Fujitsu
PRIMERGY RX1330 M4, Intel Celeron G4900, 3.10GHz

SPECspeed2017_fp_base = 11.7
SPECspeed2017_fp_peak = Not Run

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<td>619.lbm_s 2</td>
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<td>627.cam4_s 2</td>
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<td>628.pop2_s 2</td>
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<td>644.nab_s 2</td>
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</tr>
<tr>
<td>Threads</td>
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Hardware
CPU Name: Intel Celeron G4900
Max MHz.: 3100
Nominal: 3100
Enabled: 2 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: 2 MB I+D on chip per chip
Other: None
Memory: 64 GB (4 x 16 GB 2Rx8 PC4-2666V-E, running at 2400)
Storage: 1 x SATA M.2 SSD, 240 GB
Other: None

Software
OS: Red Hat Enterprise Linux Server release 7.5 (Maipo)
3.10.0-862.el7.x86_64
Compiler: C/C++: Version 19.0.0.117 of Intel C/C++
Compiler for Linux:
Fortran: Version 19.0.0.117 of Intel Fortran
Compiler for Linux
Parallel: Yes
Firmware: Fujitsu BIOS Version V5.0.0.13 R1.4.0 for D3675-A1x. Released Nov-2018 tested as V5.0.0.13 R1.0.0 for D3675-A1x Sep-2018
File System: xfs
System State: Run level 3 (multi-user)
Base Pointers: 64-bit
Peak Pointers: Not Applicable
Other: None
SPEC CPU2017 Floating Point Speed Result

Fujitsu
PRIMERGY RX1330 M4, Intel Celeron G4900, 3.10GHz

SPECspeed2017_fp_base = 11.7
SPECspeed2017_fp_peak = Not Run

Results Table

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</tbody>
</table>

SPECspeed2017_fp_base = 11.7
SPECspeed2017_fp_peak = Not Run

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:
KMP_AFFINITY = "granularity=fine,compact"
LD_LIBRARY_PATH = "/home/Benchmark/speccpu2017-ic19/ic19.0-lib/intel64"
OMP_STACKSIZE = "192M"

Binaries compiled on a system with 1x Intel Xeon E-2186G CPU + 64GB RAM memory using Red Hat Enterprise Linux Server release 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.
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.
SPEC CPU2017 Floating Point Speed Result

Fujitsu
PRIMERGY RX1330 M4, Intel Celeron G4900, 3.10GHz

SPECspeed2017_fp_base = 11.7
SPECspeed2017_fp_peak = Not Run

CPU2017 License: 19
Test Sponsor: Fujitsu
Test Date: Nov-2018
Tested by: Fujitsu
Hardware Availability: Nov-2018
Software Availability: Sep-2018

Platform Notes

Sysinfo program /home/Benchmark/speccpu2017-ic19/bin/sysinfo
Rev: r5797 of 2017-06-14 96c45e4568ad54c135fd618b0c091c0f
running on localhost.localdomain Mon Nov 12 17:00:10 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) Celeron(R) G4900 CPU @ 3.10GHz
  1 "physical id"s (chips)
  2 "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 : 2
siblings : 2
physical 0: cores 0 1

From lscpu:

Architecture: x86_64
CPU op-mode(s): 32-bit, 64-bit
Byte Order: Little Endian
CPU(s): 2
On-line CPU(s) list: 0,1
Thread(s) per core: 1
Core(s) per socket: 2
Socket(s): 1
NUMA node(s): 1
Vendor ID: GenuineIntel
CPU family: 6
Model: 158
Model name: Intel(R) Celeron(R) G4900 CPU @ 3.10GHz
Stepping: 11
CPU MHz: 3100.000
CPU max MHz: 3100.0000
CPU min MHz: 800.0000
BogoMIPS: 6192.00
Virtualization: VT-x
L1d cache: 32K
L1i cache: 32K
L2 cache: 256K
L3 cache: 2048K
NUMA node0 CPU(s): 0,1
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 rdtdsc
lm constant_tsc art arch_perfmon pebs bts rep_good nopl xtopology nonstop_tsc
aperfmperf eagerfpu pni pclmulqdq dtes64 monitor ds_cpl vmx est tm2 ssse3 sdbg cx16

