



SPEC CPU®2017 Floating Point Speed Result

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Tyrone Systems

(Test Sponsor: Netweb Pte Ltd)

Tyrone Camarero TDI100C3R-212
(2.40 GHz, Intel Xeon Platinum 8360Y)

SPECspeed®2017_fp_base = 244

SPECspeed®2017_fp_peak = 244

CPU2017 License: 006042

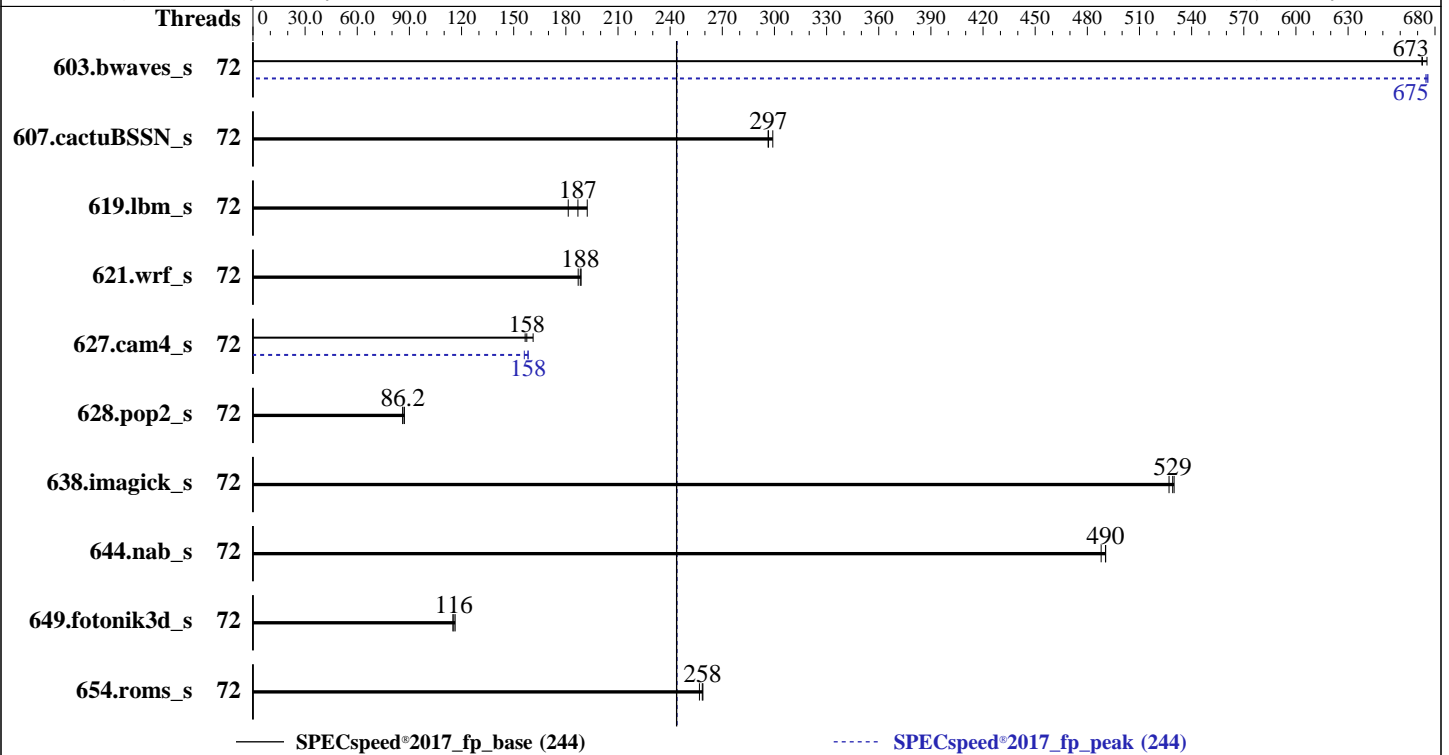
Test Sponsor: Netweb Pte Ltd

Tested by: Tyrone Systems

Test Date: Sep-2023

Hardware Availability: Apr-2021

Software Availability: May-2022



Hardware

CPU Name: Intel Xeon Platinum 8360Y
 Max MHz: 3500
 Nominal: 2400
 Enabled: 72 cores, 2 chips, 2 threads/core
 Orderable: 1,2 Chips
 Cache L1: 32 KB I + 48 KB D on chip per core
 L2: 1.25 MB I+D on chip per core
 L3: 54 MB I+D on chip per chip
 Other: None
 Memory: 512 GB (16 x 32 GB 2Rx4 PC4-3200AA-R)
 Storage: 1 x 512 GB NVMe SSD
 Other: None

