SPEC CPU®2017 Integer Speed Result

Tyrone Systems
(Test Sponsor: Netweb Pte Ltd)

Tyrone Camarero DIT400TR-48RL
(2.10 GHz, Intel Xeon Silver 4216)

SPECspeed®2017_int_base = 9.29
SPECspeed®2017_int_peak = 9.50

CPU2017 License: 006042
Test Sponsor: Netweb Pte Ltd
Tested by: Tyrone Systems
Test Date: Aug-2021
Software Availability: Jun-2021

Tested by: Tyrone Systems
Hardware Availability: Apr-2019
Software Availability: Jun-2021

600.perlbench_s 64
602.gcc_s 64
605.mcf_s 64
620.omnetpp_s 64
623.xalancbmk_s 64
625.x264_s 64
631.deepsjeng_s 64
641.leela_s 64
648.exchange2_s 64
657.xz_s 64

Threads

0.0 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 10.0 11.0 12.0 13.0 14.0 15.0 16.0 17.0 18.0 19.0 20.0 21.0

SPECspeed®2017_int_base (9.29) ----
SPECspeed®2017_int_peak (9.50) ----

Hardware

CPU Name: Intel Xeon Silver 4216
Max MHz: 3200
Nominal: 2100
Enabled: 32 cores, 2 chips, 2 threads/core
Orderable: 1.2 Chips
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 PC4-2933P-R, running at 2400)
Storage: 1 x 480 GB SATA SSD
Other: None

Software

OS: CentOS Linux release 8.4.2105
Kernel 4.18.0-305.3.1.el8.x86_64
Compiler: C/C++: Version 2021.1 of Intel oneAPI DPC++/C++ Compiler Build 20201113 for Linux;
Fortran: Version 2021.1 of Intel Fortran Compiler Classic Build 20201112 for Linux;
C/C++: Version 2021.1 of Intel C/C++ Compiler Classic Build 20201112 for Linux
Parallel: Yes
Firmware: Version V8.104 released Jul-2021
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

Tyrone Systems  
(Test Sponsor: Netweb Pte Ltd)  
Tyrone Camarero DIT400TR-48RL  
(2.10 GHz, Intel Xeon Silver 4216)

SPECspeed®2017_int_base = 9.29  
SPECspeed®2017_int_peak = 9.50

Results Table

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Threads</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Threads</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>600.perlbench_s</td>
<td>64</td>
<td>326</td>
<td>5.45</td>
<td>327</td>
<td>5.43</td>
<td>326</td>
<td>5.45</td>
<td>64</td>
<td>274</td>
<td>5.47</td>
<td>273</td>
<td>5.60</td>
<td>276</td>
<td>5.44</td>
</tr>
<tr>
<td>602.gcc_s</td>
<td>64</td>
<td>452</td>
<td>8.80</td>
<td>451</td>
<td>8.84</td>
<td>455</td>
<td>8.74</td>
<td>64</td>
<td>432</td>
<td>9.22</td>
<td>436</td>
<td>9.13</td>
<td>433</td>
<td>9.19</td>
</tr>
<tr>
<td>605.mcf_s</td>
<td>64</td>
<td>288</td>
<td>16.4</td>
<td>283</td>
<td>16.7</td>
<td>288</td>
<td>16.4</td>
<td>64</td>
<td>288</td>
<td>16.4</td>
<td>283</td>
<td>16.7</td>
<td>288</td>
<td>16.4</td>
</tr>
<tr>
<td>620.omnetpp_s</td>
<td>64</td>
<td>217</td>
<td>7.52</td>
<td>217</td>
<td>7.52</td>
<td>220</td>
<td>7.40</td>
<td>64</td>
<td>217</td>
<td>7.52</td>
<td>217</td>
<td>7.52</td>
<td>220</td>
<td>7.40</td>
</tr>
<tr>
<td>623.xalanchmk_s</td>
<td>64</td>
<td>125</td>
<td>11.4</td>
<td>125</td>
<td>11.3</td>
<td>126</td>
<td>11.2</td>
<td>64</td>
<td>125</td>
<td>11.4</td>
<td>125</td>
<td>11.3</td>
<td>126</td>
<td>11.2</td>
</tr>
<tr>
<td>625.x264_s</td>
<td>64</td>
<td>133</td>
<td>13.3</td>
<td>132</td>
<td>13.3</td>
<td>133</td>
<td>13.2</td>
<td>64</td>
<td>131</td>
<td>13.5</td>
<td>130</td>
<td>13.5</td>
<td>131</td>
<td>13.3</td>
</tr>
<tr>
<td>631.deepsjeng_s</td>
<td>64</td>
<td>290</td>
<td>4.93</td>
<td>291</td>
<td>4.92</td>
<td>291</td>
<td>4.93</td>
<td>64</td>
<td>290</td>
<td>4.93</td>
<td>291</td>
<td>4.92</td>
<td>291</td>
<td>4.93</td>
</tr>
<tr>
<td>641.leela_s</td>
<td>64</td>
<td>425</td>
<td>4.02</td>
<td>424</td>
<td>4.02</td>
<td>425</td>
<td>4.02</td>
<td>64</td>
<td>425</td>
<td>4.02</td>
<td>424</td>
<td>4.02</td>
<td>425</td>
<td>4.02</td>
</tr>
<tr>
<td>648.exchange2_s</td>
<td>64</td>
<td>217</td>
<td>13.5</td>
<td>218</td>
<td>13.5</td>
<td>218</td>
<td>13.5</td>
<td>64</td>
<td>217</td>
<td>13.5</td>
<td>218</td>
<td>13.5</td>
<td>218</td>
<td>13.5</td>
</tr>
<tr>
<td>657.xz_s</td>
<td>64</td>
<td>308</td>
<td>20.1</td>
<td>309</td>
<td>20.0</td>
<td>309</td>
<td>20.0</td>
<td>64</td>
<td>308</td>
<td>20.1</td>
<td>308</td>
<td>20.1</td>
<td>309</td>
<td>20.0</td>
</tr>
</tbody>
</table>

