



# SPEC CPU®2017 Integer Speed Result

Copyright 2017-2021 Standard Performance Evaluation Corporation

## Tyrone Systems

(Test Sponsor: Netweb Pte Ltd)

Tyrone Camarero DS400E1U-224R4  
(2.90 GHz, Intel Xeon Gold 6226R)

SPECspeed®2017\_int\_base = 9.90

SPECspeed®2017\_int\_peak = 10.1

CPU2017 License: 006042

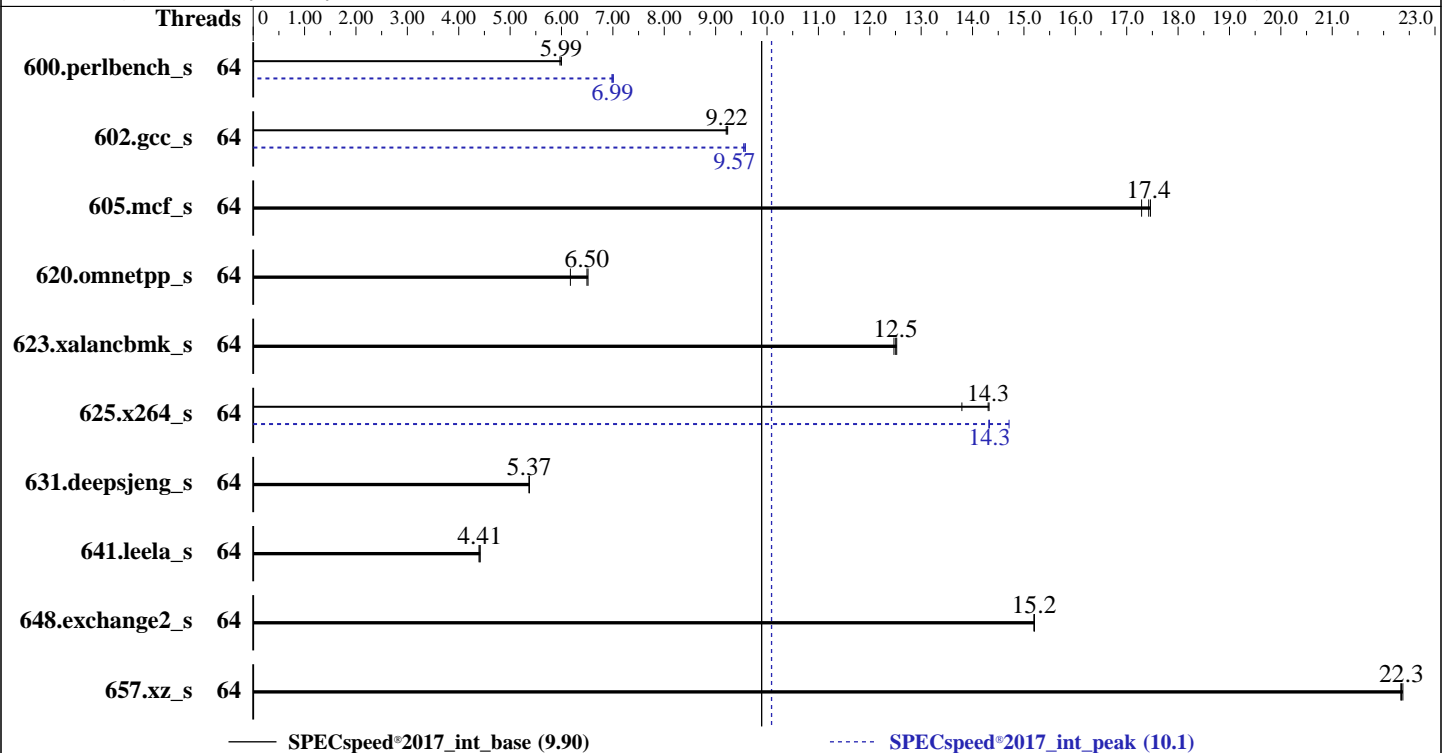
Test Sponsor: Netweb Pte Ltd

Tested by: Tyrone Systems

Test Date: Feb-2021

Hardware Availability: Aug-2020

Software Availability: Dec-2020



### Hardware

CPU Name: Intel Xeon Gold 6226R  
 Max MHz: 3900  
 Nominal: 2900  
 Enabled: 32 cores, 2 chips, 2 threads/core  
 Orderable: 1,2 (chip)s  
 Cache L1: 32 KB I + 32 KB D on chip per core  
 L2: 1 MB I+D on chip per core  
 L3: 22 MB I+D on chip per chip  
 Other: None  
 Memory: 384 GB (12 x 32 GB 2Rx4 PC4-2933Y-R)  
 Storage: 1 x 480 GB SATA SSD  
 Other: None

### Software

OS: CentOS Linux release 8.3.2011  
 4.18.0-240.el8.x86\_64  
 Compiler: C/C++: Version 19.1.1.217 of Intel C/C++ Compiler for Linux Build 20200306;  
 Fortran: Version 19.1.1.217 of Intel Fortran Compiler for Linux Build 20200306;  
 Parallel: Yes  
 Firmware: Version 3.4 released Oct-2020  
 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



# SPEC CPU®2017 Integer Speed Result

Copyright 2017-2021 Standard Performance Evaluation Corporation

**Tyrone Systems**

(Test Sponsor: Netweb Pte Ltd)

**Tyrone Camarero DS400E1U-224R4**  
(2.90 GHz, Intel Xeon Gold 6226R)

SPECspeed®2017\_int\_base = 9.90

SPECspeed®2017\_int\_peak = 10.1

