Fujitsu
PRIMERGY RX2530 M4, Intel Xeon Silver 4110, 2.10GHz

**SPECrate2017_fp_base = 85.6**
**SPECrate2017_fp_peak = 88.1**

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Software</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CPU Name</strong>: Intel Xeon Silver 4110</td>
<td><strong>OS</strong>: SUSE Linux Enterprise Server 12 SP2 4.4.14-92.64-default</td>
</tr>
<tr>
<td><strong>Max MHz.</strong>: 3000</td>
<td><strong>Compiler</strong>: C/C++: Version 18.0.0.128 of Intel C/C++ Compiler for Linux; Fortran: Version 18.0.0.128 of Intel Fortran Compiler for Linux</td>
</tr>
<tr>
<td><strong>Nominal</strong>: 2100</td>
<td><strong>Parallel</strong>: No</td>
</tr>
<tr>
<td><strong>Enabled</strong>: 16 cores, 2 chips, 2 threads/core</td>
<td><strong>Firmware</strong>: Fujitsu BIOS Version V5.0.0.12 R1.17.0 for D3383-A1x. Released Feb-2018</td>
</tr>
<tr>
<td><strong>Orderable</strong>: 1.2 chips</td>
<td><strong>File System</strong>: tmpfs</td>
</tr>
<tr>
<td><strong>Cache L1</strong>: 32 KB I + 32 KB D on chip per core</td>
<td><strong>System State</strong>: Run level 3 (multi-user)</td>
</tr>
<tr>
<td><strong>Cache L2</strong>: 1 MB I+D on chip per core</td>
<td><strong>Base Pointers</strong>: 64-bit</td>
</tr>
<tr>
<td><strong>Cache L3</strong>: 11 MB I+D on chip per core</td>
<td><strong>Peak Pointers</strong>: 64-bit</td>
</tr>
<tr>
<td><strong>Other</strong>: None</td>
<td><strong>Other</strong>: None</td>
</tr>
<tr>
<td><strong>Memory</strong>: 384 GB (24 x 16 GB 2Rx4 PC4-2666V-R, running at 2400)</td>
<td><strong>Memory</strong>: 384 GB tmpfs</td>
</tr>
<tr>
<td><strong>Storage</strong>: 384 GB tmpfs</td>
<td><strong>Other</strong>: None</td>
</tr>
<tr>
<td><strong>Other</strong>: 1 x SATA HDD, 1000 GB, 7200 RPM, used for swap</td>
<td><strong>Other</strong>: None</td>
</tr>
</tbody>
</table>
SPEC CPU2017 Floating Point Rate Result

Fujitsu
PRIMERGY RX2530 M4, Intel Xeon Silver 4110, 2.10GHz

SPECrate2017_fp_base = 85.6
SPECrate2017_fp_peak = 88.1

Results Table

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Base</th>
<th>Peak</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Copies</td>
<td>Seconds</td>
</tr>
<tr>
<td>503.bwaves_r</td>
<td>32</td>
<td>991</td>
</tr>
<tr>
<td>507.cactuBSSN_r</td>
<td>32</td>
<td>582</td>
</tr>
<tr>
<td>508.namd_r</td>
<td>32</td>
<td>547</td>
</tr>
<tr>
<td>510.parest_r</td>
<td>32</td>
<td>1366</td>
</tr>
<tr>
<td>511.povray_r</td>
<td>32</td>
<td>827</td>
</tr>
<tr>
<td>519.lbm_r</td>
<td>32</td>
<td>492</td>
</tr>
<tr>
<td>521.wrf_r</td>
<td>32</td>
<td>740</td>
</tr>
<tr>
<td>526.blender_r</td>
<td>32</td>
<td>636</td>
</tr>
<tr>
<td>527.cam4_r</td>
<td>32</td>
<td>797</td>
</tr>
<tr>
<td>538.imagick_r</td>
<td>32</td>
<td>723</td>
</tr>
<tr>
<td>544.nab_r</td>
<td>32</td>
<td>556</td>
</tr>
<tr>
<td>549.fotonik3d_r</td>
<td>32</td>
<td>1310</td>
</tr>
<tr>
<td>554.roms_r</td>
<td>32</td>
<td>953</td>
</tr>
</tbody>
</table>

