**Tyrone Systems**

(Test Sponsor: Netweb Pte Ltd)

**Tyrone Camarero DS400TOG-424RT2**

(2.90 GHz, Intel Xeon Gold 6226R)

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**SPEC CPU®2017 Floating Point Rate Result**

**Copyright 2017-2021 Standard Performance Evaluation Corporation**

SPECrate®2017_fp_base = 218

SPECrate®2017_fp_peak = 221

---

**Hardware**

- **CPU Name:** Intel Xeon Gold 6226R
- **Max MHz:** 3900
- **Nominal:** 2900
- **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 PC4-2933Y-R)
- **Storage:** 1 x 480 GB SATA SSD
- **Other:** None

---

**Software**

- **OS:** CentOS Linux release 8.2.2004 (Core)
- **Compiler:** C/C++: Version 19.1.1.217 of Intel C/C++ Compiler Build 20200306 for Linux;
  Fortran: Version 19.1.1.217 of Intel Fortran Compiler Build 20200306 for Linux
- **Parallel:** No
- **Firmware:** Version 3.3 released Feb-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

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**Test Sponsor:** Netweb Pte Ltd

**Test Date:** Feb-2021

**Hardware Availability:** Aug-2020

**Software Availability:** Jun-2020

---

**Tested by:** Tyrone Systems

**Software Availability:** Jun-2020

**CPU2017 License:** 006042
SPEC CPU®2017 Floating Point Rate Result

Tyrone Systems
(Test Sponsor: Netweb Pte Ltd)
Tyrone Camarero DS400TOG-424RT2
(2.90 GHz, Intel Xeon Gold 6226R)

SPECrate®2017_fp_base = 218
SPECrate®2017_fp_peak = 221

Results Table

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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

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/je5.0.1-64"
MALLOCONF = "retain:true"
**SPEC CPU®2017 Floating Point Rate Result**

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

**Tyrone Camarero DS400TOG-424RT2**
(2.90 GHz, Intel Xeon Gold 6226R)

<table>
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</tr>
</tbody>
</table>

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**General Notes**

Binaries compiled on a system with 2x Intel Cascade Lake CPU 4214R + 384 GB 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
runcpu command invoked through numactl i.e.:
numactl --interleave=all runcpu <etc>
```
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 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 = Maximum 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 localhost.localdomain Tue Feb 9 00:33:00 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
```

(Continued on next page)
Platform Notes (Continued)

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
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: 3470.185
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 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 sse2 fma cx16 xtrnas cdic pcid dca sse4_1 sse4_2 x2apic movbe popcnt tsc_deadline_timer aes xsave avx f16c rdrand lahf_lm ab43 nowprefetch bmi1 hle avx2 smep bmi2 ibrms invpcid rdseed adx xsaveopt xsaveopt xsaveprec 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

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

(Continued on next page)
SPEC CPU®2017 Floating Point Rate Result

Tyrone Systems
(Test Sponsor: Netweb Pte Ltd)
Tyrone Camarero DS400TOG-424RT2
(2.90 GHz, Intel Xeon Gold 6226R)

SPECrat®2017_fp_base = 218
SPECrat®2017_fp_peak = 221

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

Test Date: Feb-2021
Hardware Availability: Aug-2020
Software Availability: Jun-2020

Platform Notes (Continued)

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: 95326 MB
node 0 free: 86143 MB
node 1 cpus: 4 5 6 7 12 13 14 15 36 37 38 39 44 45 46 47
node 1 size: 96764 MB
node 1 free: 89098 MB
node 2 cpus: 16 17 18 19 24 25 26 27 48 49 50 51 56 57 58 59
node 2 size: 96764 MB
node 2 free: 88762 MB
node 3 cpus: 20 21 22 23 28 29 30 31 52 53 54 55 60 61 62 63
node 3 size: 96763 MB
node 3 free: 89007 MB
node distances:
node 0 to 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: 394874028 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 8.2.2004 (Core)
centos-release-upstream: Derived from Red Hat Enterprise Linux 8.2 (Source)
os-release:
NAME="CentOS Linux"
VERSION="8 (Core)"
ID="centos"
ID_LIKE="rhel fedora"
VERSION_ID="8"
PLATFORM_ID="platform:e18"
PRETTY_NAME="CentOS Linux 8 (Core)"
ANSI_COLOR="0;31"
redhat-release: CentOS Linux release 8.2.2004 (Core)
system-release: CentOS Linux release 8.2.2004 (Core)
system-release-cpe: cpe:/o:centos:centos:8