Software

OS: Red Hat Enterprise Linux release 8.5 (Ootpa)
 4.18.0-348.el8.x86_64
 Compiler: C/C++: Version 2022.1 of Intel oneAPI DPC++/C++
 Compiler for Linux;
 Fortran: Version 2022.1 of Intel Fortran Compiler
 for Linux;
 Parallel: Yes
 Firmware: Version PEGC0042 released Feb-2023
 File System: xfs
 System State: Run level 3 (multi-user)
 Base Pointers: 64-bit
 Peak Pointers: 64-bit
 Other: jemalloc memory allocator V5.0.1
 Power Management: BIOS set to prefer performance at the cost of
 additional power usage.



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Results Table

Benchmark	Base						Peak							
	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
603.bwaves_s	72	87.7	672	87.7	673	87.4	675	72	87.3	675	87.3	676	87.4	675
607.cactuBSSN_s	72	55.7	299	56.3	296	56.2	297	72	55.7	299	56.3	296	56.2	297
619.lbm_s	72	27.2	192	28.9	181	28.0	187	72	27.2	192	28.9	181	28.0	187
621.wrf_s	72	70.7	187	70.2	188	70.1	189	72	70.7	187	70.2	188	70.1	189
627.cam4_s	72	56.3	158	55.0	161	56.6	157	72	56.8	156	56.0	158	56.0	158
628.pop2_s	72	138	86.2	136	87.1	138	86.2	72	138	86.2	136	87.1	138	86.2
638.imagick_s	72	27.3	529	27.2	530	27.4	527	72	27.3	529	27.2	530	27.4	527
644.nab_s	72	35.6	490	35.8	488	35.6	491	72	35.6	490	35.8	488	35.6	491
649.fotonik3d_s	72	78.9	116	78.4	116	79.3	115	72	78.9	116	78.4	116	79.3	115
654.roms_s	72	60.9	258	61.3	257	60.8	259	72	60.9	258	61.3	257	60.8	259

SPECSpeed®2017_fp_base = 244

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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:
KMP_AFFINITY = "granularity=fine,compact,1,0"
LD_LIBRARY_PATH = "/home/cpu2017/lib/intel64:/home/cpu2017/je5.0.1-64"
MALLOC_CONF = "retain:true"
OMP_STACKSIZE = "192M"

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
runcpu command invoked through numactl i.e.:
numactl --interleave=all runcpu <etc>
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-2017-5753 (Spectre variant 1) is mitigated in the system as tested and documented.
NA: The test sponsor attests, as of date of publication, that CVE-2017-5754 (Meltdown) is mitigated in the

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General Notes (Continued)

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
sources available from jemalloc.net or <https://github.com/jemalloc/jemalloc/releases>

Platform Notes

BIOS Settings:
Power Technology = Custom
Power Performance Tuning = BIOS Controls EPB
ENERGY_PERF_BIAS_CFG mode = Extreme Performance
SNC (Sub NUMA) = Enable
KTI Prefetch = Enable
LLC Dead Line Alloc = Disable
Hyper-Threading = Enabled

Sysinfo program /home/cpu2017/bin/sysinfo
Rev: r6732 of 2022-11-07 fe91c89b7ed5c36ae2c92cc097bec197
running on Tyronespec Thu Sep 7 11:44:43 2023

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

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1. uname -a
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10. who -r
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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
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18. /sys/kernel/mm/transparent_hugepage/khugepaged
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1. uname -a
Linux Tyronespec 4.18.0-348.el8.x86_64 #1 SMP Mon Oct 4 12:17:22 EDT 2021 x86_64 x86_64 x86_64 GNU/Linux

