation My Corporation SPECspeed2017_int_base = ნ.87 (Test Sponsor: Intel Corporation) SPECspeed2017 int peak **Mot Run** Test Date: CPU2017 License: 13 May-2020 Hardware Availability: **Test Sponsor:** Intel Corporation Tested by: Software Availability: Sep-2017 Intel Corporation Threads 0 1.00 2.00 600.perlbench_s 602.gcc_s 6.87 605.mcf_s 1 620.omnetpp_s 623.xalancbmk_s 625.x264 s 631.deepsjeng_s 641.leela s 648.exchange2_s 657.xz_s SPECspeed 017_int_base (6.87) Hardware Software CPU Name: Genuine Intel 0000 OS: Fedora release 32 (Thirty Two) Max MHz.: 5.7.0-0.rc6.1.1.cet.fc32.x86_64 C/C++: Version 8.1.0 of GNU C/C++ Nominal: Compiler: Enabled: cores, 1 chip, threads/core Compiler for Linux; Orderable: Fortran: Version 8.1.0 of GNU Fortran Cache L1: Compiler for Linux Parallel: L2: No L3: Firmware: Other: File System: ext4 15.428 GB fixme: If using DDR3, format is: System State: Run level 3 (add definition here) Memory: 'N GB (M x N GB nRxn PCn-nnnnnR-n, ECC)' Base Pointers: 64-bit Storage: B91 GB, add more disk info here Peak Pointers: Not Applicable Other: Other: **Errors** 'reportable' flag not set during run 648.exchange2 s (base) did not have enough runs! 623.xalanchmk_s (base) did not have enough runs!

648.exchange2 s (base) did not have enough runs!
623.xalanchmk_s (base) did not have enough runs!
631.deepsjeng_s (base) did not have enough runs!
641.leela_s (base) did not have enough runs!
620.omnetpp_s (base) did not have enough runs!
657.xz_s (base) did not have enough runs!
600.perlbench_s (base) did not have enough runs!
625.x264_s (base) did not have enough runs!
602.gcc_s (base) did not have enough runs!
605.mcf_s (base) did not have enough runs!

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SPECspeed2017_int_base =

SPECspeed2017_int_peak Not Run

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Tested by: Intel Corporation

Test Date: May-2020

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Hardware Availability:

Software Availability: Sep-2017

Errors (Continued)

Unknown flags were used! See

https://www.spec.org/cpu2017/Docs/runcpu.html#flagsurl for information about how to get rid of this error.

Results Table

	Base							\searrow	Peak					
Benchmark	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
600.perlbench_s				$\Big)$				2						
602.gcc_s							$\overline{}$							
605.mcf_s	1	<u>687</u>	6.8/7				$\overline{}$							
620.omnetpp_s			>		,		_							
623.xalancbmk_s							/							
625.x264_s)/								
631.deepsjeng_s						Ý								
641.leela_s														
648.exchange2_s					N									
657.xz_s		7	\bigcup											

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6.87

SPECspeed2017_int_peak Not Run

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

Operating System Notes

Stack size set to unlimited using "ulimit -s unlimited"

General Notes

Environment variables set by runcpu before the start of the run:

KMP_AFFINITY = "granularity=fine,compact"

LD_LIBRARY_PATH = //mme/ucsd/SpectreSandboxing/spec2017/lib/ia32:/home/ucsd/SpectreSandboxing/spec2017/lib/intel64"
OMP_STACKSIZE = "192M"

Binaries compiled on a system with Intel(R) Core(TM) i9-7900X CPU + 32GB RAM memory using Redhat Enterprise Linux 7.5
Transparent Huge Pages enabled by default

Platform Notes

Sysinfo program /home/ucsd/SpectreSandboxing/spec2017/bin/sysinfo Rev: r5797 of 2017-06-14 96c45e4568ad54c135fd618bcc091c0f running on tigerlakel-ravi Sat May 30 01:36:51 2020

(Continued on next page)

Page 2

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Hardware Availability:

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Platform Notes (Continued)
```

```
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 : Genuine Intel(R) CPU 0000 @ 2.30GHz

1 "physical id"s (chips)

8 "processors"

cores, siblings (Caution: counting these is hw and system dependent. The following

32-b1t, 64-bit Little Endian

GenuineIntel

39 bits physical, 48 bits virtual

Genuine Intel(R) CPU 0000 @ 2.30GHz

excerpts from /proc/cpuinfo(m)ght not/be reliable/ Use with caution.)

x86_

0-72

4

1

6

140

2010.970

400.0000

4608.00

192 KiB

128 KiB

5 MiB 12 MiB

0 - 7

VT-x

4200.0000

cpu cores : 4 siblings : 8

physical 0: cores 0

From lscpu:

Architecture:

CPU op-mode(s): Byte Order:

Address sizes:

CPU(s):

On-line CPU(s) list:

Thread(s) per core: Core(s) per socket:

Socket(s):

NUMA node(s):

Vendor In:

CPU family:

Model:

Model name:

Stepping:

PU MHz: CPU max MHz:

CPU min MHz:

BogoMIRS: Virtualization:

L1d cache: Mi cache:

L2 cache: L3/cache:

NUMA node0 CPU(s):

Vulnerability Itlb multihit:

Vulnerability L1tf:

Vulnerability Mds: microcode; SMT vulnerable

Vulnerability Meltdown:

Vulnerability Spec store bypass: Mitigation; Speculative Store Bypass disabled via prctl and seccomp

Not affected

KVM: Mitigation: Split huge pages

Vulnerable: Clear CPU buffers attempted, no

(Continued on next page)

Not affected

Page 3

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Test Date:

May-2020

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Software Availability: Sep-2017

Platform Notes (Continued)

Mitigation; usercopy/swapgs barriers and __user Vulnerability Spectre v1:

pointer sanitization

Mitigation; Enhanced IBRS/ IBPB conditional, RSB Vulnerability Spectre v2:

filling

Not affected Vulnerability Tsx async abort:

fpu wme de pse tsc msr pae mce cx8 apic sep mtrr Flags: pge mca cmov pat pse36 clflush dts agpi mmx fxsr sse sse2 ss ht tm pbe syscall nx pdpelgb rdtscp lm constant_tsc art arch_perfmon pebs bts rep_good nopl xtopology nonstop_tsc cpuid aperfmperf tsc_known_freq phi pc/mulqdq dtes64 monitor ds_cpl vmx smx est tm2 ssse3 sdbg fma x16 xtp dcm pcid se4_1 sse4_2 x2apic movbe popcnt tsc_deadline_timer aes xsave avx f16d rdrand lahf_lm abm 3dnowprefetch cpuid_fault epb invpcid_single ssbd ibrs ippb stibe ibrs_shanced tpr_shadow vnmi flexpriority ept vpid ept_ad fsgsbase tsc_ddjust bmil avx2 smep bmi2 erms invpcid avx512f avx512dq rdseed adx map avx512ifma alflushopt clwb intel_pt avx512cd sha_ni avx512bw avx512vl xsaveopt xsavec xgetbvl xsaves dtherm ida arat pln pts hwp hwp_notify hwp_act_window hwp_epp hwp_pkg_req avx512vbmi umip pku ospke avx512_vbmi2 shstk gfni vaes vpclmulqdq avx512_vnni avx512_bitalg tme avx512_vpopcntdq rdpid movdiri movdir64b fsrm avx512_vp2infersect ibt flush_11d arch_capabilities

/proc/cpuinfo cache data cache size : 12288 KB

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

From /proc/meminfo

MemTotal: 16177588 kB HugePages_Total: Hugepagesize: 2048 kB

etc/*release*//etc/*version*

fedora-release Fedora release 32 (Thirty Two)

os-release:

NAME=Fedora

VERSION=/32 (Workstation Edition)"

ID=fedora

VERSION_ID=32

VERSION_CODENAME=""

PLATFORM_ID="platform:f32"

PRETTY_NAME="Fedora 32 (Workstation Edition)"

ANSI_COLOR="0;34"

redhat-release: Fedora release 32 (Thirty Two) system-release: Fedora release 32 (Thirty Two) system-release-cpe: cpe:/o:fedoraproject:fedora:32

uname -a:

Linux tigerlakel-ravi 5.7.0-0.rc6.1.1.cet.fc32.x86_64 #1 SMP Mon May 18 17:21:34 PDT

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Hardware Availability:

Software Availability: Sep-2017

Platform Notes (Continued)

2020 x86_64 x86_64 x86_64 GNU/Linux

run-level 3 May 28 23:18

SPEC is set to: /home/ucsd/SpectreSandboxing/spec2017 Size Filesystem Type

/dev/mapper/fedora_localhost--live-home 128G 243G 35% /home ext4 391G

Additional information from dmidecode follows. WARNING: Use caution when you interpret this section. The 'dmidecode' (pr)gram 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.

(End of data from sysinfd program)

Compiler Version Notes

CC 605.mcf s(base)

clang version 10.0.0 (https://github.com/llvm/llvm-project

d32170dbd5b0d54436537b6b75beaf44324e0c28)

Target: wasm32-unknown wasi

Thread model: po≰ix

InstalledDir: opt/wasi-sdk/bin

Base Unknown Flags

605.mcf/s:"/opt/wasi\sdk/bin/clang --sysroot

opt/wasi sdk/shard/wasi-sysroot -Wl,--export-all

I/opt/wasi sdk/12b/clang/10.0.0/include/ARRAY(0x6f484e8)

/opt/wasi-sdk/bin/clang --sysroot

/opt/wasi-sdk/share/wasi-sysroot -Wl,--export-all

-I/opt/wasi-sdk/lib/clang/10.0.0/include/ARRAY(0x6f49070)

"-02ARRAX(0x6f61b58)

Base Runtime Environment

C benchmarks:

 $605.mcf_s$: No flags used

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Test Date: May-2020

Hardware Availability:

Software Availability: Sep-2017

Base Compiler Invocation

C benchmarks:

Tested by:

605.mcf_s: No flags used

Base Portability Flags

605.mcf_s: -DSPEC_LP64

Base Optimization Flags

C benchmarks:

605.mcf_s: -Wl,-z,muldefs -fro-strict-aliasing -DSPEC_SUPPRESS_OPENMP

Base Other Flags

C benchmarks:

605.mcf_s: No flags used

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

Tested with SPEC CPU2017 v1.0.2 on 2020-05-30 01:36:51-0700.

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