(Continued on next page)
SPEC CPU®2017 Floating Point Rate Result

Tyrone Systems
(Test Sponsor: Netweb Pte Ltd)

Tyrone Camarero DS400TOG-424RT2
(2.90 GHz, Intel Xeon Gold 6226R)

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

SPECRate®2017_fp_base = 218
SPECRate®2017_fp_peak = 221

Test Date: Feb-2021
Hardware Availability: Aug-2020
Software Availability: Jun-2020

Platform Notes (Continued)

uname -a:
Linux localhost.localdomain 4.18.0-193.el8.x86_64 #1 SMP Fri May 8 10:59:10 UTC 2020
x86_64 x86_64 x86_64 GNU/Linux

Kernel self-reported vulnerability status:

CVE-2018-12207 (iTLB Multihit): KVM: Vulnerable
CVE-2018-3620 (L1 Terminal Fault): Not affected
Microarchitectural Data Sampling: Not affected
CVE-2017-5754 (Meltdown): Mitigation: Speculative Store
CVE-2018-3639 (Speculative Store Bypass): Bypass disabled via prctl and
Mitigation: Speculative Store
seccomp
CVE-2017-5753 (Spectre variant 1): Mitigation: usercopy/swapgs
barriers and __user pointer
mitigation
CVE-2017-5715 (Spectre variant 2): Mitigation: Enhanced IBRS, IBPB:
conditional, RSB filling
CVE-2020-0543 (Special Register Buffer Data Sampling): No status reported
CVE-2019-11135 (TSX Asynchronous Abort): Mitigation: Clear CPU buffers; SMT
vulnerable

run-level 3 Feb 8 17:32

SPEC is set to: /home/cpu2017

From /sys/devices/virtual/dmi/id
Vendor: Tyrone Systems
Product: Tyrone Camarero DS400TOG-424RT2
Product Family: SMC X11
Serial: A309085X0907231

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
12x Samsung M393A4K40CB2-CVF 32 GB 2 rank 2933, configured at 2934

BIOS:
BIOS Vendor: American Megatrends Inc.
BIOS Version: 3.3
BIOS Date: 02/21/2020

(Continued on next page)
SPEC CPU®2017 Floating Point Rate Result

Tyrone Systems
(Test Sponsor: Netweb Pte Ltd)
Tyrone Camarero DS400TOG-424RT2
(2.90 GHz, Intel Xeon Gold 6226R)

SPECrater®2017_fp_base = 218
SPECrater®2017_fp_peak = 221

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

Platform Notes (Continued)

BIOS Revision: 5.14

(End of data from sysinfo program)

Compiler Version Notes

==============================================================================
C             | 519.lbm_r(base, peak) 538.imagick_r(base, peak)
             | 544.nab_r(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++            | 508.namd_r(base, peak) 510.parest_r(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++, C         | 511.povray_r(base) 526.blender_r(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++, C         | 511.povray_r(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.

(Continued on next page)
**SPEC CPU®2017 Floating Point Rate Result**

**Tyrone Systems**  
(Test Sponsor: Netweb Pte Ltd)  
Tyrone Camarero DS400TOG-424RT2  
(2.90 GHz, Intel Xeon Gold 6226R)

**SPECrate®2017_fp_base = 218**  
**SPECrate®2017_fp_peak = 221**

**CPU2017 License:** 006042  
**Test Date:** Feb-2021  
**Test Sponsor:** Netweb Pte Ltd  
**Tested by:** Tyrone Systems  
**Hardware Availability:** Aug-2020  
**Software Availability:** Jun-2020

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**Compiler Version Notes (Continued)**

**C++, C**  
| 511.povray_r(base) 526.blender_r(base, peak)  

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**Intel(R) C++ Compiler for applications running on Intel(R) 64, Version 2021.1**  
NextGen Build 20200304  
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**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.

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**C++, C**  
| 511.povray_r(peak)  

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**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.