(Continued on next page)
Fujitsu
PRIMERGY RX1330 M4, Intel Celeron G4900, 3.10GHz

SPEC CPU2017 Floating Point Speed Result

Copyright 2017-2018 Standard Performance Evaluation Corporation

SPECspeed2017_fp_base = 11.7
SPECspeed2017_fp_peak = Not Run

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

Test Date: Nov-2018
Hardware Availability: Nov-2018
Software Availability: Sep-2018

Platform Notes (Continued)

xtpr pdcm pcid sse4_1 sse4_2 x2apic movbe popcnt tsc_deadline_timer aes xsave rdrand
lahf_lm abm 3dnowprefetch epb intel_pt tpr_shadow vmmi flexpriority ept vpid
fsqsgbase tsc_adjust smep erms invpcid mpx rdrand ssse3 f100e xsaveopt xsavetz
xgetbv1 ibpb ibrs stibp dtherm arat pln pts hwp hwp_notify hwp_act_window hwp_epp
spec_ctrl intel_stibp

/proccpuinfo cache data
cache size : 2048 KB

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

available: 1 nodes (0)
ode 0 cpus: 0 1
node 0 size: 65278 MB
node 0 free: 63254 MB
node distances:
node 0
0: 10

From /proc/meminfo
MemTotal: 65546392 kB
HugePages_Total: 0
Hugepagesize: 2048 kB

From /etc/*release* /etc/*version*

os-release:
NAME="Red Hat Enterprise Linux Server"
VERSION="7.5 (Maipo)"
ID="rhel"
ID_LIKE="fedora"
VARIANT="Server"
VARIANT_ID="server"
VERSION_ID="7.5"
PREGI_NAME="Red Hat Enterprise Linux Server 7.5 (Maipo)"
redhat-release: Red Hat Enterprise Linux Server release 7.5 (Maipo)
system-release: Red Hat Enterprise Linux Server release 7.5 (Maipo)
system-release-cpe: cpe:/o:redhat:enterprise_linux:7.5:ga:server

uname -a:
Linux localhost.localdomain 3.10.0-862.el7.x86_64 #1 SMP Wed Mar 21 18:14:51 EDT 2018
x86_64 x86_64 GNU/Linux

run-level 3 Nov 12 16:46

SPEC is set to: /home/Benchmark/speccpu2017-ic19

Filesystem Type Size Used Avail Use% Mounted on
/dev/mapper/rhel-home xfs 150G 70G 81G 47% /home

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

**Fujitsu**

PRIMERGY RX1330 M4, Intel Celeron G4900, 3.10GHz

<table>
<thead>
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<td>SPECspeed2017_fp_peak</td>
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**CPU2017 License:** 19  
**Test Sponsor:** Fujitsu  
**Tested by:** Fujitsu  
**Test Date:** Nov-2018  
**Hardware Availability:** Nov-2018  
**Software Availability:** Sep-2018

**Platform Notes (Continued)**

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. V5.0.0.13 R1.0.0 for D3675-A1x  
09/14/2018  
Memory:  
4x SK Hynix HMA82GU7CJR8N-VK 16 GB 2 rank 2667, configured at 2400

(End of data from sysinfo program)

**Compiler Version Notes**

```
CC  619.lbm_s(base) 638.imagick_s(base) 644.nab_s(base)
```

---

```
icc (ICC) 19.0.0.117 20180804  
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
```

---

```
FC  607.cactuBSSN_s(base)
```

---

```
icpc (ICC) 19.0.0.117 20180804  
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
```

---

```
icc (ICC) 19.0.0.117 20180804  
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
```

