## SPEC CPU®2017 Floating Point Speed Result

### Dell Inc.

**PowerEdge XR11 (Intel Xeon Gold 6326, 2.90 GHz)**

<table>
<thead>
<tr>
<th>SPECspeed®2017_fp_base</th>
<th>SPECspeed®2017_fp_peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>102</td>
<td>104</td>
</tr>
</tbody>
</table>

**CPU2017 License:** 55  
**Test Sponsor:** Dell Inc.  
**Test Date:** May-2021  
**Tested by:** Dell Inc.  
**Hardware Availability:** Jul-2021  
**Software Availability:** Feb-2021

### Hardware

- **CPU Name:** Intel Xeon Gold 6326  
- **Max MHz:** 3500  
- **Nominal:** 2900  
- **Enabled:** 16 cores, 1 chip  
- **Orderable:** 1 chip  
- **Cache L1:** 32 KB I + 48 KB D on chip per core  
- **L2:** 1.25 MB I+D on chip per core  
- **L3:** 24 MB I+D on chip per chip  
- **Other:** None  
- **Memory:** 512 GB (8 x 64 GB 2Rx4 PC4-3200AA-R)  
- **Storage:** 225 GB on tmpfs  
- **Other:** None

### Software

- **OS:** Red Hat Enterprise Linux 8.3 (Ootpa)  
  4.18.0-240.15.1.el8_3.x86_64  
- **Compiler:**  
  C/C++: Version 2021.1 of Intel oneAPI DPC++/C++  
  Compiler Build 20201113 for Linux;  
  Fortran: Version 2021.1 of Intel Fortran Compiler  
  Classic Build 20201112 for Linux;  
  C/C++: Version 2021.1 of Intel C/C++ Compiler  
  Classic Build 20201112 for Linux

- **Parallel:** Yes  
- **Firmware:** Version 0.6.2 released Apr-2021  
- **File System:** tmpfs  
- **System State:** Run level 5 (graphical multi-user)  
- **Base Pointers:** 64-bit  
- **Peak Pointers:** 64-bit  
- **Other:** jemalloc memory allocator V5.0.1  
- **Power Management:** BIOS and OS set to prefer performance at the cost of additional power usage.

<table>
<thead>
<tr>
<th>Threads</th>
<th>SPECspeed®2017_fp_base</th>
<th>SPECspeed®2017_fp_peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>129</td>
<td>345</td>
</tr>
<tr>
<td>16</td>
<td>72.5</td>
<td>129</td>
</tr>
<tr>
<td>16</td>
<td>119</td>
<td>127</td>
</tr>
<tr>
<td>16</td>
<td>60.3</td>
<td>127</td>
</tr>
<tr>
<td>16</td>
<td>85.9</td>
<td>127</td>
</tr>
<tr>
<td>16</td>
<td>67.7</td>
<td>127</td>
</tr>
<tr>
<td>16</td>
<td>141</td>
<td>141</td>
</tr>
<tr>
<td>16</td>
<td>67.4</td>
<td>141</td>
</tr>
<tr>
<td>16</td>
<td>67.6</td>
<td>141</td>
</tr>
<tr>
<td>16</td>
<td>97.8</td>
<td>141</td>
</tr>
</tbody>
</table>
### Dell Inc.

PowerEdge XR11 (Intel Xeon Gold 6326, 2.90 GHz)