**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.

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**C++, C, Fortran**  
| 507.cactuBSSN_r(base, peak)  

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**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.

**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.

**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.

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**Fortran**  
| 503.bwaves_r(base, peak) 549.fotonik3d_r(base, peak) 554.roms_r(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.

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**Fortran, C**  
| 521.wrf_r(base) 527.cam4_r(base, peak)  

(Continued on next page)
SPEC CPU®2017 Floating Point Rate Result

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Tyrone Systems
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Tyrone Camarero DS400TOG-424RT2
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SPECrate®2017_fp_peak = 221

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

SPECrates:

- Test Date: Feb-2021
- Hardware Availability: Aug-2020
- Software Availability: Jun-2020

Compiler Version Notes (Continued)

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.

Intel(R) C Compiler for applications running on Intel(R) 64, Version 2021.1
NextGen Build 20200304
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Base Compiler Invocation

C benchmarks:
icc

(Continued on next page)
SPEC CPU®2017 Floating Point Rate Result

Tyrone Systems
(Test Sponsor: Netweb Pte Ltd)
Tyrone Camarero DS400TOG-424RT2
(2.90 GHz, Intel Xeon Gold 6226R)

SPECrate®2017_fp_base = 218
SPECrate®2017_fp_peak = 221

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

Test Date: Feb-2021
Hardware Availability: Aug-2020
Software Availability: Jun-2020

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Base Compiler Invocation (Continued)

C++ benchmarks:
icpc

Fortran benchmarks:
ifort

Benchmarks using both Fortran and C:
ifort icc

Benchmarks using both C and C++:
icpc icc

Benchmarks using Fortran, C, and C++:
icpc icc ifort

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Base Portability Flags

503.bwaves_r: -DSPEC_LP64
507.cactuBSSN_r: -DSPEC_LP64
508.namd_r: -DSPEC_LP64
510.parest_r: -DSPEC_LP64
511.povray_r: -DSPEC_LP64
519.lbm_r: -DSPEC_LP64
521.wrf_r: -DSPEC_LP64 -DSPEC_CASE_FLAG -convert big_endian
526.blender_r: -DSPEC_LP64 -DSPEC_LINUX -funsigned-char
527.cam4_r: -DSPEC_LP64 -DSPEC_CASE_FLAG
538.imagick_r: -DSPEC_LP64
544.nab_r: -DSPEC_LP64
549.fotonik3d_r: -DSPEC_LP64
554.roms_r: -DSPEC_LP64

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Base Optimization Flags

C benchmarks:
-m64 -qnextgen -std=c11
-Wl,-plugin-opt=-x86-branches-within-32B-boundaries -Wl,-z,muldefs
-fuse-ld=gold -xCORE-AVX512 -Ofast -ffast-math -flto -mfpmath=sse
-funroll-loops -qopt-mem-layout-trans=4 -L/usr/local/je5.0.1-64/lib
-1jemalloc

C++ benchmarks:
-m64 -qnextgen -Wl,-plugin-opt=-x86-branches-within-32B-boundaries

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Base Optimization Flags (Continued)

C++ benchmarks (continued):
-`-Wl,-z,muldefs -fuse-ld=gold -xCORE-AVX512 -Ofast -ffast-math -flto`
-`-mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4`
-`-L/usr/local/je5.0.1-64/lib -ljemalloc`

Fortran benchmarks:
-`-m64 -Wl,-z,muldefs -fuse-ld=gold -xCORE-AVX512 -O3 -ipo -no-prec-div -qopt-prefetch`
-`-ffinite-math-only -qopt-multiple-gather-scatter-by-shuffles`
-`-qopt-mem-layout-trans=4 -nostandard-realloc-lhs -align array32byte`
-`-auto -mbranches-within-32B-boundaries -L/usr/local/je5.0.1-64/lib -ljemalloc`

Benchmarks using both Fortran and C:
-`-m64 -qnextgen -std=c11`
-`-Wl,-z,muldefs -fuse-ld=gold -xCORE-AVX512 -O3 -ipo -no-prec-div`
-`-qopt-prefetch -ffinite-math-only`
-`-qopt-multiple-gather-scatter-by-shuffles -nostandard-realloc-lhs`
-`-align array32byte -auto -mbranches-within-32B-boundaries -L/usr/local/je5.0.1-64/lib -ljemalloc`