**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,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 locally by Netweb
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>
```

(Continued on next page)
SPEC CPU®2017 Integer Speed Result

Tyrone Systems
(Test Sponsor: Netweb Pte Ltd)
Tyrone Camarero DIT400TR-48RL
(2.10 GHz, Intel Xeon Silver 4216)

SPECspeed®2017_int_peak = 9.50
SPECspeed®2017_int_base = 9.29

CPU2017 License: 006042
Test Sponsor: Netweb Pte Ltd
Test Date: Aug-2021
Tested by: Tyrone Systems
Hardware Availability: Apr-2019
Software Availability: Jun-2021

General Notes (Continued)

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.


Platform Notes

BIOS Settings:
Power Technology set to Custom
Power Performance Tuning set to BIOS Controls EPB
ENERGY_PERF_BIAS_CFG mode set to Performance
LLC Dead Line Alloc set to Disable

Sysinfo program /home/cpu2017/bin/sysinfo
Rev: r6622 of 2021-04-07 982a61ec0915b55891ef0e16aca64d
running on localhost.localdomain Mon Aug 9 00:42:51 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) Silver 4216 CPU @ 2.10GHz
  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 from util-linux 2.32.1:
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
Thread(s) per core: 2
Core(s) per socket: 16

(Continued on next page)
SPEC CPU®2017 Integer Speed Result

Tyrone Systems
(Test Sponsor: Netweb Pte Ltd)
Tyrone Camarero DIT400TR-48RL
(2.10 GHz, Intel Xeon Silver 4216)

SPECspeed®2017_int_base = 9.29
SPECspeed®2017_int_peak = 9.50

CPU2017 License: 006042
Test Sponsor: Netweb Pte Ltd
Tested by: Tyrone Systems
Test Date: Aug-2021
Hardware Availability: Apr-2019
Software Availability: Jun-2021

Platform Notes (Continued)

Socket(s): 2
NUMA node(s): 2
Vendor ID: GenuineIntel
BIOS Vendor ID: Intel(R) Corporation
CPU family: 6
Model: 85
Model name: Intel(R) Xeon(R) Silver 4216 CPU @ 2.10GHz
BIOS Model name: Intel(R) Xeon(R) Silver 4216 CPU @ 2.10GHz
Stepping: 7
CPU MHz: 964.753
CPU max MHz: 3200.0000
CPU min MHz: 800.0000
BogoMIPS: 4200.00
Virtualization: VT-x
L1d cache: 32K
L1i cache: 32K
L2 cache: 1024K
L3 cache: 2528K
NUMA node0 CPU(s): 0-15, 32-47
NUMA node1 CPU(s): 16-31, 48-63
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
aerpffen perf pni pclmulqdq dtes64 monitor ds_cpl vmx smx est tm2 ssse3 sdbg fma cx16
xtrac pdcw pdcm dca sse4_1 sse4_2 x2apic movbe popcnt tsc_deadline_timer aes xsave
avx f16c rdrand lahf_lm abmf_lms 3qnowprefetch cpuid_fault epb cat latch
invpcid_single intel_pinn sbbd mba ibrs ibpbb stibp ibrs_enhanced tpr_shadow vnmi
flexpriori ept vpid ept_ad fsgsbase tsc_adjust bmi1 hle avx2 smep bmi2 erms
invpcid cqm mp xdt a avx512f avx512dq rdseed adx smap clflushopt clwb intel_pt
avx512cd avx512bw avx512vl xsaveopt xsavec xgetbv1 xsave vcm llic cqm_occup llic
cqm_mbb_total cqm_mmb_local dabort dita arat pln pts hwp hwp_act_window hwp_epp
hwp_pkg_req pku ospke avx512_vnni md_clear flush_lld arch_capabilities

From numactl --hardware
WARNING: a numactl 'node' might or might not correspond to a physical chip.
available: 2 nodes (0-1)
node 0 cpus: 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 32 33 34 35 36 37 38 39 40 41 42 43
44 45 46 47
node 0 size: 192106 MB
node 0 free: 169245 MB
node 1 cpus: 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 48 49 50 51 52 53 54 55 56
57 58 59 60 61 62 63
node 1 size: 193491 MB
node 1 free: 172679 MB

(Continued on next page)
SPEC CPU®2017 Integer Speed Result

Tyrone Systems
(Test Sponsor: Netweb Pte Ltd)
Tyrone Camarero DIT400TR-48RL
(2.10 GHz, Intel Xeon Silver 4216)

SPECspeed®2017_int_base = 9.29
SPECspeed®2017_int_peak = 9.50

CPU2017 License: 006042
Test Sponsor: Netweb Pte Ltd
Tested by: Tyrone Systems

Test Date: Aug-2021
Hardware Availability: Apr-2019
Software Availability: Jun-2021

Platform Notes (Continued)

node distances:
node  0  1
 0: 10 21
 1: 21 10

From /proc/meminfo
MemTotal: 394851992 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 8.4.2105
centos-release-upstream: Derived from Red Hat Enterprise Linux 8.4
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 8.4.2105
system-release: CentOS Linux release 8.4.2105
system-release-cpe: cpe:/o:centos:centos:8

uname -a:
  Linux localhost.localdomain 4.18.0-305.3.1.el8.x86_64 #1 SMP Tue Jun 1 16:14:33 UTC 2021 x86_64 x86_64 x86_64 GNU/Linux

Kernel self-reported vulnerability status:
CVE-2018-12207 (iTLB Multithit):
  KVM: Mitigation: Split huge pages
CVE-2018-3620 (L1 Terminal Fault):
  Not affected
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/swaps barriers and __user pointer

(Continued on next page)
### SPEC CPU®2017 Integer Speed Result

**Tyrone Systems**  
(Test Sponsor: Netweb Pte Ltd)  
**Tyrone Camarero DIT400TR-48RL**  
(2.10 GHz, Intel Xeon Silver 4216)  

<table>
<thead>
<tr>
<th>SPECspeed®2017_int_base</th>
<th>9.29</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECspeed®2017_int_peak</td>
<td>9.50</td>
</tr>
</tbody>
</table>

**CPU2017 License:** 006042  
**Test Sponsor:** Netweb Pte Ltd  
**Tested by:** Tyrone Systems  

---

**Platform Notes (Continued)**

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 Aug 6 11:27  

SPEC is set to: /home/cpu2017  

Filesystem Type Size Used Avail Use% Mounted on  
/dev/mapper/cl-home xfs 372G 76G 296G 21% /home  

From /sys/devices/virtual/dmi/id  

Vendor: Tyrone Systems  
Product: Tyrone Camarero DIT400TR-48RL  
Product Family: empty  
Serial: empty  

---

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:  
12x Samsung M393A4K40CB2-CVF 32 GB 2 rank 2933, configured at 2400  

BIOS:  
BIOS Vendor: American Megatrends Inc.  
BIOS Version: V8.104  
BIOS Date: 07/27/2021  
BIOS Revision: 5.14  
Firmware Revision: 6.1  

(End of data from sysinfo program)

---

**Compiler Version Notes**