---

```
ifort (IFORT) 19.0.0.117 20180804  
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
```

---

```
FC  603.bwaves_s(base) 649.fotonik3d_s(base) 654.roms_s(base)
```

---

```
ifort (IFORT) 19.0.0.117 20180804  
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
```

---

```
CC  621.wrf_s(base) 627.cam4_s(base) 628.pop2_s(base)
```

---

```
ifort (IFORT) 19.0.0.117 20180804  
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
```

---

```
icc (ICC) 19.0.0.117 20180804  
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
```

---

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ifort (IFORT) 19.0.0.117 20180804  
Copyright (C) 1985-2018 Intel Corporation. All rights reserved.
```

---

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

**Fujitsu**

PRIMERGY RX1330 M4, Intel Celeron G4900, 3.10GHz

<table>
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**CPU2017 License:** 19  
**Test Sponsor:** Fujitsu  
**Tested by:** Fujitsu  
**Test Date:** Nov-2018  
**Hardware Availability:** Nov-2018  
**Software Availability:** Sep-2018

### Compiler Version Notes (Continued)

#### Base Compiler Invocation

C benchmarks:

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

Fortran benchmarks:

```
ifort -m64
```

Benchmarks using both Fortran and C:

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

Benchmarks using Fortran, C, and C++:

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

#### Base Portability Flags

- 603.bwaves_s: -DSPEC_LP64
- 607.cactuBSSN_s: -DSPEC_LP64
- 619.lbm_s: -DSPEC_LP64
- 621.wrf_s: -DSPEC_LP64 -DSPEC_CASE_FLAG -convert big_endian
- 627.cam4_s: -DSPEC_LP64 -DSPEC_CASE_FLAG
- 628.pop2_s: -DSPEC_LP64 -DSPEC_CASE_FLAG -convert big_endian
- assume byterecl
- 638.imagick_s: -DSPEC_LP64
- 644.nab_s: -DSPEC_LP64
- 649.fotonik3d_s: -DSPEC_LP64
- 654.roms_s: -DSPEC_LP64

#### Base Optimization Flags

C benchmarks:

```
-xSSE4.2 -ipo -O3 -no-prec-div -qopt-prefetch -ffinite-math-only
-qopt-mem-layout-trans=3 -qopenmp -DSPEC_OPENMP
```

Fortran benchmarks:

```
-DSPEC_OPENMP -xSSE4.2 -ipo -O3 -no-prec-div -qopt-prefetch
-ffinite-math-only -qopt-mem-layout-trans=3 -qopenmp
-nostandard-realloc-lhs -align array32byte
```

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

**Fujitsu**  
PRIMERGY RX1330 M4, Intel Celeron G4900, 3.10GHz  

<table>
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**Test Date:** Nov-2018  
**Hardware Availability:** Nov-2018  
**Software Availability:** Sep-2018

---

**Base Optimization Flags (Continued)**

Benchmarks using both Fortran and C:
- `-xSSE4.2`  
- `-ipo`  
- `-o3`  
- `-no-prec-div`  
- `-qopt-prefetch`  
- `-ffinite-math-only`  
- `-qopt-mem-layout-trans=3`  
- `-qopenmp`  
- `-DSPEC_OPENMP`  
- `-nostandard-realloc-lhs`  
- `-align array32byte`

Benchmarks using Fortran, C, and C++:
- `-xSSE4.2`  
- `-ipo`  
- `-o3`  
- `-no-prec-div`  
- `-qopt-prefetch`  
- `-ffinite-math-only`  
- `-qopt-mem-layout-trans=3`  
- `-qopenmp`  
- `-DSPEC_OPENMP`  
- `-nostandard-realloc-lhs`  
- `-align array32byte`

---

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-V1.0.2-CFL-RevB.xml](http://www.spec.org/cpu2017/flags/Fujitsu-Platform-Settings-V1.0.2-CFL-RevB.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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Originally published on 2018-11-27.