



SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

Tyrone Systems

(Test Sponsor: Netweb Pte Ltd)

Tyrone Camarero SDI200C2G-48
(2.00 GHz, Intel Xeon Platinum 8460Y+)

SPECrate®2017_int_base = 629

SPECrate®2017_int_peak = 640

CPU2017 License: 006042

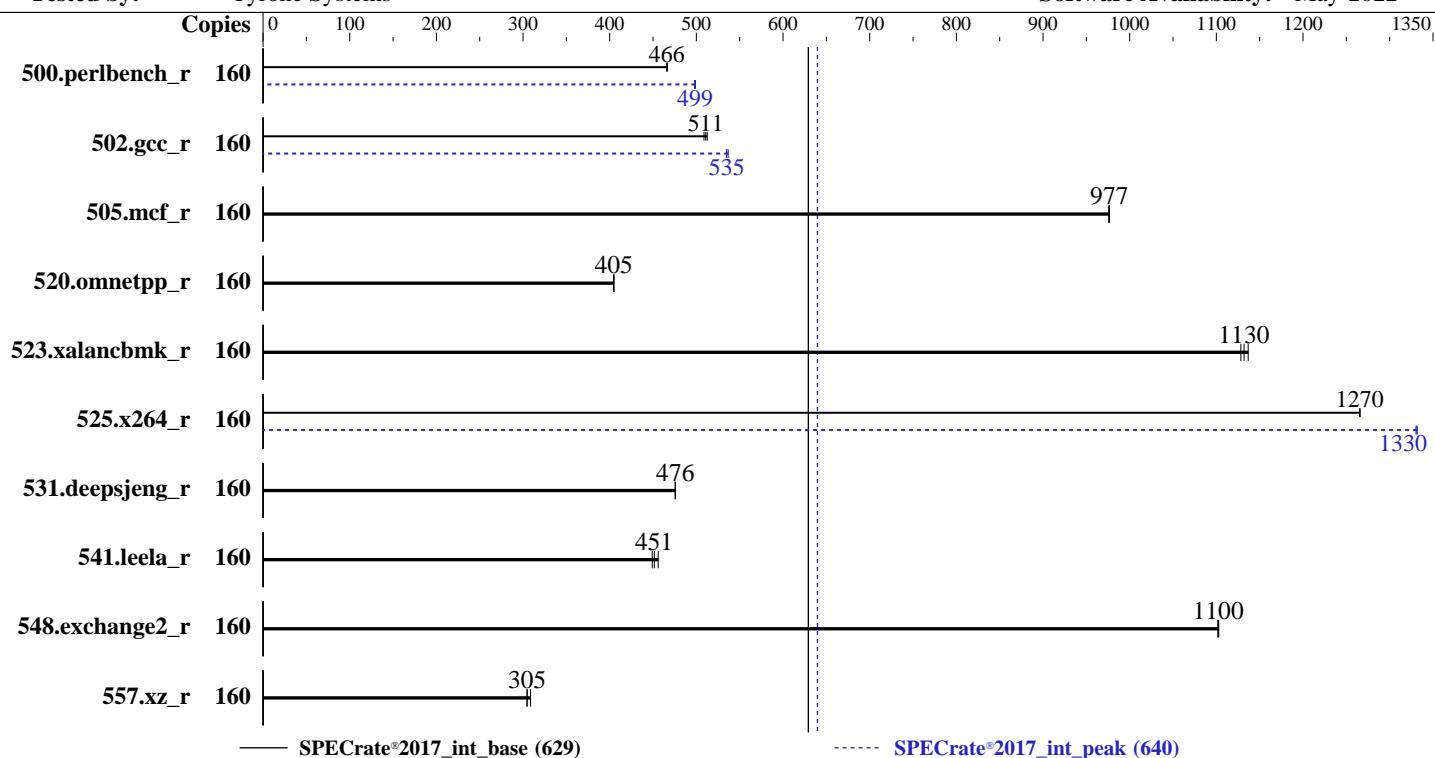
Test Date: Sep-2023

Test Sponsor: Netweb Pte Ltd

Hardware Availability: Jan-2023

Tested by: Tyrone Systems

Software Availability: May-2022



Hardware

CPU Name: Intel Xeon Platinum 8460Y+
Max MHz: 3700
Nominal: 2000
Enabled: 80 cores, 2 chips, 2 threads/core
Orderable: 1,2 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
Other: None
Memory: 1 TB (16 x 64 GB 2Rx4 PC5-4800B-R)
Storage: 1 x 512 GB NVMe SSD
Other: None