**SPECspeed®2017_fp_base = 102**

**SPECspeed®2017_fp_peak = 104**

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Threads</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Threads</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>603.bwaves_s</td>
<td>16</td>
<td>171</td>
<td>346</td>
<td>171</td>
<td>345</td>
<td>171</td>
<td>344</td>
<td>16</td>
<td>171</td>
<td>345</td>
<td>171</td>
<td>345</td>
<td>171</td>
<td>345</td>
</tr>
<tr>
<td>607.cactuBSSN_s</td>
<td>16</td>
<td>129</td>
<td>129</td>
<td>129</td>
<td>128</td>
<td>129</td>
<td>129</td>
<td>16</td>
<td>129</td>
<td>129</td>
<td>129</td>
<td>128</td>
<td>129</td>
<td>129</td>
</tr>
<tr>
<td>619.lbm_s</td>
<td>16</td>
<td>72.4</td>
<td>72.4</td>
<td>72.4</td>
<td>72.4</td>
<td>72.4</td>
<td>72.4</td>
<td>16</td>
<td>72.4</td>
<td>72.4</td>
<td>72.4</td>
<td>72.4</td>
<td>72.4</td>
<td>72.4</td>
</tr>
<tr>
<td>621.wrf_s</td>
<td>16</td>
<td>112</td>
<td>118</td>
<td>112</td>
<td>119</td>
<td>111</td>
<td>119</td>
<td>16</td>
<td>104</td>
<td>127</td>
<td>105</td>
<td>125</td>
<td>104</td>
<td>127</td>
</tr>
<tr>
<td>627.cam4_s</td>
<td>16</td>
<td>147</td>
<td>60.4</td>
<td>147</td>
<td>60.3</td>
<td>148</td>
<td>60.0</td>
<td>16</td>
<td>147</td>
<td>60.4</td>
<td>147</td>
<td>60.3</td>
<td>148</td>
<td>60.0</td>
</tr>
<tr>
<td>628.pop2_s</td>
<td>16</td>
<td>138</td>
<td>85.9</td>
<td>139</td>
<td>85.6</td>
<td>138</td>
<td>86.2</td>
<td>16</td>
<td>138</td>
<td>85.9</td>
<td>139</td>
<td>85.6</td>
<td>138</td>
<td>86.2</td>
</tr>
<tr>
<td>638.imagick_s</td>
<td>16</td>
<td>213</td>
<td>67.7</td>
<td>215</td>
<td>67.0</td>
<td>213</td>
<td>67.6</td>
<td>16</td>
<td>213</td>
<td>67.7</td>
<td>215</td>
<td>67.6</td>
<td>213</td>
<td>67.6</td>
</tr>
<tr>
<td>644.nab_s</td>
<td>16</td>
<td>124</td>
<td>141</td>
<td>124</td>
<td>141</td>
<td>124</td>
<td>141</td>
<td>16</td>
<td>113</td>
<td>155</td>
<td>113</td>
<td>155</td>
<td>113</td>
<td>155</td>
</tr>
<tr>
<td>649.fotonik3d_s</td>
<td>16</td>
<td>134</td>
<td>67.8</td>
<td>135</td>
<td>67.4</td>
<td>135</td>
<td>67.3</td>
<td>16</td>
<td>135</td>
<td>67.4</td>
<td>135</td>
<td>67.6</td>
<td>135</td>
<td>67.6</td>
</tr>
<tr>
<td>654.roms_s</td>
<td>16</td>
<td>161</td>
<td>97.8</td>
<td>161</td>
<td>97.6</td>
<td>160</td>
<td>98.4</td>
<td>16</td>
<td>161</td>
<td>97.8</td>
<td>161</td>
<td>97.6</td>
<td>160</td>
<td>98.4</td>
</tr>
</tbody>
</table>

**SPECspeed®2017_fp_base = 102**

**SPECspeed®2017_fp_peak = 104**

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

### 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:

- `KMP_AFFINITY = "granularity=fine,compact"
- `LD_LIBRARY_PATH = 
  
"/mnt/ramdisk/cpu2017-1.1.5-ic2021.1/lib/intel64:/mnt/ramdisk/cpu2017-1.1.5-ic2021.1/je5.0.1-64"
- `MALLOCONF = "retain:true"
- `OMP_STACKSIZE = "192M"

### General Notes

Binaries compiled on a system with 1x Intel Core i9-7980XE CPU + 64GB RAM memory using Redhat Enterprise Linux 8.0

Transparent Huge Pages enabled by default

Prior to runcpu invocation

Files system page cache synced and cleared with:

```
sync; echo 3> /proc/sys/vm/drop_caches
```

jemalloc, a general purpose malloc implementation built with the RedHat Enterprise 7.5, and the system compiler gcc 4.8.5


NA: 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)
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.

Benchmark run from a 225 GB ramdisk created with the cmd: "mount -t tmpfs -o size=225G tmpfs /mnt/ramdisk"

Platform Notes

BIOS Settings:
Logical Processor : Disabled
Virtualization Technology : Disabled

System Profile : Custom
CPU Power Management : Maximum Performance
C1E : Disabled
C States : Autonomous
Memory Patrol Scrub : Disabled
Energy Efficiency Policy : Performance
CPU Interconnect Bus Link
Power Management : Disabled

Sysinfo program /mnt/ramdisk/cpu2017-1.1.5-ic2021.1/bin/sysinfo
Rev: r6538 of 2020-09-24 e8664e66d2d7080afeaa89d4b38e2f1c
running on localhost.localdomain Tue May  4 09:26:34 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 6326 CPU @ 2.90GHz
  1  "physical id"s (chips)
  16 "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 : 16
physical 0: 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): 16

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

Copyright 2017-2021 Standard Performance Evaluation Corporation

Dell Inc.