**CPU2017 License:** 006042

**Test Sponsor:** Netweb Pte Ltd

**Tested by:** Tyrone Systems

**Test Date:** Feb-2021

**Hardware Availability:** Aug-2020

**Software Availability:** Dec-2020

## Results Table

Benchmark	Base							Peak						
	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
600.perlbench_s	64	297	5.97	<b>296</b>	<b>5.99</b>	296	6.00	64	253	7.01	<b>254</b>	<b>6.99</b>	254	6.98
602.gcc_s	64	433	9.21	<b>432</b>	<b>9.22</b>	431	9.23	64	416	9.58	<b>416</b>	<b>9.57</b>	417	9.54
605.mcf_s	64	270	17.5	273	17.3	<b>271</b>	<b>17.4</b>	64	270	17.5	273	17.3	<b>271</b>	<b>17.4</b>
620.omnetpp_s	64	<b>251</b>	<b>6.50</b>	264	6.17	250	6.52	64	<b>251</b>	<b>6.50</b>	264	6.17	250	6.52
623.xalancbmk_s	64	114	12.5	<b>113</b>	<b>12.5</b>	113	12.5	64	114	12.5	<b>113</b>	<b>12.5</b>	113	12.5
625.x264_s	64	123	14.3	<b>123</b>	<b>14.3</b>	128	13.8	64	123	14.3	<b>123</b>	<b>14.3</b>	120	14.7
631.deepsjeng_s	64	<b>267</b>	<b>5.37</b>	267	5.37	267	5.37	64	<b>267</b>	<b>5.37</b>	267	5.37	267	5.37
641.leela_s	64	386	4.42	388	4.39	<b>387</b>	<b>4.41</b>	64	386	4.42	388	4.39	<b>387</b>	<b>4.41</b>
648.exchange2_s	64	193	15.2	<b>193</b>	<b>15.2</b>	193	15.2	64	193	15.2	<b>193</b>	<b>15.2</b>	193	15.2
657.xz_s	64	<b>277</b>	<b>22.3</b>	277	22.3	276	22.4	64	<b>277</b>	<b>22.3</b>	277	22.3	276	22.4

SPECspeed®2017\_int\_base = **9.90**

SPECspeed®2017\_int\_peak = **10.1**

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

## Compiler Notes

The inconsistent Compiler version information under Compiler Version section is due to a discrepancy in Intel Compiler.