Software

OS: Red Hat Enterprise Linux release 8.5 (Ootpa)
Compiler: Kernel 4.18.0-348.el8.x86_64
C/C++: Version 2022.1 of Intel oneAPI DPC++/C++ Compiler for Linux;
Fortran: Version 2022.1 of Intel Fortran Compiler for Linux;
Parallel: No
Firmware: Version 1.3 released Jun-2023
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: 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	Seconds	Ratio
500.perlbench_r	160	547	466	546	467	547	466	160	511	499	512	498	511	499		
502.gcc_r	160	444	511	445	509	442	513	160	423	535	422	537	424	535		
505.mcf_r	160	265	976	265	977	265	977	160	265	976	265	977	265	977		
520.omnetpp_r	160	519	405	519	405	519	405	160	519	405	519	405	519	405		
523.xalancbmk_r	160	149	1140	150	1130	149	1130	160	149	1140	150	1130	149	1130		
525.x264_r	160	221	1270	221	1270	221	1270	160	211	1330	210	1330	210	1330		
531.deepsjeng_r	160	385	476	385	476	386	475	160	385	476	385	476	386	475		
541.leela_r	160	581	456	590	449	587	451	160	581	456	590	449	587	451		
548.exchange2_r	160	380	1100	380	1100	380	1100	160	380	1100	380	1100	380	1100		
557.xz_r	160	560	309	567	305	567	305	160	560	309	567	305	567	305		

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

Compiler Notes

SPEC has ruled that the compiler used for this result was performing a compilation that specifically improves the performance of the 523.xalancbmk_r / 623.xalancbmk_s benchmarks using a priori knowledge of the SPEC code and dataset to perform a transformation that has narrow applicability.

In order to encourage optimizations that have wide applicability (see rule 1.4 https://www.spec.org/cpu2017/Docs/runrules.html#rule_1.4), SPEC will no longer publish results using this optimization.

This result is left in the SPEC results database for historical reference.

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:
LD_LIBRARY_PATH = "/home/cpu2017/lib/intel64:/home/cpu2017/lib/ia32:/home/cpu2017/je5.0.1-32"
MALLOC_CONF = "retain:true"



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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 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

ENERGY_PERF_BIAS_CFG mode = Maximum Performance

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 Fri Sep 1 06:10:20 2023

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
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10. who -r
11. Systemd service manager version: systemd 239 (239-51.el8)
12. Services, from systemctl list-unit-files
13. Linux kernel boot-time arguments, from /proc/cmdline
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Platform Notes (Continued)

24. BIOS

```
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
06:10:20 up 25 min, 1 user, load average: 0.00, 0.02, 0.30
USER      TTY      FROM             LOGIN@    IDLE     JCPU    PCPU WHAT
root      tty1          -           06:04    4.00s   1.09s   0.02s -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) 4126783
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) 4126783
virtual memory            (kbytes, -v) unlimited
file locks               (-x) unlimited
```

```
5. sysinfo process ancestry
/usr/lib/systemd/systemd --switched-root --system --deserialize 17
login -- root
-bash
-bash
runcpu --nobuild --action validate --define default-platform-flags --define numcopies=160 -c
  ic2022.1-lin-core-avx512-rate-20220316.cfg --define smt-on --define cores=80 --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=160 --configfile
  ic2022.1-lin-core-avx512-rate-20220316.cfg --define smt-on --define cores=80 --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) Platinum 8460Y+
vendor_id       : GenuineIntel
cpu family      : 6
model          : 143
stepping        : 8
```

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Platform Notes (Continued)

```
microcode      : 0x2b000461
bugs          : spectre_v1 spectre_v2 spec_store_bypass swapgs
cpu cores     : 40
siblings       : 80
2 physical ids (chips)
160 processors (hardware threads)
physical id 0: core ids 0-39
physical id 1: core ids 0-39
physical id 0: apicids 0-79
physical id 1: apicids 128-207
```

