NEC Corporation

Express5800/R110i-1 (Intel Xeon E3-1225 v6)

SPEC® CPU2017 Floating Point Rate Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

CPU2017 License: 9006
Test Sponsor: NEC Corporation
Tested by: NEC Corporation

Test Date: Oct-2018
Hardware Availability: Apr-2017
Software Availability: Mar-2018

Copies

SPECrate2017_fp_base = 26.8
SPECrate2017_fp_peak = 27.2

Hardware

CPU Name: Intel Xeon E3-1225 v6
Max MHz.: 3700
Nominal: 3300
Enabled: 4 cores, 1 chip
Orderable: 1 chip
Cache L1: 32 KB I + 32 KB D on chip per core
L2: 256 KB I+D on chip per core
L3: 8 MB I+D on chip per chip
Other: None
Memory: 64 GB (4 x 16 GB 2Rx8 PC4-2400T-E)
Storage: 1 x 1 TB SATA, 7200 RPM
Other: None

Software

OS: Red Hat Enterprise Linux Server release 7.4 (Maipo)
Compiler: C/C++: Version 18.0.2.199 of Intel C/C++ Compiler for Linux;
Fortran: Version 18.0.2.199 of Intel Fortran Compiler for Linux
Parallel: No
Firmware: Version 5.0.3006 02/28/2018 released Apr-2018
File System: ext4
System State: Run level 3 (multi-user)
Base Pointers: 64-bit
Peak Pointers: 64-bit
Other: None
### Results Table

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Copies</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>503.bwaves_r</td>
<td>4</td>
<td>589</td>
<td>68.1</td>
<td>589</td>
<td>68.1</td>
<td>589</td>
<td>68.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>507.cactuBSSN_r</td>
<td>4</td>
<td>227</td>
<td>22.3</td>
<td>227</td>
<td>22.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>508.namd_r</td>
<td>4</td>
<td>211</td>
<td>18.0</td>
<td>212</td>
<td>17.9</td>
<td>210</td>
<td>18.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>510.parest_r</td>
<td>4</td>
<td>588</td>
<td>17.8</td>
<td>596</td>
<td>17.6</td>
<td>592</td>
<td>17.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>511.povray_r</td>
<td>4</td>
<td>316</td>
<td>29.5</td>
<td>315</td>
<td>29.6</td>
<td>319</td>
<td>29.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>519.lbm_r</td>
<td>4</td>
<td>252</td>
<td>16.7</td>
<td>252</td>
<td>16.7</td>
<td>253</td>
<td>16.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>521.wrf_r</td>
<td>4</td>
<td>277</td>
<td>32.4</td>
<td>276</td>
<td>32.5</td>
<td>275</td>
<td>32.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>526.blender_r</td>
<td>4</td>
<td>250</td>
<td>24.4</td>
<td>250</td>
<td>24.4</td>
<td>250</td>
<td>24.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>527.cam4_r</td>
<td>4</td>
<td>241</td>
<td>29.0</td>
<td>242</td>
<td>29.0</td>
<td>240</td>
<td>29.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>538.imagick_r</td>
<td>4</td>
<td>156</td>
<td>63.7</td>
<td>154</td>
<td>64.4</td>
<td>155</td>
<td>64.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>544.nab_r</td>
<td>4</td>
<td>188</td>
<td>35.8</td>
<td>187</td>
<td>35.9</td>
<td>188</td>
<td>35.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>549.fotonik3d_r</td>
<td>4</td>
<td>746</td>
<td>20.9</td>
<td>745</td>
<td>20.9</td>
<td>746</td>
<td>20.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>554.roms_r</td>
<td>4</td>
<td>451</td>
<td>14.1</td>
<td>450</td>
<td>14.1</td>
<td>450</td>
<td>14.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SPECrate2017_fp_base** = 26.8  
**SPECrate2017_fp_peak** = 27.2  

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

### Submit Notes

The taskset mechanism was used to bind copies to processors. The config file option 'submit' was used to generate taskset 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"

### General Notes

Environment variables set by runcpu before the start of the run:
LD_LIBRARY_PATH = "/home/cpu2017/lib/ia32:/home/cpu2017/lib/intel64:/home/cpu2017/je5.0.1-32:/home/cpu2017/je5.0.1-64"

Binaries compiled on a system with 1x Intel Core i7-6700K CPU + 32GB RAM memory using Redhat Enterprise Linux 7.5

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

Yes: The test sponsor attests, as of date of publication, that CVE-2017-5754 (Meltdown) is mitigated in the system as tested and documented.