The correct version of C/C++ compiler is: Version 19.1.1.217 Build 20200306 Compiler for Linux

The correct version of Fortran compiler is: Version 19.1.1.217 Build 20200306 Compiler for Linux

## 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,scatter"

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 Cascade Lake CPU + 384GB RAM memory using Centos 8.2 x86\_64

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
```

(Continued on next page)



# SPEC CPU®2017 Integer Speed Result

Copyright 2017-2021 Standard Performance Evaluation Corporation

**Tyrone Systems**

(Test Sponsor: Netweb Pte Ltd)

**Tyrone Camarero DS400E1U-224R4**  
(2.90 GHz, Intel Xeon Gold 6226R)

SPECspeed®2017\_int\_base = 9.90

SPECspeed®2017\_int\_peak = 10.1

**CPU2017 License:** 006042

**Test Sponsor:** Netweb Pte Ltd

**Tested by:** Tyrone Systems

**Test Date:** Feb-2021

**Hardware Availability:** Aug-2020

**Software Availability:** Dec-2020

## General Notes (Continued)

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) is mitigated in the system as tested and documented.

jemalloc, a general purpose malloc implementation

built with the Centos 8.2 x86\_64, and the system compiler gcc 8.3.1

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 = Enable

Stale AtoS = Disable

IMC Interleaving = 1-way Interleave

Patrol Scrub = Disable

Sysinfo program /home/cpu2017/bin/sysinfo

Rev: r6538 of 2020-09-24 e8664e66d2d7080afeaa89d4b38e2f1c

running on spec Sun Feb 7 10:58:04 2021

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 : Intel(R) Xeon(R) Gold 6226R CPU @ 2.90GHz

2 "physical id"s (chips)

64 "processors"

cores, siblings (Caution: counting these is hw and system dependent. The following excerpts from /proc/cpuinfo might not be reliable. Use with caution.)

cpu cores : 16

siblings : 32

physical 0: cores 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

physical 1: cores 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

From lscpu:

Architecture: x86\_64

CPU op-mode(s): 32-bit, 64-bit

Byte Order: Little Endian

CPU(s): 64

On-line CPU(s) list: 0-63

(Continued on next page)



# SPEC CPU®2017 Integer Speed Result

Copyright 2017-2021 Standard Performance Evaluation Corporation

**Tyrone Systems**

(Test Sponsor: Netweb Pte Ltd)

**Tyrone Camarero DS400E1U-224R4**  
(2.90 GHz, Intel Xeon Gold 6226R)

SPECspeed®2017\_int\_base = 9.90

SPECspeed®2017\_int\_peak = 10.1

**CPU2017 License:** 006042

**Test Sponsor:** Netweb Pte Ltd

**Tested by:** Tyrone Systems

**Test Date:** Feb-2021

**Hardware Availability:** Aug-2020

**Software Availability:** Dec-2020

## Platform Notes (Continued)

```

Thread(s) per core: 2
Core(s) per socket: 16
Socket(s): 2
NUMA node(s): 4
Vendor ID: GenuineIntel
CPU family: 6
Model: 85
Model name: Intel(R) Xeon(R) Gold 6226R CPU @ 2.90GHz
Stepping: 7
CPU MHz: 3599.996
CPU max MHz: 3900.0000
CPU min MHz: 1200.0000
BogoMIPS: 5800.00
Virtualization: VT-x
L1d cache: 32K
L1i cache: 32K
L2 cache: 1024K
L3 cache: 22528K
NUMA node0 CPU(s): 0-3,8-11,32-35,40-43
NUMA node1 CPU(s): 4-7,12-15,36-39,44-47
NUMA node2 CPU(s): 16-19,24-27,48-51,56-59
NUMA node3 CPU(s): 20-23,28-31,52-55,60-63
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
aperfmpperf pni pclmulqdq dtes64 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 cdp_l3 invpcid_single
intel_ppin ssbd mba ibrs ibpb stibp ibrs_enhanced fsgsbase tsc_adjust bmi1 hle avx2
smep bmi2 erms invpcid cqm mpx rdt_a avx512f avx512dq rdseed adx smap clflushopt
clwb intel_pt avx512cd avx512bw avx512vl xsaveopt xsavec xgetbv1 xsaves cqm_llc
cqm_occup_llc cqm_mbm_total cqm_mbm_local dtherm ida arat pln pts pku ospke
avx512_vnni md_clear flush_lld arch_capabilities

```