PowerEdge XR11 (Intel Xeon Gold 6326, 2.90 GHz)

SPECspeed®2017_fp_base = 102
SPECspeed®2017_fp_peak = 104

CPU2017 License: 55
Test Sponsor: Dell Inc.
Test Date: May-2021
Tested by: Dell Inc.
Software Availability: Feb-2021
Hardware Availability: Jul-2021

Platform Notes (Continued)

On-line CPU(s) list: 0-15
Thread(s) per core: 1
Core(s) per socket: 16
Socket(s): 1
NUMA node(s): 1
Vendor ID: GenuineIntel
CPU family: 6
Model: 106
Model name: Intel(R) Xeon(R) Gold 6326 CPU @ 2.90GHz
Stepping: 6
CPU MHz: 3302.957
BogoMIPS: 5800.00
Virtualization: VT-x
L1d cache: 48K
L1i cache: 32K
L2 cache: 1280K
L3 cache: 24576K
NUMA node0 CPU(s): 0-15
Flags: fpu vme de pse tsc msr pae mce cmov
apat pse36 clflush dts acpi mmx fxsr sse sse2 ss ht tm pbe syscall nx pdpe1gb
dtscpl constant_tsc arch_perfmon pebs bts rep_good nopl xtopology nonstop_tsc
cpuid aperfmpref pni pclmulqdq dtes64 monitor 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 epb cat_l3
invpcid_single intel_pstate ssbd mba ibrs ibpb stibp ibrs_enhanced fsgsbase
tsc_adjust bmi1 hle avx2 smep bmi2 erms invvpid cmp qdcm qrdt_a avx512f
avx512dq rdseed adx smap avx512sfma clflushopt clwb intel_pt avx512cd sha ni
avx512bw avx512vl xsaveopt xsaves xsavecf qcm llc qcm_occupa llc
qcm_mbb_siz total qcm_mbb_local split_lock detect wbnoinvd dtherm
da工艺 pxn pts avx512vbmi umip pku ospke avx512_vbmi2 gfnq vaes vpclmulqdq
avx512_vnni avx512_bitalg tme avx512_vpopcntdq 1a57 rdpid md_clear
pconfig flush_l1d
arch_capabilities

/proc/cpuinfo cache data

size : 24576 KB

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 4 5 6 7 8 9 10 11 12 13 14 15
node 0 size: 499134 MB
node 0 free: 492296 MB
node distances:

node 0

0: 10

From /proc/meminfo

MemTotal: 527818972 KB

(Continued on next page)
### Platform Notes (Continued)

HugePages_Total:       0
Hugepagesize:       2048 kB

/sbin/tuned-adm active
  Current active profile: throughput-performance

From /etc/*release* /etc/*version*
  os-release:
    NAME="Red Hat Enterprise Linux"
    VERSION="8.3 (Ootpa)"
    ID="rhel"
    ID_LIKE="fedora"
    VERSION_ID="8.3"
    PLATFORM_ID="platform:el8"
    PRETTY_NAME="Red Hat Enterprise Linux 8.3 (Ootpa)"
    ANSI_COLOR="0;31"

redhat-release: Red Hat Enterprise Linux release 8.3 (Ootpa)
system-release: Red Hat Enterprise Linux release 8.3 (Ootpa)
system-release-cpe: cpe:/o:redhat:enterprise_linux:8.3:ga

uname -a:
  Linux localhost.localdomain 4.18.0-240.15.1.el8_3.x86_64 #1 SMP Wed Feb 3 03:12:15 EST 2021 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: userscopy/swapsgs 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):** Not affected
**CVE-2019-11135 (TSX Asynchronous Abort):** Not affected

run-level 5 May 4 05:21

SPEC is set to: /mnt/ramdisk/cpu2017-1.1.5-ic2021.1

<table>
<thead>
<tr>
<th>Filesystem</th>
<th>Type</th>
<th>Size</th>
<th>Used</th>
<th>Avail</th>
<th>Use%</th>
<th>Mounted on</th>
</tr>
</thead>
<tbody>
<tr>
<td>tmpfs</td>
<td>tmpfs</td>
<td>225G</td>
<td>13G</td>
<td>213G</td>
<td>6%</td>
<td>/mnt/ramdisk</td>
</tr>
</tbody>
</table>

(Continued on next page)
Dell Inc.
PowerEdge XR11 (Intel Xeon Gold 6326, 2.90 GHz)

<table>
<thead>
<tr>
<th>SPECspeed®2017_fp_base = 102</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECspeed®2017_fp_peak = 104</td>
</tr>
</tbody>
</table>

CPU2017 License: 55
Test Sponsor: Dell Inc.
Tested by: Dell Inc.

