### SPEC CPU®2017 Floating Point Rate Result

#### Inspur Corporation

**Inspur NF5180M6 (Intel Xeon Gold 6338N)**

- **SPECrater®2017_fp_base = 379**
- **SPECrater®2017_fp_peak = 402**

<table>
<thead>
<tr>
<th>Software</th>
<th>Hardware</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OS:</strong></td>
<td><strong>CPU Name:</strong> Intel Xeon Gold 6338N</td>
</tr>
<tr>
<td>Red Hat Enterprise Linux release 8.2 (Ootpa)</td>
<td>Max MHz: 3500</td>
</tr>
<tr>
<td>4.18.0-193.el8.x86_64</td>
<td>Nominal: 2200</td>
</tr>
<tr>
<td>Compiler: C/C++: Version 2021.1 of Intel oneAPI DPC++/C++</td>
<td>Enabled: 64 cores, 2 chips, 2 threads/core</td>
</tr>
<tr>
<td>Compiler Build 20201113 for Linux; C/C++: Version 2021.1 of Intel C/C++</td>
<td>Orderable: 1,2 chips</td>
</tr>
<tr>
<td>Compiler Classic Build 20201112 for Linux; Fortran: Version 2021.1 of Intel Fortran</td>
<td>Cache L1: 32 KB I + 48 KB D on chip per core</td>
</tr>
<tr>
<td>Power Management: BIOS and OS set to prefer performance at the cost of additional power usage.</td>
<td>L2: 1.25 MB I+D on chip per core</td>
</tr>
<tr>
<td><strong>Firmware:</strong></td>
<td>L3: 48 MB I+D on chip per chip</td>
</tr>
<tr>
<td>Version 05.00.00 released Apr-2021</td>
<td>Other: None</td>
</tr>
<tr>
<td><strong>File System:</strong></td>
<td>Memory: 1 TB (32 x 32 GB 2Rx4 PC4-3200AA-R, running at 2666)</td>
</tr>
<tr>
<td>xfs</td>
<td>Storage: 1 x 4 TB NVME SSD</td>
</tr>
<tr>
<td><strong>System State:</strong> Run level 3 (multi-user)</td>
<td>Other: None</td>
</tr>
<tr>
<td><strong>Base Pointers:</strong> 64-bit</td>
<td><strong>Power Management:</strong> BIOS and OS set to prefer performance at the cost of additional power usage.</td>
</tr>
<tr>
<td><strong>Peak Pointers:</strong> 64-bit</td>
<td></td>
</tr>
</tbody>
</table>

**Test Sponsor:** Inspur Corporation

**Test Date:** Jul-2021

**Hardware Availability:** May-2021

**Software Availability:** Dec-2020

**Tested by:** Inspur Corporation

**Software Availability:** Dec-2020

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**Software Availability:** Dec-2020

---

**CPU2017 License:** 3358

**Test Sponsor:** Inspur Corporation

**Test Date:** Jul-2021

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**Tested by:** Inspur Corporation

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**Test Date:** Jul-2021

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**Software Availability:** Dec-2020

---

**CPU Name:** Intel Xeon Gold 6338N

**Max MHz:** 3500

**Nominal:** 2200

**Enabled:** 64 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:** 48 MB I+D on chip per chip

**Other:** None

**Memory:** 1 TB (32 x 32 GB 2Rx4 PC4-3200AA-R, running at 2666)

**Storage:** 1 x 4 TB NVME SSD

**Other:** None

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**Test Date:** Jul-2021

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Inspur Corporation

Inspur NF5180M6 (Intel Xeon Gold 6338N)

SPECrate®2017_fp_base = 379
SPECrate®2017_fp_peak = 402

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Results Table

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Copies</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
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</tr>
</tbody>
</table>

SPECrate®2017_fp_base = 379
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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"
SCALING_GOVERNOR set to Performance

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"
MALLOC_CONF = "retain:true"

General Notes

Binaries compiled on a system with 1x Intel Core i9-7980XE CPU + 64GB RAM
memory using Red Hat Enterprise Linux 8.1
Transparent Huge Pages enabled by default
Prior to runcpu invocation

(Continued on next page)
Inspur Corporation

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CPU2017 License: 3358
Test Date: Jul-2021
Test Sponsor: Inspur Corporation
Hardware Availability: May-2021
Tested by: Inspur Corporation
Software Availability: Dec-2020

General Notes (Continued)

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 RedHat Enterprise 7.5,
and the system compiler gcc 4.8.5;
sources available from jemalloc.net or

Platform Notes

BIOS configuration:
ENERGY_PERF_BIAS_CFG mode set to Performance
Hardware Prefetch set to Disable
VT Support set to Disable
C1E Support set to Disable
Sub NUMA Cluster (SNC) set to Enable