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"
Set Kernel Boot Parameter: nohz_full=1-31
Set CPU frequency governor to maximum performance with:
cpuset --c all frequency-set -g performance
Set tmpfs filesystem with:
mkdir /home/memory
mount -t tmpfs -o size=384g,rw tmpfs /home/memory
Process tuning settings:
cpu idle state set with:
cpuset idle-set -d 1

General Notes
Environment variables set by runcpu before the start of the run:
LD_LIBRARY_PATH = "/home/memory/pecspeccpu/lib/ia32:/home/memory/pecspeccpu/lib/intel64"
LD_LIBRARY_PATH = "$LD_LIBRARY_PATH:/home/memory/pecspeccpu/je5.0.1-32:/home/memory/pecspeccpu/je5.0.1-64"

(Continued on next page)
Fujitsu
PRIMERGY RX2530 M4, Intel Xeon Silver 4110, 2.10GHz

SPECrate2017_fp_base = 85.6
SPECrate2017_fp_peak = 88.1

CPU2017 License: 19
Test Sponsor: Fujitsu
Tested by: Fujitsu

General Notes (Continued)

Binaries compiled on a system with 1x Intel Core i7-4790 CPU + 32GB RAM
memory using Redhat Enterprise Linux 7.4
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-2017-5754 (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.

Platform Notes

BIOS configuration:
 DCU Streamer Prefetcher = Disabled
Override OS Energy Performance = Enabled
Energy Performance = Performance
Package C State limit = C0
LLC Dead Line Alloc = Disabled
Stale AtoS = Enabled
Sub NUMA Clustering = Disabled
IMC Interleaving = 2-way
Fan Control = Full
Sysinfo program /home/memory/speccpu/bin/sysinfo
Rev: r5797 of 2017-06-14 96c45e4568ad54c135fd618bccc091c0f
running on RX2530M4 Sat Mar 17 19:54:20 2018

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 4110 CPU @ 2.10GHz
    2 "physical id"s (chips)
    32 "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: 8
siblings: 16
physical 0: cores 0 1 2 3 4 5 6 7
physical 1: cores 0 1 2 3 4 5 6 7

(Continued on next page)
### SPEC CPU2017 Floating Point Rate Result

**Fujitsu**  
PRIMERGY RX2530 M4, Intel Xeon Silver 4110, 2.10GHz  

<table>
<thead>
<tr>
<th>SPECrate2017_fp_base</th>
<th>SPECrate2017_fp_peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>85.6</td>
<td>88.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CPU2017 License</th>
<th>Test Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>Mar-2018</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Test Sponsor</th>
<th>Hardware Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fujitsu</td>
<td>Jul-2017</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tested by</th>
<th>Software Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fujitsu</td>
<td>Feb-2018</td>
</tr>
</tbody>
</table>

---

**Platform Notes (Continued)**

From `lscpu`:

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Architecture</td>
<td>x86_64</td>
</tr>
<tr>
<td>CPU op-mode(s)</td>
<td>32-bit, 64-bit</td>
</tr>
<tr>
<td>Byte Order</td>
<td>Little Endian</td>
</tr>
<tr>
<td>CPU(s)</td>
<td>32</td>
</tr>
<tr>
<td>On-line CPU(s) list</td>
<td>0-31</td>
</tr>
<tr>
<td>Thread(s) per core</td>
<td>2</td>
</tr>
<tr>
<td>Core(s) per socket</td>
<td>8</td>
</tr>
<tr>
<td>Socket(s)</td>
<td>2</td>
</tr>
<tr>
<td>NUMA node(s)</td>
<td>2</td>
</tr>
<tr>
<td>Vendor ID</td>
<td>GenuineIntel</td>
</tr>
<tr>
<td>CPU family</td>
<td>6</td>
</tr>
<tr>
<td>Model</td>
<td>85</td>
</tr>
<tr>
<td>Model name</td>
<td>Intel(R) Xeon(R) Silver 4110 CPU @ 2.10GHz</td>
</tr>
<tr>
<td>Stepping</td>
<td>4</td>
</tr>
<tr>
<td>CPU MHz</td>
<td>2474.893</td>
</tr>
<tr>
<td>CPU max MHz</td>
<td>3000.0000</td>
</tr>
<tr>
<td>CPU min MHz</td>
<td>800.0000</td>
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<tr>
<td>BogoMIPS</td>
<td>4190.15</td>
</tr>
<tr>
<td>Virtualization</td>
<td>VT-x</td>
</tr>
<tr>
<td>L1d cache</td>
<td>32K</td>
</tr>
<tr>
<td>L1i cache</td>
<td>32K</td>
</tr>
<tr>
<td>L2 cache</td>
<td>1024K</td>
</tr>
<tr>
<td>L3 cache</td>
<td>11264K</td>
</tr>
<tr>
<td>NUMA node0 CPU(s)</td>
<td>0-7, 16-23</td>
</tr>
<tr>
<td>NUMA node1 CPU(s)</td>
<td>8-15, 24-31</td>
</tr>
<tr>
<td>Flags</td>
<td>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 rdtsd cl constant_tsc arch_perfmon pebs bts rep_good nopl xtopology nonstop_tsc aperfmperf eagerfpu pni pclmulqdq dtes64 monitor ds_cpl vmx smx est tm2 ssse3 sdbg fma cx16 xtrm pdm ccid dca ssse4_1 ssse4_2 x2apic movbe popcnt tsc_deadline_timer aes xsave avx fl64 rdand lahf_lm abm 3dnowprefetch ida arat epb invpcid_single pln pts dtm hw hwp_act_window hwp_epp hwp_pkg_req intel_pt rsb_ctxsw spec_ctrl retpoline kaiser tpr_shadow vnmi flexpriority ept vpid fsgsbase tsc_adjust bmi1 hle avx2 smep bmi2 erm invpcid rtm cqm mpx avx512f avx512dq rdseed adx smap clflushopt clwb avx512cd avx512bw avx512vl xsavesopt xsaveopt xsave xgetbv1 cqm_llc cqm_occup_llc</td>
</tr>
</tbody>
</table>

From `numactl --hardware`:

```
WARNING: a numactl 'node' might or might not correspond to a physical chip.
```

```
From numactl --hardware:

<table>
<thead>
<tr>
<th>Node</th>
<th>CPUs</th>
<th>Memory</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0-7</td>
<td>191784 MB</td>
</tr>
<tr>
<td>1</td>
<td>8-15</td>
<td>182348 MB</td>
</tr>
</tbody>
</table>
```

(Continued on next page)
SPEC CPU2017 Floating Point Rate Result

Fujitsu
PRIMERGY RX2530 M4, Intel Xeon Silver 4110, 2.10GHz

SPECrate2017_fp_base = 85.6
SPECrate2017_fp_peak = 88.1

CPU2017 License: 19
Test Sponsor: Fujitsu
Test Date: Mar-2018
Tested by: Fujitsu
Hardware Availability: Jul-2017
Software Availability: Feb-2018

Platform Notes (Continued)
node 1 cpus: 8 9 10 11 12 13 14 15 24 25 26 27 28 29 30 31
node 1 size: 193388 MB
node 1 free: 192974 MB
node distances:
node 0 1
0: 10 21
1: 21 10

From /proc/meminfo
MemTotal: 394417256 kB
HugePages_Total: 0
Hugepagesize: 2048 kB

/usr/bin/lsb_release -d
SUSE Linux Enterprise Server 12 SP2

From /etc/*release* /etc/*version*
SuSE-release:
SUSE Linux Enterprise Server 12 (x86_64)
VERSION = 12
PATCHLEVEL = 2
# This file is deprecated and will be removed in a future service pack or release.
# Please check /etc/os-release for details about this release.
os-release:
NAME="SLES"
VERSION="12-SP2"
VERSION_ID="12.2"
PRETTY_NAME="SUSE Linux Enterprise Server 12 SP2"
ID="sles"
ANSI_COLOR="0;32"
CPE_NAME="cpe:/o:suse:sles:12:sp2"

uname -a:
Linux RX2530M4 4.4.114-92.64-default #1 SMP Thu Feb 1 19:18:19 UTC 2018 (c6ce5db)
x86_64 x86_64 x86_64 GNU/Linux

run-level 3 Mar 17 08:24

SPEC is set to: /home/memory/speccpu
Filesystem Type Size Used Avail Use% Mounted on
tmpfs tmpfs 384G 8.8G 376G 3% /home/memory