**Platform Notes (Continued)**

From /sys/devices/virtual/dmi/id
Vendor: Dell Inc.
Product: PowerEdge XR11
Product Family: PowerEdge
Serial: 09A000K

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:
4x 00AD00B300AD HMAA8GR7AJR4N-XN 64 GB 2 rank 3200
1x 00AD063200AD HMAA8GR7AJR4N-XN 64 GB 2 rank 3200
3x 00AD069D00AD HMAA8GR7AJR4N-XN 64 GB 2 rank 3200

BIOS:
BIOS Vendor: Dell Inc.
BIOS Version: 0.6.2
BIOS Date: 04/12/2021
BIOS Revision: 0.6

(End of data from sysinfo program)

**Compiler Version Notes**

```
C               | 619.lbm_s(base, peak) 638.imagick_s(base, peak)
| 644.nab_s(base)

Intel(R) C Intel(R) 64 Compiler Classic for applications running on Intel(R)
64, Version 2021.1 Build 20201112_000000
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.
```

```
C               | 644.nab_s(peak)

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64,
Version 2021.1 Build 20201113
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.
```

```
C               | 619.lbm_s(base, peak) 638.imagick_s(base, peak)
| 644.nab_s(base)
```

(Continued on next page)
Dell Inc. PowerEdge XR11 (Intel Xeon Gold 6326, 2.90 GHz)

**SPECspeak®2017_fp_base = 102**

**SPECspeak®2017_fp_peak = 104**

**Compiler Version Notes (Continued)**

Intel(R) C Intel(R) 64 Compiler Classic for applications running on Intel(R) 64, Version 2021.1 Build 20201112_000000
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.

---

**C**

| 644.nab_s (peak) |

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2021.1 Build 20201113
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.

---

**C++, C, Fortran**

| 607.cactuBSSN_s (base, peak) |

---

Intel(R) C++ Intel(R) 64 Compiler Classic for applications running on Intel(R) 64, Version 2021.1 Build 20201112_000000
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.

---

**Fortran**

| 603.bwaves_s (base, peak) 649.fotonik3d_s (base, peak) 654.roms_s (base, peak) |

---

Intel(R) Fortran Intel(R) 64 Compiler Classic for applications running on Intel(R) 64, Version 2021.1 Build 20201112_000000
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.

---

**Fortran, C**

| 621.wrf_s (base, peak) 627.cam4_s (base, peak) 628.pop2_s (base, peak) |

---

Intel(R) Fortran Intel(R) 64 Compiler Classic for applications running on Intel(R) 64, Version 2021.1 Build 20201112_000000
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.

---

Intel(R) C Intel(R) 64 Compiler Classic for applications running on Intel(R) 64, Version 2021.1 Build 20201112_000000
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.

---

Intel(R) Fortran Intel(R) 64 Compiler Classic for applications running on Intel(R) 64, Version 2021.1 Build 20201112_000000
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.
SPEC CPU®2017 Floating Point Speed Result

Dell Inc.

PowerEdge XR11 (Intel Xeon Gold 6326, 2.90 GHz)

SPECspeed®2017_fp_base = 102
SPECspeed®2017_fp_peak = 104

CPU2017 License: 55
Test Sponsor: Dell Inc.
Tested by: Dell Inc.

Test Date: May-2021
Hardware Availability: Jul-2021
Software Availability: Feb-2021

Base Compiler Invocation

C benchmarks:
icc

Fortran benchmarks:
ifort

Benchmarks using both Fortran and C:
ifort icc

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

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:
-m64 -std=c11 -xCORE-AVX512 -ipo -O3 -no-prec-div -qopt-prefetch
-ffinite-math-only -qopt-mem-layout-trans=4 -qopenmp -DSPEC_OPENMP
-mbranches-within-32B-boundaries

Fortran benchmarks:
-m64 -Wl,-z,muldefs -DSPEC_OPENMP -xCORE-AVX512 -ipo -O3
-no-prec-div -qopt-prefetch -ffinite-math-only
-qpopt-mem-layout-trans=4 -qopenmp -nostandard-realloc-lhs
-mbranches-within-32B-boundaries -L/usr/local/jemalloc64-5.0.1/lib
-ljemalloc