Sysinfo program /home/CPU2017/bin/sysinfo
Rev: r6622 of 2021-04-07 982a61ec0915b55891ef0e16acafc64d
running on localhost.localdomain Wed Jul 28 00:10:57 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 6338N CPU @ 2.20GHz
    2 "physical id"s (chips)
    128 "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 : 32
siblings : 64
physical 0: cores 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
25 26 27 28 29 30 31
physical 1: cores 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24
(Continued on next page)
Platform Notes (Continued)

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): 128
On-line CPU(s) list: 0-127
Thread(s) per core: 2
Core(s) per socket: 32
Socket(s): 2
NUMA node(s): 4
Vendor ID: GenuineIntel
CPU family: 6
Model: 106
Model name: Intel(R) Xeon(R) Gold 6338N CPU @ 2.20GHz
Stepping: 6
CPU MHz: 2799.895
CPU max MHz: 3500.0000
CPU min MHz: 800.0000
BogoMIPS: 4400.00
Virtualization: VT-x
L1d cache: 48K
L1i cache: 32K
L2 cache: 1280K
L3 cache: 49152K
NUMA node0 CPU(s): 0-15, 64-79
NUMA node1 CPU(s): 16-31, 80-95
NUMA node2 CPU(s): 32-47, 96-111
NUMA node3 CPU(s): 48-63, 112-127
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
aperfmerf 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 ebpx cat_l3 invpcid_single ssbd mba ibrs
ibpb stibp ibrs_enhanced tpr_shadow vmi fexpriori ept vpid fsgsbase tsc_adjust
bm1 hle avx2 smep bmi2 erms invpcid rtm cmq rdt_a avx512f avx512dq rseed adx smap
avx512ifma clflushopt clwb intel_pt avx512cd sha ni avx512bw avx512vl xsaveopt
xsaves xgetbv1 xsaves cmq_llc cmq_occup_llc cmq_mbb_total cmq_mbb_local wbnoinvd
dtherm ida arat pln pts avx512vmbni umpq pku ospke avx512vmbi qfnl vaes vpcm1ldq
avx512_vnni avx512_bitalg tme avx512_vpopcntdq la57 rdpid md_clear pconfig flush_l1d
arch_capabilities

/proc/cpuinfo cache data
    cache size : 49152 KB

(Continued on next page)
Inspur Corporation

Inspur NF5180M6 (Intel Xeon Gold 6338N)

**SPECrate®2017_fp_base = 379**

**SPECrate®2017_fp_peak = 402**

<table>
<thead>
<tr>
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<th>3358</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Sponsor:</td>
<td>Inspur Corporation</td>
</tr>
<tr>
<td>Tested by:</td>
<td>Inspur Corporation</td>
</tr>
<tr>
<td>Test Date:</td>
<td>Jul-2021</td>
</tr>
<tr>
<td>Hardware Availability:</td>
<td>May-2021</td>
</tr>
<tr>
<td>Software Availability:</td>
<td>Dec-2020</td>
</tr>
</tbody>
</table>

**Platform Notes (Continued)**

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 4 5 6 7 8 9 10 11 12 13 14 15 64 65 66 67 68 69 70 71 72 73 74 75
76 77 78 79
node 0 size: 257608 MB
node 0 free: 242346 MB
node 1 cpus: 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 80 81 82 83 84 85 86 87 88
89 90 91 92 93 94 95
node 1 size: 258040 MB
node 1 free: 245124 MB
node 2 cpus: 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 96 97 98 99 100 101 102
103 104 105 106 107 108 109 110 111
node 2 size: 258040 MB
node 2 free: 245250 MB
node 3 cpus: 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 112 113 114 115 116 117
118 119 120 121 122 123 124 125 126 127
node 3 size: 258038 MB
node 3 free: 245256 MB
node distances:
node 0 1 2 3
0: 10 11 20 20
1: 11 10 20 20
2: 20 20 10 11
3: 20 20 11 10
```

From `/proc/meminfo`

```
MemTotal:       1056489904 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*`

```
NAME="Red Hat Enterprise Linux"
VERSION="8.2 (Ootpa)"
ID="rhel"
ID_LIKE="fedora"
VERSION_ID="8.2"
PLATFORM_ID="platform:el8"
PRETTY_NAME="Red Hat Enterprise Linux 8.2 (Ootpa)"
ANSI_COLOR="0;31"
```

(Continued on next page)
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**Insper Corporation**

**Insper NF5180M6 (Intel Xeon Gold 6338N)**

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**CPU2017 License:** 3358

**Test Sponsor:** Inspur Corporation

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**Test Date:** Jul-2021

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### Platform Notes (Continued)