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

NEC Corporation

Express5800/R110i-1 (Intel Xeon E3-1225 v6)  

<table>
<thead>
<tr>
<th>SPECrate2017_fp_base</th>
<th>26.8</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECrate2017_fp_peak</td>
<td>27.2</td>
</tr>
</tbody>
</table>

CPU2017 License: 9006  
Test Sponsor: NEC Corporation  
Tested by: NEC Corporation  
Test Date: Oct-2018  
Hardware Availability: Apr-2017  
Software Availability: Mar-2018

General Notes (Continued)

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 Settings:
Power Management Policy: Custom
Energy Performance: Performance
DCU Streamer Prefetcher: Disabled
Sysinfo program /home/cpu2017/bin/sysinfo
Rev: r5974 of 2018-05-19 9bcde8f2999c33d61f64985e45859ea9
running on r1101l Fri Oct 12 16:10:12 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) CPU E3-1225 v6 @ 3.30GHz
  - 1 "physical id"s (chips)
  - 4 "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 : 4
    - siblings : 4
    - physical 0: cores 0 1 2 3

From lscpu:

- Architecture: x86_64
- CPU op-mode(s): 32-bit, 64-bit
- Byte Order: Little Endian
- CPU(s): 4
- On-line CPU(s) list: 0-3
- Thread(s) per core: 1
- Core(s) per socket: 4
- Socket(s): 1
- NUMA node(s): 1
- Vendor ID: GenuineIntel
- CPU family: 6
- Model: 158
- Model name: Intel(R) Xeon(R) CPU E3-1225 v6 @ 3.30GHz
- Stepping: 9
- CPU MHz: 3629.871

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

**NEC Corporation**

Express5800/R110i-1 (Intel Xeon E3-1225 v6)  

<table>
<thead>
<tr>
<th>SPECrate2017_fp_base</th>
<th>26.8</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECrate2017_fp_peak</td>
<td>27.2</td>
</tr>
</tbody>
</table>

**CPU2017 License:** 9006  
**Test Sponsor:** NEC Corporation  
**Tested by:** NEC Corporation  
**Test Date:** Oct-2018  
**Hardware Availability:** Apr-2017  
**Software Availability:** Mar-2018

### Platform Notes (Continued)

- **CPU max MHz:** 3700.0000  
- **CPU min MHz:** 800.0000  
- **BogoMIPS:** 6624.00  
- **Virtualization:** VT-x  
- **L1d cache:** 32K  
- **L1i cache:** 32K  
- **L2 cache:** 256K  
- **L3 cache:** 8192K  
- **NUMA node0 CPU(s):** 0-3  
- **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 arch_perfmon pebs bts rep_good nopl xtopology nonstop_tsc aperffmperf eagerfpu pni pclmulqdq dtes64 monitor ds_cpl vmx smx est tm2 ssse3 fma cx16 xtpr pdcm pcid sse4_1 sse4_2 x2apic movbe popcnt tsc_deadline_timer aes xsave avx f16c rdrand lahf_lm abm 3dnowprefetch epb invpcid_single intel_pt spec_ctrl ibpb_support tpr_shadow vnmi flexpriority ept vpid fsgsbase tsc_adjust bmi1 hle avx2 smep bmi2 erm invpcid rtm mpx rdseed adx smap clflushopt xsaveopt xsavec xgetbv1 dtherm ida arat pin pts hwp hwp_notify hwp_act_window hwp_epp

From `numactl --hardware`  
**WARNING:** a numactl 'node' might or might not correspond to a physical chip.  
- **available:** 1 nodes (0)  
- **node 0 cpus:** 0 1 2 3  
- **node 0 size:** 65474 MB  
- **node 0 free:** 63619 MB  
- **node distances:**  
  - node 0  
  - 0: 10

From `/proc/meminfo`  
- **MemTotal:** 65915844 kB  
- **HugePages_Total:** 0  
- **Hugepagesize:** 2048 kB

From `/etc/*release*`  
- **NAME:** Red Hat Enterprise Linux Server"  
- **VERSION:**"7.4 (Maipo)"  
- **ID:**"rhel"  
- **ID_LIKE:**"fedora"  
- **VARIANT:**"Server"  
- **VARIANT_ID:**"server"  
- **VERSION_ID:**"7.4"  
- **PRETTY_NAME:**"Red Hat Enterprise Linux Server 7.4 (Maipo)"