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.
BIOS FUJITSU // American Megatrends Inc. V5.0.0.12 R1.17.0 for D3383-A1x

(Continued on next page)
**Fujitsu**
PRIMERGY RX2530 M4, Intel Xeon Silver 4110, 2.10GHz

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</tr>
</thead>
<tbody>
<tr>
<td>SPECrate2017_fp_peak</td>
<td>88.1</td>
</tr>
</tbody>
</table>

**CPU2017 License:** 19  
**Test Sponsor:** Fujitsu  
**Tested by:** Fujitsu

**Test Date:** Mar-2018  
**Hardware Availability:** Jul-2017  
**Software Availability:** Feb-2018

---

**Platform Notes (Continued)**

02/08/2018  
Memory:
24x Hynix HMA42GR7BJR4N-VK 16 GB 2 rank 2666, configured at 2400

(End of data from sysinfo program)

---

**Compiler Version Notes**

```plaintext
CC 519.lbm_r(base) 538.imagick_r(base, peak) 544.nab_r(base)

icc (ICC) 18.0.0 20170811
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.

CC 519.lbm_r(peak) 544.nab_r(peak)

icc (ICC) 18.0.0 20170811
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.

CXXC 508.namd_r(base) 510.parest_r(base)

icpc (ICC) 18.0.0 20170811
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.

CXXC 508.namd_r(peak) 510.parest_r(peak)

icpc (ICC) 18.0.0 20170811
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.

CC 511.povray_r(base) 526.blender_r(base)

icpc (ICC) 18.0.0 20170811
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.

icc (ICC) 18.0.0 20170811
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.
```

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(Continued on next page)
Fujitsu
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CPU2017 License: 19
Test Sponsor: Fujitsu
Test Date: Mar-2018
Tested by: Fujitsu
Hardware Availability: Jul-2017
Software Availability: Feb-2018

Compiler Version Notes (Continued)

cc 511.povray_r(peak) 526.blender_r(peak)
------------------------------------------------------------------------------
icpc (ICC) 18.0.0 20170811
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.
icc (ICC) 18.0.0 20170811
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.
------------------------------------------------------------------------------
==============================================================================
f77 507.cactuBSSN_r(base)
------------------------------------------------------------------------------
icpc (ICC) 18.0.0 20170811
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.
icc (ICC) 18.0.0 20170811
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.
ifort (IFORT) 18.0.0 20170811
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.
------------------------------------------------------------------------------
==============================================================================
f77 507.cactuBSSN_r(peak)
------------------------------------------------------------------------------
icpc (ICC) 18.0.0 20170811
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.
icc (ICC) 18.0.0 20170811
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.
ifort (IFORT) 18.0.0 20170811
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.
------------------------------------------------------------------------------
==============================================================================
f77 503.bwaves_r(base, peak) 549.fotonik3d_r(base, peak) 554.roms_r(base)
------------------------------------------------------------------------------
ifort (IFORT) 18.0.0 20170811
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.
------------------------------------------------------------------------------
==============================================================================
f77 554.roms_r(peak)
------------------------------------------------------------------------------
ifort (IFORT) 18.0.0 20170811
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.
------------------------------------------------------------------------------
==============================================================================
cc 521.wrf_r(base) 527.cam4_r(base)
------------------------------------------------------------------------------
(Continued on next page)
Fujitsu

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CPU2017 License: 19
Test Sponsor: Fujitsu
Tested by: Fujitsu

Compiler Version Notes (Continued)

ifort (IFORT) 18.0.0 20170811
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.
icc (ICC) 18.0.0 20170811
Copyright (C) 1985-2017 Intel Corporation. All rights reserved.