- **redhat-release:** Red Hat Enterprise Linux release 8.2 (Ootpa)
- **system-release:** Red Hat Enterprise Linux release 8.2 (Ootpa)
- **system-release-cpe:** cpe:/o:redhat:enterprise_linux:8.2:ga

```bash
test -av:
    Linux localhost.localdomain 4.18.0-193.el8.x86_64 #1 SMP Fri Mar 27 14:35:58 UTC 2020
    x86_64 x86_64 x86_64 GNU/Linux
```

**Kernel self-reported vulnerability status:**

- **CVE-2018-12207 (iTLB Multihit):** Not affected
- **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/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):** No status reported

- **CVE-2019-11135 (TSX Asynchronous Abort):** Not affected

- **run-level 3 Jul 27 15:59**

- **SPEC is set to:** /home/CPU2017

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<tr>
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<th>Size</th>
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<th>Avail</th>
<th>Use%</th>
<th>Mounted on</th>
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</thead>
<tbody>
<tr>
<td>/dev/mapper/rhel-home</td>
<td>xfs</td>
<td>3.6T</td>
<td>98G</td>
<td>3.5T</td>
<td>3%</td>
<td>/home</td>
</tr>
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</table>

- **From /sys/devices/virtual/dmi/id**

<table>
<thead>
<tr>
<th>Vendor</th>
<th>Product</th>
<th>Product Family</th>
<th>Serial</th>
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<tbody>
<tr>
<td>Inspur</td>
<td>NF5180M6</td>
<td>Family</td>
<td>380827124</td>
</tr>
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</table>

- **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.

<table>
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<tr>
<th>Memory</th>
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<tr>
<td>32x Micron 36ASF4G72PZ-3G2R1 32 GB 2 rank 3200, configured at 2666</td>
<td>BIOS Vendor: American Megatrends Inc.</td>
</tr>
<tr>
<td></td>
<td>BIOS Version: 05.00.00</td>
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**Platform Notes (Continued)**

- **BIOS Date:** 04/25/2021  
- **BIOS Revision:** 5.22

(End of data from sysinfo program)

**Compiler Version Notes**

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<thead>
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<th>Compiler Name</th>
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<tr>
<td>C</td>
<td>519.lbm_r(base, peak) 538.imagick_r(base, peak) 544.nab_r(base, peak)</td>
</tr>
<tr>
<td>C++, C</td>
<td>511.povray_r(peak)</td>
</tr>
<tr>
<td>C++, C++</td>
<td>511.povray_r(base) 526.blender_r(base, peak)</td>
</tr>
</tbody>
</table>

**Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64,**  
**Version 2021.1 Build 20201113**  
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(Continued on next page)
Insipur Corporation

Inspur NF5180M6 (Intel Xeon Gold 6338N)

CPU2017 License: 3358
Test Sponsor: Inspur Corporation
Tested by: Inspur Corporation

SPECrate®2017_fp_base = 379
SPECrate®2017_fp_peak = 402

Test Date: Jul-2021
Hardware Availability: May-2021
Software Availability: Dec-2020

Compiler Version Notes (Continued)

C++, C     | 511.povray_r(peak)
-----------
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Intel(R) C Intel(R) 64 Compiler Classic for applications running on Intel(R)
64, Version 2021.1 Build 20201112_000000
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C++, C     | 511.povray_r(base) 526.blender_r(base, peak)
-----------
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C++, C, Fortran | 507.cactuBSSN_r(base, peak)
-----------------
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Fortran     | 503.bwaves_r(base, peak) 549.fotonik3d_r(base, peak)
-----------
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Fortran, C  | 521.wrf_r(peak)

(Continued on next page)
Insper Corporation

Insper NF5180M6 (Intel Xeon Gold 6338N)

SPECrater®2017_fp_base = 379

SPECrater®2017_fp_peak = 402

CPU2017 License: 3358
Test Sponsor: Insper Corporation
Tested by: Insper Corporation

Test Date: Jul-2021
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Compiler Version Notes (Continued)

---------------------------------------------------------------------
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Intel(R) C Intel(R) 64 Compiler Classic for applications running on Intel(R)
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---------------------------------------------------------------------
Fortran, C | 521.wrf_r(base) 527.cam4_r(base, peak)
---------------------------------------------------------------------
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---------------------------------------------------------------------
Fortran, C | 521.wrf_r(peak)
---------------------------------------------------------------------
Intel(R) Fortran Intel(R) 64 Compiler Classic for applications running on
Intel(R) 64, Version 2021.1 Build 20201112_000000
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Intel(R) C Intel(R) 64 Compiler Classic for applications running on Intel(R)
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Fortran, C | 521.wrf_r(base) 527.cam4_r(base, peak)
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---------------------------------------------------------------------
Base Compiler Invocation