Benchmarks using both Fortran and C:
-m64 -std=c11 -Wl,-z,muldefs -xCORE-AVX512 -ipo -O3 -no-prec-div
Dell Inc.  
PowerEdge XR11 (Intel Xeon Gold 6326, 2.90 GHz)  

<table>
<thead>
<tr>
<th>SPECspeed®2017_fp_base = 102</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECspeed®2017_fp_peak = 104</td>
</tr>
</tbody>
</table>

CPU2017 License: 55  
Test Sponsor: Dell Inc.  
Tested by: Dell Inc.  
Test Date: May-2021  
Hardware Availability: Jul-2021  
Software Availability: Feb-2021

### Base Optimization Flags (Continued)

- `-qopt-prefetch -ffinite-math-only -qopt-mem-layout-trans=4 -qopenmp`
- `-DSPEC_OPENMP -mbranches-within-32B-boundaries -nostandard-realloc-lhs`
- `-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc`

- Benchmarks using Fortran, C, and C++:
  - `-m64 -std=c11 -W1,-z,muldefs -xCORE-AVX512 -ipo -O3 -no-prec-div`
  - `-qopt-prefetch -ffinite-math-only -qopt-mem-layout-trans=4 -qopenmp`
  - `-DSPEC_OPENMP -mbranches-within-32B-boundaries -nostandard-realloc-lhs`
  - `-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc`

### Peak Compiler Invocation

- C benchmarks (except as noted below):
  - `icc`
  - `644.nab_s: icx`

- Fortran benchmarks:
  - `ifort`

- Benchmarks using both Fortran and C:
  - `ifort icc`

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

### Peak Portability Flags

Same as Base Portability Flags

### Peak Optimization Flags

C benchmarks:

- `619.lbm_s: basepeak = yes`
- `638.imagick_s: basepeak = yes`

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

644.nab_s: -m64 -Wl,-z,muldefs -xCORE-AVX512 -Ofast -ffast-math
-ftlo -mfpmath=sse -funroll-loops -fiopenmp
-DSPEC_OPENMP -qopt-mem-layout-trans=4
-fimf-accuracy-bits=14:sqrt
-mbranches-within-32B-boundaries
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc

Fortran benchmarks:

603.bwaves_s: -m64 -Wl,-z,muldefs -prof-gen(pass 1) -prof-use(pass 2)
-DSPEC_SUPPRESS_OPENMP -DSPEC_OPENMP -ipo -xCORE-AVX512
-O3 -no-prec-div -qopt-prefetch -ffinite-math-only
-qopt-mem-layout-trans=4 -qopenmp -nostandard-realloc-lhs
-mbranches-within-32B-boundaries
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc

649.fotonik3d_s: Same as 603.bwaves_s

654.roms_s: basepeak = yes

Benchmarks using both Fortran and C:

621.wrf_s: -m64 -std=c11 -Wl,-z,muldefs -prof-gen(pass 1)
-prof-use(pass 2) -ipo -xCORE-AVX512 -O3 -no-prec-div
-qopt-prefetch -ffinite-math-only -qopt-mem-layout-trans=4
-DSPEC_SUPPRESS_OPENMP -qopenmp -DSPEC_OPENMP
-mbranches-within-32B-boundaries -nostandard-realloc-lhs
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc

627.cam4_s: basepeak = yes

628.pop2_s: basepeak = yes

Benchmarks using Fortran, C, and C++:

607.cactuBSSN_s: basepeak = yes

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/Intel-ic2021-official-linux64_revA.xml
Dell Inc.

PowerEdge XR11 (Intel Xeon Gold 6326, 2.90 GHz)  

SPEC Speed 2017 Floating Point Speed Result

<table>
<thead>
<tr>
<th>SPECspeed®2017_fp_base = 102</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECspeed®2017_fp_peak = 104</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CPU2017 License: 55</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Sponsor: Dell Inc.</td>
</tr>
<tr>
<td>Tested by: Dell Inc.</td>
</tr>
<tr>
<td>Test Date: May-2021</td>
</tr>
<tr>
<td>Hardware Availability: Jul-2021</td>
</tr>
<tr>
<td>Software Availability: Feb-2021</td>
</tr>
</tbody>
</table>

SPEC CPU and SPECspeed are registered trademarks 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 CPU®2017 v1.1.5 on 2021-05-04 10:26:33-0400.
Originally published on 2021-07-06.