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

NEC Corporation

Express5800/R110i-1 (Intel Xeon E3-1225 v6)

SPECrate2017_fp_base = 26.8
SPECrate2017_fp_peak = 27.2

CPU2017 License: 9006
Test Sponsor: NEC Corporation
Tested by: NEC Corporation

Platform Notes (Continued)

redhat-release: Red Hat Enterprise Linux Server release 7.4 (Maipo)
system-release: Red Hat Enterprise Linux Server release 7.4 (Maipo)
system-release-cpe: cpe:/o:redhat:enterprise_linux:7.4:ga:server

uname -a:
    Linux r110i1 3.10.0-693.21.1.el7.x86_64 #1 SMP Fri Feb 23 18:54:16 UTC 2018 x86_64
    x86_64 x86_64 GNU/Linux

Kernel self-reported vulnerability status:

CVE-2017-5754 (Meltdown): Mitigation: PTI
CVE-2017-5753 (Spectre variant 1): Mitigation: Load fences
CVE-2017-5715 (Spectre variant 2): Mitigation: IBRS (kernel)

run-level 3 Oct 12 16:04

SPEC is set to: /home/cpu2017

Filesystem     Type  Size  Used Avail Use% Mounted on
/dev/sda3      ext4  909G   85G  778G  10% /

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 American Megatrends Inc. 5.0.3006 02/28/2018
    Memory:
        4x Micron 18ASF2G72AZ-2G3B1 16 GB 2 rank 2400

(End of data from sysinfo program)

Compiler Version Notes

==============================================================================
CC  519.lbm_r(base) 538.imagick_r(base, peak) 544.nab_r(base, peak)
==============================================================================
icc (ICC) 18.0.2 20180210
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
==============================================================================

==============================================================================
CC  519.lbm_r(peak)
==============================================================================
icc (ICC) 18.0.2 20180210
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
==============================================================================

(Continued on next page)
NEC Corporation

Express5800/R110i-1 (Intel Xeon E3-1225 v6)

SPEC CPU2017 Floating Point Rate Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

SPECrate2017_fp_base = 26.8
SPECrate2017_fp_peak = 27.2

CPU2017 License: 9006
Test Sponsor: NEC Corporation
Test Date: Oct-2018
Tested by: NEC Corporation
Hardware Availability: Apr-2017
Software Availability: Mar-2018

Compiler Version Notes (Continued)

==============================================================================
CXXC 508.namd_r(base) 510.parest_r(base, peak)
------------------------------------------------------------------------------
icpc (ICC) 18.0.2 20180210
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
------------------------------------------------------------------------------
CXXC 508.namd_r(peak)
------------------------------------------------------------------------------
icpc (ICC) 18.0.2 20180210
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
------------------------------------------------------------------------------
CC  511.povray_r(base) 526.blender_r(base, peak)
------------------------------------------------------------------------------
icpc (ICC) 18.0.2 20180210
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
icc (ICC) 18.0.2 20180210
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
------------------------------------------------------------------------------
CC  511.povray_r(peak)
------------------------------------------------------------------------------
icpc (ICC) 18.0.2 20180210
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
icc (ICC) 18.0.2 20180210
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
------------------------------------------------------------------------------
FC  507.cactuBSSN_r(base, peak)
------------------------------------------------------------------------------
icpc (ICC) 18.0.2 20180210
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
icc (ICC) 18.0.2 20180210
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
ifort (IFORT) 18.0.2 20180210
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
------------------------------------------------------------------------------
FC  503.bwaves_r(base, peak) 549.fotonik3d_r(base, peak) 554.roms_r(base)
------------------------------------------------------------------------------
ifort (IFORT) 18.0.2 20180210

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

Express5800/R110i-1 (Intel Xeon E3-1225 v6)

<table>
<thead>
<tr>
<th>SPECrate2017_fp_base</th>
<th>SPECrate2017_fp_peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>26.8</td>
<td>27.2</td>
</tr>
</tbody>
</table>

**Compiler Version Notes (Continued)**

Copyright (C) 1985-2018 Intel Corporation. All rights reserved.

---

FC 554.roms_r(peak)

ifort (IFORT) 18.0.2 20180210
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.