2. w
11:44:43 up 1 day, 4:03, 2 users, load average: 5.83, 6.66, 3.96
USER TTY FROM LOGIN@ IDLE JCPU PCPU WHAT

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Platform Notes (Continued)

```
root    tty1    -                Wed07    3:46m  1.21s  0.00s  -bash
root    tty2    -                Wed07    28:02m 0.01s  0.01s  -bash
```

3. Username

From environment variable \$USER: root

4. ulimit -a

```
core file size          (blocks, -c) 0
data seg size           (kbytes, -d) unlimited
scheduling priority     (-e) 0
file size                (blocks, -f) unlimited
pending signals         (-i) 2062222
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) 2062222
virtual memory          (kbytes, -v) unlimited
file locks              (-x) unlimited
```

5. sysinfo process ancestry

```
/usr/lib/systemd/systemd --switched-root --system --deserialize 18
login -- root
-bash
-bash
runcpu --nobuild --action validate --define default-platform-flags -c
ic2022.1-lin-core-avx512-speed-20220316.cfg --define cores=72 --tune base,peak -o all --define smt-on
--define drop_caches fpspeed
runcpu --nobuild --action validate --define default-platform-flags --configfile
ic2022.1-lin-core-avx512-speed-20220316.cfg --define cores=72 --tune base,peak --output_format all
--define smt-on --define drop_caches --nopower --runmode speed --tune base:peak --size refspeed fpspeed
--nopreenv --note-preenv --logfile $SPEC/tmp/CPU2017.004/templogs/preenv.fpspeed.004.0.log --lognum 004.0
--from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /home/cpu2017
```

6. /proc/cpuinfo

```
model name      : Intel(R) Xeon(R) Platinum 8360Y CPU @ 2.40GHz
vendor_id       : GenuineIntel
cpu family      : 6
model           : 106
stepping        : 6
microcode       : 0xd0002e0
bugs            : spectre_v1 spectre_v2 spec_store_bypass swaps
cpu cores       : 36
siblings        : 72
2 physical ids (chips)
144 processors (hardware threads)
physical id 0:  core ids 0-35
physical id 1:  core ids 0-35
physical id 0:  apicids 0-71
physical id 1:  apicids 128-199
```

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Platform Notes (Continued)

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 2.32.1:

```

Architecture:          x86_64
CPU op-mode(s):        32-bit, 64-bit
Byte Order:            Little Endian
CPU(s):                144
On-line CPU(s) list:   0-143
Thread(s) per core:    2
Core(s) per socket:    36
Socket(s):             2
NUMA node(s):         2
Vendor ID:             GenuineIntel
BIOS Vendor ID:       Intel(R) Corporation
CPU family:            6
Model:                106
Model name:            Intel(R) Xeon(R) Platinum 8360Y CPU @ 2.40GHz
BIOS Model name:      Intel(R) Xeon(R) Platinum 8360Y CPU @ 2.40GHz
Stepping:              6
CPU MHz:               2400.000
CPU max MHz:          3500.0000
CPU min MHz:          800.0000
BogoMIPS:              4800.00
Virtualization:        VT-x
L1d cache:             48K
L1i cache:             32K
L2 cache:              1280K
L3 cache:              55296K
NUMA node0 CPU(s):    0-35,72-107
NUMA node1 CPU(s):    36-71,108-143
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 pni
pclmulqdq dtes64 monitor ds_cpl vmx smx est tm2 ssse3 sdbg fma cx16 xtpr pdcm pcid dca
sse4_1 sse4_2 x2apic movbe popcnt tsc_deadline_timer aes xsave avx f16c rdrand lahf_lm
abm 3dnowprefetch cpuid_fault epb cat_l3 invpcid_single intel_ppin ssbd mba ibrs ibpb
stibp ibrs_enhanced tpr_shadow vnmi flexpriority ept vpid ept_ad fsgsbase tsc_adjust
sgx bmi1 hle avx2 smep bmi2 erms invpcid cqm rdt_a avx512f avx512dq rdseed adx smap
avx512ifma clflushopt clwb intel_pt avx512cd sha_ni avx512bw avx512vl xsaveopt xsavec
xgetbv1 xsaves cqm_llc cqm_occup_llc cqm_mbm_total cqm_mbm_local split_lock_detect
wbnoinvd dtherm ida arat pln pts hwp hwp_act_window hwp_epp hwp_pkg_req avx512vbmi
umip pku ospke avx512_vbmi2 gfni vaes vpclmulqdq avx512_vnni avx512_bitalg tme
avx512_vpoperndq la57 rdpid sgx_lc fsrm md_clear pconfig flush_lld arch_capabilities