```

/proc/cpuinfo cache data
cache size : 22528 KB

```

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

```

available: 4 nodes (0-3)
node 0 cpus: 0 1 2 3 8 9 10 11 32 33 34 35 40 41 42 43
node 0 size: 91297 MB
node 0 free: 82419 MB
node 1 cpus: 4 5 6 7 12 13 14 15 36 37 38 39 44 45 46 47
node 1 size: 61836 MB
node 1 free: 53708 MB
node 2 cpus: 16 17 18 19 24 25 26 27 48 49 50 51 56 57 58 59

```

(Continued on next page)



# SPEC CPU®2017 Integer Speed Result

Copyright 2017-2021 Standard Performance Evaluation Corporation

**Tyrone Systems**

(Test Sponsor: Netweb Pte Ltd)

**Tyrone Camarero DS400E1U-224R4**  
(2.90 GHz, Intel Xeon Gold 6226R)

SPECspeed®2017\_int\_base = 9.90

SPECspeed®2017\_int\_peak = 10.1

**CPU2017 License:** 006042

**Test Sponsor:** Netweb Pte Ltd

**Tested by:** Tyrone Systems

**Test Date:** Feb-2021

**Hardware Availability:** Aug-2020

**Software Availability:** Dec-2020

## Platform Notes (Continued)

```

node 2 size: 92736 MB
node 2 free: 85661 MB
node 3 cpus: 20 21 22 23 28 29 30 31 52 53 54 55 60 61 62 63
node 3 size: 93129 MB
node 3 free: 85949 MB
node distances:
node 0 1 2 3
0: 10 11 21 21
1: 11 10 21 21
2: 21 21 10 11
3: 21 21 11 10

```

```

From /proc/meminfo
MemTotal:      361832316 kB
HugePages_Total:      0
Hugepagesize:    2048 kB

```

```

/sbin/tuned-adm active
Current active profile: throughput-performance

```

```

/sys/devices/system/cpu/cpu*/cpufreq/scaling_governor has
performance

```

```

From /etc/*release* /etc/*version*
centos-release: CentOS Linux release 8.3.2011
centos-release-upstream: Derived from Red Hat Enterprise Linux 8.3
os-release:
NAME="CentOS Linux"
VERSION="8"
ID="centos"
ID_LIKE="rhel fedora"
VERSION_ID="8"
PLATFORM_ID="platform:el8"
PRETTY_NAME="CentOS Linux 8"
ANSI_COLOR="0;31"
redhat-release: CentOS Linux release 8.3.2011
system-release: CentOS Linux release 8.3.2011
system-release-cpe: cpe:/o:centos:centos:8

```

```

uname -a:
Linux spec 4.18.0-240.el8.x86_64 #1 SMP Fri Sep 25 19:48:47 UTC 2020 x86_64 x86_64
x86_64 GNU/Linux

```

Kernel self-reported vulnerability status:

```

CVE-2018-12207 (iTLB Multihit):          KVM: Mitigation: Split huge pages
CVE-2018-3620 (L1 Terminal Fault):      Not affected

```

(Continued on next page)



# SPEC CPU®2017 Integer Speed Result

Copyright 2017-2021 Standard Performance Evaluation Corporation

**Tyrone Systems**

(Test Sponsor: Netweb Pte Ltd)

**Tyrone Camarero DS400E1U-224R4**  
(2.90 GHz, Intel Xeon Gold 6226R)

**SPECspeed®2017\_int\_base = 9.90**

**SPECspeed®2017\_int\_peak = 10.1**

**CPU2017 License:** 006042

**Test Sponsor:** Netweb Pte Ltd

**Tested by:** Tyrone Systems

**Test Date:** Feb-2021

**Hardware Availability:** Aug-2020

**Software Availability:** Dec-2020

## Platform Notes (Continued)

Microarchitectural Data Sampling:	Not affected
CVE-2017-5754 (Meltdown):	Not affected
CVE-2018-3639 (Speculative Store Bypass):	Mitigation: Speculative Store Bypass disabled via prctl and seccomp
CVE-2017-5753 (Spectre variant 1):	Mitigation: usercopy/swapgs barriers and __user pointer sanitization
CVE-2017-5715 (Spectre variant 2):	Mitigation: Enhanced IBRS, IBPB: conditional, RSB filling
CVE-2020-0543 (Special Register Buffer Data Sampling):	Not affected
CVE-2019-11135 (TSX Asynchronous Abort):	Mitigation: TSX disabled

run-level 3 Feb 5 15:36

SPEC is set to: /home/cpu2017

Filesystem	Type	Size	Used	Avail	Use%	Mounted on
/dev/mapper/cl-home	xfs	372G	158G	215G	43%	/home

From /sys/devices/virtual/dmi/id

Vendor:	Tyrone Systems
Product:	Tyrone Camarero DS400E1
Serial:	S263875X9527668

Additional information from dmidecode 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:

12x NO DIMM NO DIMM	
1x Samsung M393A4K40CB2-CVF	2 rank 2933, configured at 2934
11x Samsung M393A4K40CB2-CVF	32 GB 2 rank 2933, configured at 2934

BIOS:

BIOS Vendor:	American Megatrends Inc.
BIOS Version:	3.4
BIOS Date:	10/30/2020
BIOS Revision:	5.14

(End of data from sysinfo program)

## Compiler Version Notes

```
=====
C      | 600.perlbench_s(base) 602.gcc_s(base, peak) 605.mcf_s(base, peak)
      | 625.x264_s(base, peak) 657.xz_s(base, peak)
```

(Continued on next page)



# SPEC CPU®2017 Integer Speed Result

Copyright 2017-2021 Standard Performance Evaluation Corporation

**Tyrone Systems**

(Test Sponsor: Netweb Pte Ltd)

**Tyrone Camarero DS400E1U-224R4**  
(2.90 GHz, Intel Xeon Gold 6226R)

SPECspeed®2017\_int\_base = 9.90

SPECspeed®2017\_int\_peak = 10.1

**CPU2017 License:** 006042

**Test Sponsor:** Netweb Pte Ltd

**Tested by:** Tyrone Systems

**Test Date:** Feb-2021

**Hardware Availability:** Aug-2020

**Software Availability:** Dec-2020

## Compiler Version Notes (Continued)

-----  
Intel(R) C Compiler for applications running on Intel(R) 64, Version 2021.1  
NextGen Build 20200304  
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.  
-----

=====  
C | 600.perlbench\_s(peak)  
-----

Intel(R) C Intel(R) 64 Compiler for applications running on Intel(R) 64,  
Version 19.1.1.217 Build 20200306  
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.  
-----

=====  
C | 600.perlbench\_s(base) 602.gcc\_s(base, peak) 605.mcf\_s(base, peak)  
625.x264\_s(base, peak) 657.xz\_s(base, peak)

Intel(R) C Compiler for applications running on Intel(R) 64, Version 2021.1  
NextGen Build 20200304  
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.  
-----

=====  
C | 600.perlbench\_s(peak)  
-----

Intel(R) C Intel(R) 64 Compiler for applications running on Intel(R) 64,  
Version 19.1.1.217 Build 20200306  
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.  
-----

=====  
C++ | 620.omnetpp\_s(base, peak) 623.xalanbmk\_s(base, peak)  
631.deepsjeng\_s(base, peak) 641.leela\_s(base, peak)

Intel(R) C++ Compiler for applications running on Intel(R) 64, Version 2021.1  
NextGen Build 20200304  
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.  
-----

=====  
Fortran | 648.exchange2\_s(base, peak)  
-----

Intel(R) Fortran Intel(R) 64 Compiler for applications running on Intel(R)  
64, Version 19.1.1.217 Build 20200306  
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.  
-----



# SPEC CPU®2017 Integer Speed Result

Copyright 2017-2021 Standard Performance Evaluation Corporation

**Tyrone Systems**

(Test Sponsor: Netweb Pte Ltd)

**Tyrone Camarero DS400E1U-224R4**  
(2.90 GHz, Intel Xeon Gold 6226R)

SPECspeed®2017\_int\_base = 9.90

SPECspeed®2017\_int\_peak = 10.1

**CPU2017 License:** 006042

**Test Sponsor:** Netweb Pte Ltd

**Tested by:** Tyrone Systems

**Test Date:** Feb-2021

**Hardware Availability:** Aug-2020

**Software Availability:** Dec-2020

## Base Compiler Invocation

C benchmarks:

icc

C++ benchmarks:

icpc

Fortran benchmarks:

ifort

## Base Portability Flags