---

CC 521.wrf_r(base) 527.cam4_r(base)

ifort (IFORT) 18.0.2 20180210
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.

icc (ICC) 18.0.2 20180210
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.

---

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

ifort (IFORT) 18.0.2 20180210
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.

icc (ICC) 18.0.2 20180210
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.

---

**Base Compiler Invocation**

C benchmarks:

```
icc -m64 -std=c11
```

C++ benchmarks:

```
icpc -m64
```

Fortran benchmarks:

```
ifort -m64
```

Benchmarks using both Fortran and C:

```
ifort -m64 icc -m64 -std=c11
```

Benchmarks using both C and C++:

```
icpc -m64 icc -m64 -std=c11
```

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

**NEC Corporation**

Express5800/R110i-1 (Intel Xeon E3-1225 v6)

<table>
<thead>
<tr>
<th>SPECrate2017_fp_base</th>
<th>26.8</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECrate2017_fp_peak</td>
<td>27.2</td>
</tr>
</tbody>
</table>

- **CPU2017 License**: 9006
- **Test Sponsor**: NEC Corporation
- **Tested by**: NEC Corporation
- **Test Date**: Oct-2018
- **Hardware Availability**: Apr-2017
- **Software Availability**: Mar-2018

---

**Base Compiler Invocation (Continued)**

Benchmarks using Fortran, C, and C++:

```
icpc -m64 icc -m64 -std=c11 ifort -m64```

---

**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:**

```
-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 -auto -nostandard-realloc-lhs```

**Benchmarks using both Fortran and C:**

```
-xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch -ffinite-math-only
-qopt-mem-layout-trans=3 -auto -nostandard-realloc-lhs```

**Benchmarks using both C and C++:**

```
-xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch -ffinite-math-only
-qopt-mem-layout-trans=3```
### Base Optimization Flags (Continued)

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

### Peak Compiler Invocation

**C benchmarks:**
- `icc -m64 -std=c11`

**C++ benchmarks:**
- `icpc -m64`

**Fortran benchmarks:**
- `ifort -m64`

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

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

Benchmarks using Fortran, C, and C++:
- `icpc -m64 icc -m64 -std=c11 ifort -m64`

### Peak Portability Flags

Same as Base Portability Flags

### Peak Optimization Flags

C benchmarks:
- `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: basepeak = yes

544.nab_r: basepeak = yes
### NEC Corporation

**Express5800/R110i-1 (Intel Xeon E3-1225 v6)**

**SPECrate2017_fp_base = 26.8**

**SPECrate2017_fp_peak = 27.2**

<table>
<thead>
<tr>
<th>CPU2017 License:</th>
<th>9006</th>
<th>Test Date:</th>
<th>Oct-2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Sponsor:</td>
<td>NEC Corporation</td>
<td>Hardware Availability:</td>
<td>Apr-2017</td>
</tr>
<tr>
<td>Tested by:</td>
<td>NEC Corporation</td>
<td>Software Availability:</td>
<td>Mar-2018</td>
</tr>
</tbody>
</table>

---

### Peak Optimization Flags (Continued)

**C++ benchmarks:**

- 508.namd_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`
- 510.parest_r: `-xCORE-AVX2 -ipo -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 -auto -nostandard-realloc-lhs`
- 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 -auto -nostandard-realloc-lhs`

**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 -auto -nostandard-realloc-lhs`

**Benchmarks using both C and C++:**

- 511.povray_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`
- 526.blender_r: `-xCORE-AVX2 -ipo -O3 -no-prec-div -qopt-prefetch -ffinite-math-only -qopt-mem-layout-trans=3 -auto -nostandard-realloc-lhs`

---

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:

### SPEC CPU2017 Floating Point Rate Result

<table>
<thead>
<tr>
<th>NEC Corporation</th>
<th>SPECrate2017_fp_base = 26.8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Express5800/R110i-1 (Intel Xeon E3-1225 v6)</td>
<td>SPECrate2017_fp_peak = 27.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CPU2017 License: 9006</th>
<th>Test Date: Oct-2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Sponsor: NEC Corporation</td>
<td>Hardware Availability: Apr-2017</td>
</tr>
<tr>
<td>Tested by: NEC Corporation</td>
<td>Software Availability: Mar-2018</td>
</tr>
</tbody>
</table>

SPEC is a registered trademark 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 CPU2017 v1.0.5 on 2018-10-12 03:10:11-0400.
Originally published on 2018-10-30.