==============================================================================
CC  521.wrf_r(peak) 527.cam4_r(peak)
==============================================================================

Base Compiler Invocation

C benchmarks:
icc

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

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

(Continued on next page)
SPEC CPU2017 Floating Point Rate Result

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Test Sponsor: Fujitsu
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Test Date: Mar-2018
Hardware Availability: Jul-2017
Software Availability: Feb-2018

Base Portability Flags (Continued)

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:
-xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch -ffinite-math-only
-qopt-mem-layout-trans=3

C++ benchmarks:
-xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch -ffinite-math-only
-qopt-mem-layout-trans=3

Fortran benchmarks:
-xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch -ffinite-math-only
-qopt-mem-layout-trans=3 -nostandard-realloc-lhs -align array32byte

Benchmarks using both Fortran and C:
-xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch -ffinite-math-only
-qopt-mem-layout-trans=3 -nostandard-realloc-lhs -align array32byte

Benchmarks using both C and C++:
-xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch -ffinite-math-only
-qopt-mem-layout-trans=3

Benchmarks using Fortran, C, and C++:
-xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch -ffinite-math-only
-qopt-mem-layout-trans=3 -nostandard-realloc-lhs -align array32byte

Base Other Flags

C benchmarks:
-m64 -std=c11

C++ benchmarks:
-m64

(Continued on next page)
### Base Other Flags (Continued)

Fortran benchmarks:

- `-m64`

Benchmarks using both Fortran and C:

- `-m64 -std=c11`

Benchmarks using both C and C++:

- `-m64 -std=c11`

Benchmarks using Fortran, C, and C++:

- `-m64 -std=c11`

### Peak Compiler Invocation

C benchmarks:

- `icc`

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:

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

519.lbm_r: -prof-gen(pass 1) -prof-use(pass 2) -ipo -xCORE-AVX2 -O3
-no-prec-div -qopt-prefetch -ffinite-math-only
-qopt-mem-layout-trans=3

538.imagick_r: -xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch
-ffinite-math-only -qopt-mem-layout-trans=3

544.nab_r: Same as 519.lbm_r

C++ benchmarks:
-prof-gen(pass 1) -prof-use(pass 2) -ipo -xCORE-AVX2 -O3
-no-prec-div -qopt-prefetch -ffinite-math-only
-qopt-mem-layout-trans=3

Fortran benchmarks:

503.bwaves_r: -xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch
-ffinite-math-only -qopt-mem-layout-trans=3
-nostandard-realloc-lhs -align array32byte

549.fotonik3d_r: Same as 503.bwaves_r

554.roms_r: -prof-gen(pass 1) -prof-use(pass 2) -ipo -xCORE-AVX2 -O3
-no-prec-div -qopt-prefetch -ffinite-math-only
-qopt-mem-layout-trans=3 -nostandard-realloc-lhs
-align array32byte

Benchmarks using both Fortran and C:
-prof-gen(pass 1) -prof-use(pass 2) -ipo -xCORE-AVX2 -O3
-no-prec-div -qopt-prefetch -ffinite-math-only
-qopt-mem-layout-trans=3 -nostandard-realloc-lhs -align array32byte

Benchmarks using both C and C++:
-prof-gen(pass 1) -prof-use(pass 2) -ipo -xCORE-AVX2 -O3
-no-prec-div -qopt-prefetch -ffinite-math-only
-qopt-mem-layout-trans=3

Benchmarks using Fortran, C, and C++:

507.cactuBSSN_r: basepeak = yes
Fujitsu
PRIMERGY RX2530 M4, Intel Xeon Silver 4110, 2.10GHz

SPECrate2017_fp_base = 85.6
SPECrate2017_fp_peak = 88.1

Peak Other Flags

C benchmarks:
- m64 -std=c11

C++ benchmarks:
- m64

Fortran benchmarks:
- m64

Benchmarks using both Fortran and C:
- m64 -std=c11

Benchmarks using both C and C++:
- m64 -std=c11

Benchmarks using Fortran, C, and C++:
- m64 -std=c11

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

You can also download the XML flags sources by saving the following links:
http://www.spec.org/cpu2017/flags/Fujitsu-Platform-Settings-V1.2-SKL-RevE.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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