Benchmarks using both C and C++:
-`-m64 -qnextgen -std=c11`
-`-Wl,-z,muldefs -fuse-ld=gold -xCORE-AVX512 -Ofast -ffast-math -flto -mfpmath=sse`
-`-funroll-loops -qopt-mem-layout-trans=4 -L/usr/local/je5.0.1-64/lib -ljemalloc`

Benchmarks using Fortran, C, and C++:
-`-m64 -qnextgen -std=c11`
-`-Wl,-z,muldefs -fuse-ld=gold -xCORE-AVX512 -Ofast -ffast-math -flto -mfpmath=sse`
-`-funroll-loops -qopt-mem-layout-trans=4 -O3 -ipo -no-prec-div`
-`-qopt-prefetch -ffinite-math-only`
-`-qopt-multiple-gather-scatter-by-shuffles -nostandard-realloc-lhs`
-`-align array32byte -auto -mbranches-within-32B-boundaries -L/usr/local/je5.0.1-64/lib -ljemalloc`

Peak Compiler Invocation

C benchmarks:
`icc`

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Peak Compiler Invocation (Continued)

C++ benchmarks:
icpc

Fortran benchmarks:
ifort

Benchmarks using both Fortran and C:
ifort icc

Benchmarks using both C and C++:
icpc icc

Benchmarks using Fortran, C, and C++:
icpc icc ifort

Peak Portability Flags

Same as Base Portability Flags

Peak Optimization Flags

C benchmarks:

519.lbm_r: basepeak = yes
538.imagick_r: basepeak = yes
544.nab_r: basepeak = yes

C++ benchmarks:

508.namd_r: basepeak = yes
510.parest_r: -m64 -qnextgen
-W1,-plugin-opt=-x86-branches-within-32B-boundaries
-W1,-z,muldefs -fuse-ld=gold -xCORE-AVX512 -Ofast
-ffast-math -flto -mfpmath=sse -funroll-loops
-qopt-mem-layout-trans=4 -L/usr/local/je5.0.1-64/lib
-ljemalloc

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Peak Optimization Flags (Continued)

Fortran benchmarks:

503.bwaves_r: -m64 -Wl,-plugin-opt=-x86-branches-within-32B-boundaries
-Wl,-z,muldefs -fuse-ld=gold -xCORE-AVX512 -03 -ipo
-no-prec-div -qopt-prefetch -ffinite-math-only
-qopt-multiple-gather-scatter-by-shuffles
-qopt-mem-layout-trans=4 -nostandard-realloc-lhs
-align array32byte -auto -mbranches-within-32B-boundaries
-L/usr/local/je5.0.1-64/lib -ljemalloc

549.fotonik3d_r: basepeak = yes

554.roms_r: Same as 503.bwaves_r

Benchmarks using both Fortran and C:

521.wrf_r: -prof-gen(pass 1) -prof-use(pass 2) -xCORE-AVX512 -03
-ipo -no-prec-div -qopt-prefetch -ffinite-math-only
-qopt-multiple-gather-scatter-by-shuffles
-qopt-mem-layout-trans=4 -mbranches-within-32B-boundaries
-nostandard-realloc-lhs -align array32byte -auto
-L/usr/local/je5.0.1-64/lib -ljemalloc

527.cam4_r: basepeak = yes

Benchmarks using both C and C++:

511.povray_r: -prof-gen(pass 1) -prof-use(pass 2) -xCORE-AVX512 -03
-ipo -no-prec-div -qopt-prefetch -ffinite-math-only
-qopt-multiple-gather-scatter-by-shuffles
-qopt-mem-layout-trans=4 -mbranches-within-32B-boundaries
-L/usr/local/je5.0.1-64/lib -ljemalloc

526.blender_r: basepeak = yes

Benchmarks using Fortran, C, and C++:

507.cactuBSSN_r: 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-revB.html

You can also download the XML flags sources by saving the following links:
http://www.spec.org/cpu2017/flags/Intel-ic19.1u1-official-linux64_revA.xml
http://www.spec.org/cpu2017/flags/Tyrone-Platform-Settings-V1.2-CLX-revB.xml
### SPEC CPU®2017 Floating Point Rate Result

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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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