```

8. numactl --hardware

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

```

available: 2 nodes (0-1)
node 0 cpus: 0-35,72-107
node 0 size: 257586 MB
node 0 free: 214405 MB
node 1 cpus: 36-71,108-143
node 1 size: 258028 MB
node 1 free: 212968 MB
node distances:
node 0 1

```

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Platform Notes (Continued)

```
0: 10 20
1: 20 10
```

```
9. /proc/meminfo
MemTotal: 527989112 kB
```

```
10. who -r
run-level 3 Sep 6 07:41
```

```
11. Systemd service manager version: systemd 239 (239-51.el8)
Default Target Status
multi-user running
```

```
12. Services, from systemctl list-unit-files
STATE UNIT FILES
enabled ModemManager NetworkManager NetworkManager-dispatcher NetworkManager-wait-online accounts-daemon
atd auditd autovt@ avahi-daemon bluetooth chronyd cups display-manager firewalld gdm
getty@ import-state insights-client-boot irqbalance iscsi iscsi-onboot kdump ksm ksmtuned
libstoragemgmt libvirt loadmodules lvm2-monitor mcelog mdmonitor microcode multipathd
nis-domainname nvidia-hibernate nvidia-resume nvidia-suspend nvme-fc-boot-connections
ostree-remount qemu-guest-agent rhsmcertd rpcbind rsyslog rtkit-daemon selinux-autorelabel-mark
sep5 smartd sshd sssd syslog timedatex tuned udisks2 vdo vgaauthd vmtoolsd
disabled arp-ethers blk-availability brltty canberra-system-bootup canberra-system-shutdown
canberra-system-shutdown-reboot chrony-wait console-getty cpupower cups-browsed debug-shell
dnsmasq ebttables gssproxy httpd httpd@ initial-setup initial-setup-reconfiguration iprdump
iprinit iprupdate iscsid iscsiui kpatch kvm_stat ledmon man-db-restart-cache-update
ndctl-monitor netcf-transaction nfs-blkmap nfs-convert nfs-server nftables numad nvidia-powerd
nvme-autoconnect oddjobd podman podman-auto-update podman-restart psacct radvd ras-mc-ctl
rasdaemon rdisc rhcd rhsm rhsm-facts saslauthd serial-getty@ snmpd snmptrapd speech-dispatcherd
sshd-keygen@ switcheroo-control systemd-nspawn@ systemd-resolved tcsd tog-pegasus upower
virtinterfaced virtnetworkd virtnodevd virtnwfilterd virtproxyd virtqemud virtsecret
virtstoraged wpa_supplicant
generated SystemTap compile-server gcc-toolset-10-stap-server gcc-toolset-10-systemtap
gcc-toolset-11-stap-server gcc-toolset-11-systemtap gcc-toolset-9-stap-server
gcc-toolset-9-systemtap scripts startup
indirect spice-vdagentd sssd-autofs sssd-kcm sssd-nss sssd-pac sssd-pam sssd-ssh sssd-sudo virtlockd
virtlogd
masked systemd-timedated
```

```
13. Linux kernel boot-time arguments, from /proc/cmdline
BOOT_IMAGE=(hd1,gpt2)/vmlinuz-4.18.0-348.el8.x86_64
root=/dev/mapper/rhel-root
ro
resume=/dev/mapper/rhel-swap
rd.lvm.lv=rhel/root
rd.lvm.lv=rhel/swap
rhgb
quiet
```

```
14. cpupower frequency-info
analyzing CPU 0:
current policy: frequency should be within 800 MHz and 3.50 GHz.
The governor "performance" may decide which speed to use
within this range.
```

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Platform Notes (Continued)