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):                 160
On-line CPU(s) list:   0-159
Thread(s) per core:    2
Core(s) per socket:    40
Socket(s):              2
NUMA node(s):           2
Vendor ID:              GenuineIntel
BIOS Vendor ID:        Intel(R) Corporation
CPU family:             6
Model:                  143
Model name:             Intel(R) Xeon(R) Platinum 8460Y+
BIOS Model name:        Intel(R) Xeon(R) Platinum 8460Y+
Stepping:               8
CPU MHz:                2001.000
CPU max MHz:            2001.0000
CPU min MHz:            800.0000
BogoMIPS:               4000.00
Virtualization:         VT-x
L1d cache:              48K
L1i cache:              32K
L2 cache:               2048K
L3 cache:               107520K
NUMA node0 CPU(s):      0-39,80-119
NUMA node1 CPU(s):      40-79,120-159
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 aperfmpfperf
tsc_known_freq pn1 pclmulqdq dtes64 monitor ds_cpl vmx smx est tm2 ssse3 sdbg fma cx16
xtrp 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 cat_l2 cdp_l3
invpcid_single cdip_12 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 cqmm rdt_a avx512f avx512dq rdseed adx smap avx512ifma clflushopt clwb intel_pt
avx512cd sha_ni avx512bw avx512vl xsaveopt xsaves cqmm_llc cqmm_occup_llc
cqmm_mbm_total cqmm_mbm_local split_lock_detect avx_vnni avx512_bf16 wbnoinvd dtherm ida
arat pln pts avx512vbmi umip pku ospte waitpkg avx512_vbmi2 gfni vaes vpclmulqdq
avx512_vnni avx512_bitlg tme avx512_vpopcntdq la57 rdpid bus_lock_detect cldemote
movdiri movdir64b enqcmd sgx_lc fsrm md_clear serialize tsxldtrk pconfig arch_lbr
avx512_fp16 flush_l1d arch_capabilities
```

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Platform Notes (Continued)

8. numactl --hardware

NOTE: a numactl 'node' might or might not correspond to a physical chip.
available: 2 nodes (0-1)
node 0 cpus: 0-39,80-119
node 0 size: 515680 MB
node 0 free: 513508 MB
node 1 cpus: 40-79,120-159
node 1 size: 516074 MB
node 1 free: 515308 MB
node distances:
node 0 1
0: 10 21
1: 21 10

9. /proc/meminfo

MemTotal: 1056516628 kB

10. who -r

run-level 3 Sep 1 05:45

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 crond cups display-manager firewalld gdm getty@ import-state insights-client-boot irqbalance iscsi iscsi-onboot kdump ksm ksmtuned libstoragemgmt libvиртd loadmodules lvm2-monitor mcelog mdmonitor microcode multipathd nis-domainname nvidia-hibernate nvidia-resume nvidia-suspend nvmefc-boot-connections ostree-remount qemu-guest-agent rhsmcertd rpcbind rsyslog rtkit-daemon selinux-autorelabel-mark sep5 smartd sshd sssd syslog timedatectl 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 cuppower cups-browsed debug-shell dnsmasq ebttables gssproxy httpd httpd@ initial-setup initial-setup-reconfiguration iprdump iprinit iprupdate isccsid iscsiuio kpatch kvm_stat ledmon man-db-restart-cache-update ndctl-monitor netcf-transaction nfs-blkmap nfs-convert nfs-server nftables numad nvidia-powerd nvmf-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 virtnodedevedv virtnwfiterd virtproxyd virtqemud virtsecretd 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	
indirect	gcc-toolset-9-systemtap scripts startup spice-vdagagentd sssd-autoofs 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=(hd0,gpt2)/vmlinuz-4.18.0-348.el8.x86_64
root=/dev/mapper/rhel-root
ro

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Platform Notes (Continued)

```
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 2.00 GHz.
                  The governor "performance" may decide which speed to use
                  within this range.
    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+madvise [madvise] never
enabled          [always] madvise 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
```

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Platform Notes (Continued)

```
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  
l1tf             Not affected  
mds              Not affected  
meltdown         Not affected  
spec_store_bypass Mitigation: Speculative Store Bypass disabled via prctl and seccomp  
spectre_v1        Mitigation: usercopy/swapgs 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  355G   47G  89% /home
```

```
-----  
22. /sys/devices/virtual/dmi/id  
Vendor:          Tyrone Systems  
Product:         Tyrone Camarero SDI200A3N-212  
Product Family:  Family  
Serial:          A497867X3106771
```