```
C       | 600.perlbench_s(peak)
```

---

Intel(R) C Intel(R) 64 Compiler Classic for applications running on Intel(R)  
64, Version 2021.1 Build 20201112_000000  
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.  

---

```
C       | 600.perlbench_s(base) 602.gcc_s(base, peak) 605.mcf_s(base, peak)
```

(Continued on next page)
## Compiler Version Notes (Continued)

<table>
<thead>
<tr>
<th>625.x264_s(base, peak)</th>
<th>657.xz_s(base, peak)</th>
</tr>
</thead>
</table>

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2021.1 Build 20201113  
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.

<table>
<thead>
<tr>
<th>C</th>
<th>600.perlbench_s(peak)</th>
</tr>
</thead>
</table>

Intel(R) C Intel(R) 64 Compiler Classic for applications running on Intel(R) 64, Version 2021.1 Build 20201112_000000  
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.

<table>
<thead>
<tr>
<th>C</th>
<th>600.perlbench_s(base, peak) 602.gcc_s(base, peak) 605.mcf_s(base, peak)</th>
</tr>
</thead>
<tbody>
<tr>
<td>625.x264_s(base, peak)</td>
<td>657.xz_s(base, peak)</td>
</tr>
</tbody>
</table>

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2021.1 Build 20201113  
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.

<table>
<thead>
<tr>
<th>C++</th>
<th>620.omnetpp_s(base, peak) 623.xalancbmk_s(base, peak)</th>
</tr>
</thead>
<tbody>
<tr>
<td>631.deepsjeng_s(base, peak)</td>
<td>641.leela_s(base, peak)</td>
</tr>
</tbody>
</table>

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2021.1 Build 20201113  
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.

<table>
<thead>
<tr>
<th>Fortran</th>
<th>648.exchange2_s(base, peak)</th>
</tr>
</thead>
</table>

Intel(R) Fortran Intel(R) 64 Compiler Classic for applications running on Intel(R) 64, Version 2021.1 Build 20201112_000000  
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.

---

### Base Compiler Invocation

**C benchmarks:**