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	0
vm.dirty_background_bytes	0
vm.dirty_background_ratio	10
vm.dirty_bytes	0
vm.dirty_expire_centisecs	3000
vm.dirty_ratio	40
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	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 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_swap	64
pages_to_scan	4096
scan_sleep_millisecs	10000

19. OS release

From /etc/*-release /etc/*-version	
os-release	Red Hat Enterprise Linux 8.5 (Ootpa)
redhat-release	Red Hat Enterprise Linux release 8.5 (Ootpa)
system-release	Red Hat Enterprise Linux release 8.5 (Ootpa)

20. Kernel self-reported vulnerability status, from /sys/devices/system/cpu/vulnerabilities

itlb_multihit	Not affected
lltf	Not affected
mds	Not affected
meltdown	Not affected
spec_store_bypass	Mitigation: Speculative Store Bypass disabled via prctl and seccomp

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Platform Notes (Continued)

spectre_v1 Mitigation: usercopy/swaps barriers and __user pointer sanitization
spectre_v2 Mitigation: Enhanced IBRS, IBPB: conditional, RSB filling
srbds Not affected
tsx_async_abort Not affected
For more information, see the Linux documentation on hardware vulnerabilities, for example
<https://www.kernel.org/doc/html/latest/admin-guide/hw-vuln/index.html>

21. Disk information
SPEC is set to: /home/cpu2017
Filesystem Type Size Used Avail Use% Mounted on
/dev/mapper/rhel-home xfs 402G 372G 30G 93% /home

22. /sys/devices/virtual/dmi/id
Vendor: TyroneSystems
Product: TDI100C3R-212
Product Family: Family

23. dmidecode
Additional information from dmidecode 3.2 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 Samsung M393A4K40EB3-CWE 32 GB 2 rank 3200

24. BIOS
(This section combines info from /sys/devices and dmidecode.)
BIOS Vendor: American Megatrends International, LLC.
BIOS Version: PEGC0042
BIOS Date: 02/14/2023
BIOS Revision: 5.22

Compiler Version Notes

=====
C | 619.lbm_s(base, peak) 638.imagick_s(base, peak) 644.nab_s(base, peak)

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2022.1.0 Build 20220316
Copyright (C) 1985-2022 Intel Corporation. All rights reserved.

=====
C++, C, Fortran | 607.cactuBSSN_s(base, peak)

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2022.1.0 Build 20220316
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Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2022.1.0 Build 20220316
Copyright (C) 1985-2022 Intel Corporation. All rights reserved.
Intel(R) Fortran Compiler for applications running on Intel(R) 64, Version 2022.1.0 Build 20220316
Copyright (C) 1985-2022 Intel Corporation. All rights reserved.

=====
Fortran | 603.bwaves_s(base, peak) 649.fotonik3d_s(base, peak) 654.roms_s(base, peak)

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Compiler Version Notes (Continued)

Intel(R) Fortran Compiler for applications running on Intel(R) 64, Version 2022.1.0 Build 20220316
Copyright (C) 1985-2022 Intel Corporation. All rights reserved.

=====
Fortran, C | 621.wrf_s(base, peak) 627.cam4_s(base, peak) 628.pop2_s(base, peak)

Intel(R) Fortran Compiler for applications running on Intel(R) 64, Version 2022.1.0 Build 20220316
Copyright (C) 1985-2022 Intel Corporation. All rights reserved.
Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2022.1.0 Build 20220316
Copyright (C) 1985-2022 Intel Corporation. All rights reserved.

Base Compiler Invocation

C benchmarks:

icx

Fortran benchmarks:

ifx

Benchmarks using both Fortran and C:

ifx icx

Benchmarks using Fortran, C, and C++:

icpx icx ifx

Base Portability Flags

603.bwaves_s: -DSPEC_LP64
607.cactuBSSN_s: -DSPEC_LP64
619.lbm_s: -DSPEC_LP64
621.wrf_s: -DSPEC_LP64 -DSPEC_CASE_FLAG -convert big_endian
627.cam4_s: -DSPEC_LP64 -DSPEC_CASE_FLAG
628.pop2_s: -DSPEC_LP64 -DSPEC_CASE_FLAG -convert big_endian
-assume byterecl
638.imagick_s: -DSPEC_LP64
644.nab_s: -DSPEC_LP64
649.fotonik3d_s: -DSPEC_LP64
654.roms_s: -DSPEC_LP64