```
600.perlbench_s: -DSPEC_LP64 -DSPEC_LINUX_X64
602.gcc_s: -DSPEC_LP64
605.mcf_s: -DSPEC_LP64
620.omnetpp_s: -DSPEC_LP64
623.xalancbmk_s: -DSPEC_LP64 -DSPEC_LINUX
625.x264_s: -DSPEC_LP64
631.deepsjeng_s: -DSPEC_LP64
641.leela_s: -DSPEC_LP64
648.exchange2_s: -DSPEC_LP64
657.xz_s: -DSPEC_LP64
```

## Base Optimization Flags

C benchmarks:

```
-m64 -qnextgen -std=c11
-Wl,-plugin-opt=-x86-branches-within-32B-boundaries -Wl,-z,muldefs
-xCORE-AVX512 -O3 -ffast-math -flto -mfpmath=sse -funroll-loops
-fuse-ld=gold -qopt-mem-layout-trans=4 -fopenmp -DSPEC_OPENMP
-L/usr/local/je5.0.1-64/lib -ljemalloc
```

C++ benchmarks:

```
-m64 -qnextgen -Wl,-plugin-opt=-x86-branches-within-32B-boundaries
-Wl,-z,muldefs -xCORE-AVX512 -O3 -ffast-math -flto -mfpmath=sse
-funroll-loops -fuse-ld=gold -qopt-mem-layout-trans=4
-L/usr/local/IntelCompiler19/compilers_and_libraries_2020.1.217/linux/compiler/lib/intel64_lin
-lqkmallocc
```

Fortran benchmarks:

```
-m64 -Wl,-plugin-opt=-x86-branches-within-32B-boundaries -xCORE-AVX512
-O3 -ipo -no-prec-div -qopt-mem-layout-trans=4
-nostandard-realloc-lhs -align array32byte
```

(Continued on next page)





# SPEC CPU®2017 Integer Speed Result

Copyright 2017-2021 Standard Performance Evaluation Corporation

**Tyrone Systems**

(Test Sponsor: Netweb Pte Ltd)

**Tyrone Camarero DS400E1U-224R4**  
(2.90 GHz, Intel Xeon Gold 6226R)

SPECspeed®2017\_int\_base = 9.90

SPECspeed®2017\_int\_peak = 10.1

**CPU2017 License:** 006042

**Test Sponsor:** Netweb Pte Ltd

**Tested by:** Tyrone Systems

**Test Date:** Feb-2021

**Hardware Availability:** Aug-2020

**Software Availability:** Dec-2020

## Base Optimization Flags (Continued)

Fortran benchmarks (continued):

`-mbranches-within-32B-boundaries`

## Peak Compiler Invocation

C benchmarks:

`icc`

C++ benchmarks:

`icpc`

Fortran benchmarks:

`ifort`

## Peak Portability Flags

600.perlbench\_s: `-DSPEC_LP64 -DSPEC_LINUX_X64`

602.gcc\_s: `-DSPEC_LP64(*) -DSPEC_LP64`

605.mcf\_s: `-DSPEC_LP64`

620.omnetpp\_s: `-DSPEC_LP64`

623.xalancbmk\_s: `-DSPEC_LP64 -DSPEC_LINUX`

625.x264\_s: `-DSPEC_LP64`

631.deepsjeng\_s: `-DSPEC_LP64`

641.leela\_s: `-DSPEC_LP64`

648.exchange2\_s: `-DSPEC_LP64`

657.xz\_s: `-DSPEC_LP64`

(\*) Indicates a portability flag that was found in a non-portability variable.

## Peak Optimization Flags

C benchmarks:

600.perlbench\_s: `-w1, -z, muldefs -prof-gen(pass 1) -prof-use(pass 2)`

`-xCORE-AVX512 -ipo -O3 -no-prec-div`

`-qopt-mem-layout-trans=4 -fno-strict-overflow`

`-mbranches-within-32B-boundaries`

`-L/usr/local/je5.0.1-64/lib -ljemalloc`

(Continued on next page)



# SPEC CPU®2017 Integer Speed Result

Copyright 2017-2021 Standard Performance Evaluation Corporation

**Tyrone Systems**

(Test Sponsor: Netweb Pte Ltd)

**Tyrone Camarero DS400E1U-224R4**  
(2.90 GHz, Intel Xeon Gold 6226R)

SPECspeed®2017\_int\_base = 9.90

SPECspeed®2017\_int\_peak = 10.1

**CPU2017 License:** 006042

**Test Sponsor:** Netweb Pte Ltd

**Tested by:** Tyrone Systems

**Test Date:** Feb-2021

**Hardware Availability:** Aug-2020

**Software Availability:** Dec-2020

## Peak Optimization Flags (Continued)

```
602.gcc_s: -m64 -qnextgen -std=c11 -fuse-ld=gold
-Wl,-plugin-opt=-x86-branches-within-32B-boundaries
-Wl,-z,muldefs -fprofile-generate(pass 1)
-fprofile-use=default.profddata(pass 2) -xCORE-AVX512 -flto
-Ofast(pass 1) -O3 -ffast-math -qopt-mem-layout-trans=4
-L/usr/local/je5.0.1-64/lib -ljemalloc
```

605.mcf\_s: basepeak = yes

```
625.x264_s: -m64 -qnextgen -std=c11
-Wl,-plugin-opt=-x86-branches-within-32B-boundaries
-Wl,-z,muldefs -xCORE-AVX512 -flto -O3 -ffast-math
-fuse-ld=gold -qopt-mem-layout-trans=4 -fno-alias
-L/usr/local/je5.0.1-64/lib -ljemalloc
```

657.xz\_s: basepeak = yes

C++ benchmarks:

620.omnetpp\_s: basepeak = yes

623.xalancbmk\_s: basepeak = yes

631.deepsjeng\_s: basepeak = yes

641.leela\_s: basepeak = yes

Fortran benchmarks:

648.exchange2\_s: basepeak = yes

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

[http://www.spec.org/cpu2017/flags/Intel-ic19.1ul-official-linux64\\_revA.html](http://www.spec.org/cpu2017/flags/Intel-ic19.1ul-official-linux64_revA.html)

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

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

[http://www.spec.org/cpu2017/flags/Intel-ic19.1ul-official-linux64\\_revA.xml](http://www.spec.org/cpu2017/flags/Intel-ic19.1ul-official-linux64_revA.xml)

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

SPEC CPU and SPECspeed are registered trademarks of the Standard Performance Evaluation Corporation. All other brand and product names appearing in this result are trademarks or registered trademarks of their respective holders.

For questions about this result, please contact the tester. For other inquiries, please contact [info@spec.org](mailto:info@spec.org).

Tested with SPEC CPU®2017 v1.1.5 on 2021-02-07 00:28:03-0500.

Report generated on 2021-03-02 15:49:22 by CPU2017 PDF formatter v6255.

Originally published on 2021-03-02.