C benchmarks:
icx

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

Inspur Corporation
Inspur NF5180M6 (Intel Xeon Gold 6338N)

SPECrate®2017_fp_base = 379
SPECrate®2017_fp_peak = 402

CPU2017 License: 3358
Test Sponsor: Inspur Corporation
Test Date: Jul-2021
Tested by: Inspur Corporation
Hardware Availability: May-2021
Software Availability: Dec-2020

Base Compiler Invocation (Continued)

C++ benchmarks:
  icpx

Fortran benchmarks:
  ifort

Benchmarks using both Fortran and C:
  ifort icx

Benchmarks using both C and C++:
  icpx icx

Benchmarks using Fortran, C, and C++:
  icpx icx ifort

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

Base Optimization Flags

C benchmarks:
  -w -std=c11 -m64 -Wl,-z,muldefs -xCORE-AVX512 -Ofast -ffast-math
  -flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4
  -mbranches-within-32B-boundaries -ljemalloc
  -L/usr/local/jemalloc64-5.0.1/lib

(Continued on next page)
Base Optimization Flags (Continued)

C++ benchmarks:
-`-w -m64 -Wl,-z,muldefs -xCORE-AVX512 -Ofast -ffast-math -flto`
-`-mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4`
-`-mbranches-within-32B-boundaries -ljemalloc`
-`-L/usr/local/jemalloc64-5.0.1/lib`

Fortran benchmarks:
-`-w -m64 -Wl,-z,muldefs -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 -ljemalloc`
-`-L/usr/local/jemalloc64-5.0.1/lib`

Benchmarks using both Fortran and C:
-`-w -m64 -std=c11 -Wl,-z,muldefs -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`
-`-mbranches-within-32B-boundaries -nostandard-realloc-lhs`
-`-align array32byte -auto -ljemalloc -L/usr/local/jemalloc64-5.0.1/lib`

Benchmarks using both C and C++:
-`-w -m64 -std=c11 -Wl,-z,muldefs -xCORE-AVX512 -Ofast -ffast-math`
-`-flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4`
-`-mbranches-within-32B-boundaries -ljemalloc`
-`-L/usr/local/jemalloc64-5.0.1/lib`

Benchmarks using Fortran, C, and C++:
-`-w -m64 -std=c11 -Wl,-z,muldefs -xCORE-AVX512 -Ofast -ffast-math`
-`-flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4 -O3`
-`-no-prec-div -qopt-prefetch -ffinite-math-only`
-`-qopt-multiple-gather-scatter-by-shuffles`
-`-mbranches-within-32B-boundaries -nostandard-realloc-lhs`
-`-align array32byte -auto -ljemalloc -L/usr/local/jemalloc64-5.0.1/lib`

Peak Compiler Invocation

C benchmarks:
icx

C++ benchmarks:
icpx
Peak Compiler Invocation (Continued)

Fortran benchmarks:
ifort

Benchmarks using both Fortran and C:
521.wrf_r: ifort icc
527.cam4_r: ifort icx

Benchmarks using both C and C++:
511.povray_r: icpc icc
526.blender_r: icpx icx

Benchmarks using Fortran, C, and C++:
icpx icx ifort

Peak Portability Flags

Same as Base Portability Flags

Peak Optimization Flags

C benchmarks:
519.lbm_r: basepeak = yes
538.imagick_r: basepeak = yes

C++ benchmarks:
508.namd_r: basepeak = yes
510.parest_r: -w -m64 -Wl,-z,muldefs -xCORE-AVX512 -Ofast -ffast-math -flto -mfpmath=sse -funroll-loops

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

**Inspur Corporation**

Inspur NF5180M6 (Intel Xeon Gold 6338N)

**SPECrate®2017_fp_base = 379**

**SPECrate®2017_fp_peak = 402**

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**Peak Optimization Flags (Continued)**

510.parest_r (continued):
-qopt-mem-layout-trans=4 -mbranches-within-32B-boundaries
-ljemalloc -L/usr/local/jemalloc64-5.0.1/lib

Fortran benchmarks:

503.bwaves_r: -w -m64 -Wl,-z,muldefs -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
-ljemalloc -L/usr/local/jemalloc64-5.0.1/lib

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 -O3
-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/jemalloc64-5.0.1/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 -O3
-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/jemalloc64-5.0.1/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/Inspur-Platform-Settings-V2.0.html
Inspur Corporation

Inspur NF5180M6 (Intel Xeon Gold 6338N)

SPECrate®2017_fp_base = 379
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CPU2017 License: 3358
Test Sponsor: Inspur Corporation
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Test Date: Jul-2021
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Software Availability: Dec-2020

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/Inspur-Platform-Settings-V2.0.xml

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