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Tyrone Camarero TDI100C3R-212

(2.40 GHz, Intel Xeon Platinum 8360Y)

SPECspeed®2017_fp_base = 244

SPECspeed®2017_fp_peak = 244

CPU2017 License: 006042

Test Sponsor: Netweb Pte Ltd

Tested by: Tyrone Systems

Test Date: Sep-2023

Hardware Availability: Apr-2021

Software Availability: May-2022

Base Optimization Flags

C benchmarks:

```
-m64 -std=c11 -Wl,-z,muldefs -xCORE-AVX512 -Ofast -ffast-math -flto
-mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4 -fiopenmp
-DSPEC_OPENMP -L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

Fortran benchmarks:

```
-m64 -Wl,-z,muldefs -DSPEC_OPENMP -xCORE-AVX512 -Ofast -ffast-math
-flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4 -fiopenmp
-nostandard-realloc-lhs -align array32byte -auto
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

Benchmarks using both Fortran and C:

```
-m64 -std=c11 -Wl,-z,muldefs -xCORE-AVX512 -Ofast -ffast-math -flto
-mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4 -fiopenmp
-DSPEC_OPENMP -nostandard-realloc-lhs -align array32byte -auto
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

Benchmarks using Fortran, C, and C++:

```
-m64 -std=c11 -Wl,-z,muldefs -xCORE-AVX512 -Ofast -ffast-math -flto
-mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4 -fiopenmp
-DSPEC_OPENMP -nostandard-realloc-lhs -align array32byte -auto
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

Peak Compiler Invocation

C benchmarks:

```
icx
```

Fortran benchmarks:

```
ifx
```

Benchmarks using both Fortran and C:

```
ifx icx
```

Benchmarks using Fortran, C, and C++:

```
icpx icx ifx
```

Peak Portability Flags

Same as Base Portability Flags



SPEC CPU®2017 Floating Point Speed Result

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Peak Optimization Flags

C benchmarks:

619.lbm_s: basepeak = yes

638.imagick_s: basepeak = yes

644.nab_s: basepeak = yes

Fortran benchmarks:

603.bwaves_s: -m64 -Wl,-z,muldefs -DSPEC_OPENMP -xCORE-AVX512 -Ofast
-ffast-math -flto -mfpmath=sse -funroll-loops
-qopt-mem-layout-trans=4 -fiopenmp -nostandard-realloc-lhs
-align array32byte -auto -L/usr/local/jemalloc64-5.0.1/lib
-ljemalloc

649.fotonik3d_s: basepeak = yes

654.roms_s: basepeak = yes

Benchmarks using both Fortran and C:

621.wrf_s: basepeak = yes

627.cam4_s: -m64 -std=c11 -Wl,-z,muldefs -xCORE-AVX512 -Ofast
-ffast-math -flto -mfpmath=sse -funroll-loops
-qopt-mem-layout-trans=4 -fiopenmp -DSPEC_OPENMP
-nostandard-realloc-lhs -align array32byte -auto
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc

628.pop2_s: basepeak = yes

Benchmarks using Fortran, C, and C++:

607.cactuBSSN_s: basepeak = yes

The flags files that were used to format this result can be browsed at

http://www.spec.org/cpu2017/flags/Intel-ic2022-official-linux64_revA.html

<http://www.spec.org/cpu2017/flags/Tyrone-Platform-Settings-V1.2-ICX-revA.html>

You can also download the XML flags sources by saving the following links:

http://www.spec.org/cpu2017/flags/Intel-ic2022-official-linux64_revA.xml

<http://www.spec.org/cpu2017/flags/Tyrone-Platform-Settings-V1.2-ICX-revA.xml>



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Tested with SPEC CPU®2017 v1.1.9 on 2023-09-07 07:44:43-0400.

Report generated on 2023-10-11 12:28:55 by CPU2017 PDF formatter v6716.

Originally published on 2023-10-10.