```
-----  
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 M321R8GA0BB0-CQKZH 64 GB 2 rank 4800
```

```
-----  
24. BIOS  
(This section combines info from /sys/devices and dmidecode.)  
BIOS Vendor:      American Megatrends International, LLC.  
BIOS Version:     1.3  
BIOS Date:        06/01/2023  
BIOS Revision:    5.31
```

Compiler Version Notes

```
=====  
C      | 502.gcc_r(peak)
```

```
-----  
Intel(R) oneAPI DPC++/C++ Compiler for applications running on IA-32, Version 2022.1.0 Build 20220316  
Copyright (C) 1985-2022 Intel Corporation. All rights reserved.
```

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Compiler Version Notes (Continued)

```
=====
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 2022.1.0 Build 20220316
Copyright (C) 1985-2022 Intel Corporation. All rights reserved.
```

```
=====
C      | 502.gcc_r(peak)
```

```
=====
Intel(R) oneAPI DPC++/C++ Compiler for applications running on IA-32, Version 2022.1.0 Build 20220316
Copyright (C) 1985-2022 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 2022.1.0 Build 20220316
Copyright (C) 1985-2022 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 2022.1.0 Build 20220316
Copyright (C) 1985-2022 Intel Corporation. All rights reserved.
```

```
=====
Fortran | 548.exchange2_r(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.
```

Base Compiler Invocation

C benchmarks:

icx

C++ benchmarks:

icpx

Fortran benchmarks:

ifx



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Tyrone Camarero SDI200C2G-48
(2.00 GHz, Intel Xeon Platinum 8460Y+)

SPECrate®2017_int_base = 629

SPECrate®2017_int_peak = 640

CPU2017 License: 006042

Test Sponsor: Netweb Pte Ltd

Tested by: Tyrone Systems

Test Date: Sep-2023

Hardware Availability: Jan-2023

Software Availability: May-2022

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-AVX512 -O3 -ffast-math  
-flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4  
-L/usr/local/intel/compiler/2022.1.0/linux/compiler/lib/intel64_lin  
-lqkmalloc
```

C++ benchmarks:

```
-w -m64 -Wl,-z,muldefs -xCORE-AVX512 -O3 -ffast-math -flto  
-mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4  
-L/usr/local/intel/compiler/2022.1.0/linux/compiler/lib/intel64_lin  
-lqkmalloc
```

Fortran benchmarks:

```
-w -m64 -Wl,-z,muldefs -xCORE-AVX512 -O3 -ffast-math -flto  
-mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4  
-nostandard-realloc-lhs -align array32byte -auto  
-L/usr/local/intel/compiler/2022.1.0/linux/compiler/lib/intel64_lin  
-lqkmalloc
```

Peak Compiler Invocation

C benchmarks:

icx

C++ benchmarks:

icpx

Fortran benchmarks:

ifx



SPEC CPU®2017 Integer Rate Result

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Software Availability: May-2022

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-AVX512
-Ofast -ffast-math -flto -mfpmath=sse -funroll-loops
-qopt-mem-layout-trans=4 -fno-strict-overflow
-L/usr/local/intel/compiler/2022.1.0/linux/compiler/lib/intel64_lin
-lqkmalloc

502.gcc_r: -m32
-L/usr/local/intel/compiler/2022.1.0/linux/compiler/lib/ia32_lin
-std=gnu89 -Wl,-z,muldefs -fprofile-generate(pass 1)
-fprofile-use=default.profdata(pass 2) -xCORE-AVX512
-Ofast -ffast-math -flto -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 -xCORE-AVX512 -Ofast
-ffast-math -flto -mfpmath=sse -funroll-loops
-qopt-mem-layout-trans=4 -fno-alias
-L/usr/local/intel/compiler/2022.1.0/linux/compiler/lib/intel64_lin
-lqkmalloc

557.xz_r: basepeak = yes

C++ benchmarks:

(Continued on next page)



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Test Date: Sep-2023

Hardware Availability: Jan-2023

Software Availability: May-2022

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-ic2022-official-linux64_revA.html
<http://www.spec.org/cpu2017/flags/Tyrone-Platform-Settings-V1.2-SPR-revC.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-SPR-revC.xml>

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

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