```bash
icx
```
**SPEC CPU®2017 Integer Speed Result**

**Tyrone Systems**  
(Test Sponsor: Netweb Pte Ltd)

**Tyrone Camarero DIT400TR-48RL**  
(2.10 GHz, Intel Xeon Silver 4216)

<table>
<thead>
<tr>
<th>SPECspeed®2017_int_base</th>
<th>9.29</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECspeed®2017_int_peak</td>
<td>9.50</td>
</tr>
</tbody>
</table>

**CPU2017 License:** 006042  
**Test Sponsor:** Netweb Pte Ltd  
**Tested by:** Tyrone Systems

**Test Date:** Aug-2021  
**Hardware Availability:** Apr-2019  
**Software Availability:** Jun-2021

---

**Base Compiler Invocation (Continued)**

C++ benchmarks:
- icpx

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:
- -DSPEC_OPENMP -std=c11 -m64 -fopenmp -Wl,-z,muldefs -xCORE-AVX512  
- -O3 -ffast-math -flto -mfpmath=sse -funroll-loops  
- -qopt-mem-layout-trans=4 -mbranches-within-32B-boundaries  
- -L/usr/local/je5.0.1-64/lib -ljemalloc

C++ benchmarks:
- -DSPEC_OPENMP -m64 -Wl,-z,muldefs -xCORE-AVX512 -O3 -ffast-math  
- -flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4  
- -mbranches-within-32B-boundaries  
- -L/opt/intel/oneapi/compiler/2021.1.1/linux/compiler/lib/intel64_lin/  
- -ljemalloc

Fortran benchmarks:
- -m64 -xCORE-AVX512 -O3 -ipo -no-prec-div -qopt-mem-layout-trans=4  
- -nostandard-realloc-lhs -align array32byte  
- -mbranches-within-32B-boundaries

---
SPEC CPU®2017 Integer Speed Result

Tyrone Systems
(Test Sponsor: Netweb Pte Ltd)
Tyrone Camarero DIT400TR-48RL
(2.10 GHz, Intel Xeon Silver 4216)

SPECspeed®2017_int_base = 9.29
SPECspeed®2017_int_peak = 9.50

CPU2017 License: 006042
Test Sponsor: Netweb Pte Ltd
Tested by: Tyrone Systems

Peak Compiler Invocation
C benchmarks (except as noted below):
icx

600.perlbench_s: icc

C++ benchmarks:
icpx

Fortran benchmarks:
ifort

Peak Portability Flags
Same as Base Portability Flags

Peak Optimization Flags
C benchmarks:

600.perlbench_s: -Wl,-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

602.gcc_s: -m64 -std=c11 -Wl,-z,muldefs -fprofile-generate(pass 1) -fprofile-use=default.profdata(pass 2) -xCORE-AVX512 -flto -Ofast(pass 1) -O3 -ffast-math -qopt-mem-layout-trans=4 -mbranches-within-32B-boundaries -L/usr/local/je5.0.1-64/lib -ljemalloc

605.mcf_s: basepeak = yes

625.x264_s: -DSPEC_OPENMP -fiopenmp -std=c11 -m64 -Wl,-z,muldefs -xCORE-AVX512 -flto -O3 -ffast-math -qopt-mem-layout-trans=4 -fno-alias -mbranches-within-32B-boundaries -L/usr/local/je5.0.1-64/lib -ljemalloc

657.xz_s: basepeak = yes

(Continued on next page)
## Peak Optimization Flags (Continued)

**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/Tyrone-Platform-Settings-V1.2-CLX-revI.html

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

http://www.spec.org/cpu2017/flags/Intel-ic2021-official-linux64_revA.xml

http://www.spec.org/cpu2017/flags/Tyrone-Platform-Settings-V1.2-CLX-revI.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.

Tested with SPEC CPU®2017 v1.1.8 on 2021-08-09 00:42:51-0400.


Originally published on 2021-09-20.