**Dell Inc.**

PowerEdge MX750c (Intel Xeon Gold 6348, 2.60 GHz)

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Software</th>
</tr>
</thead>
</table>
| **CPU Name**: Intel Xeon Gold 6348  
**Max MHz**: 3500  
**Nominal**: 2600  
**Enabled**: 56 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**: 42 MB I+D on chip per core  
**Other**: None  
**Memory**: 1 TB (32 x 32 GB 2Rx8 PC4-3200AA-R)  
**Storage**: 125 GB on tmpfs  
**Other**: None | **OS**: Red Hat Enterprise Linux 8.2 (Ootpa)  
**Version**: 4.18.0-193.el8.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**: No  
**Firmware**: Version 1.1.2 released Apr-2021  
**File System**: tmpfs  
**System State**: Run level 3 (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. |

SPECrates

| SPECrate®2017_fp_base = 390 |
| SPECrate®2017_fp_peak = 409 |

<table>
<thead>
<tr>
<th>SPEC CPU®2017 Floating Point Rate Result</th>
</tr>
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<tbody>
<tr>
<td>Dell Inc. PowerEdge MX750c (Intel Xeon Gold 6348, 2.60 GHz)</td>
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<td>541</td>
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<td>507.cactusBSSN_r</td>
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<tr>
<td>508.namd_r</td>
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<td>511.povray_r</td>
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<td>519.lbm_r</td>
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<td>554.roms_r</td>
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CPU2017 License: 55  
Test Sponsor: Dell Inc.  
Tested by: Dell Inc.  
Test Date: Apr-2021  
Hardware Availability: Apr-2021  
Software Availability: Feb-2021
# SPEC CPU®2017 Floating Point Rate Result

## Dell Inc.

**PowerEdge MX750c (Intel Xeon Gold 6348, 2.60 GHz)**

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

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</tbody>
</table>

**SPECrate®2017_fp_base = 390**  
**SPECrate®2017_fp_peak = 409**

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"

## Environment Variables Notes

Environment variables set by runcpu before the start of the run:  
LD_LIBRARY_PATH =  
"/mnt/ramdisk/cpu2017-1.1.7-ic2021.1/lib/intel64:/mnt/ramdisk/cpu2017-1.1.7-ic2021.1/je5.0.1-64"  
MALLOCONF = "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

(Continued on next page)
Dell Inc.

PowerEdge MX750c (Intel Xeon Gold 6348, 2.60 GHz)

SPECrate®2017_fp_base = 390
SPECrate®2017_fp_peak = 409

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

General Notes (Continued)

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.

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 numaclt i.e.:
numactl --interleave=all runcpu <etc>
jemalloc, a general purpose malloc implementation
built with the RedHat Enterprise 7.5, and the system compiler gcc 4.8.5

Benchmark run from a 125 GB ramdisk created with the cmd: "mount -t tmpfs -o size=125G tmpfs /mnt/ramdisk"

Platform Notes

BIOS Settings:
  Sub NUMA Cluster : 2-Way Clustering
  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/cpu2017-1.1.7-ic2021.1/bin/sysinfo
Rev: r6538 of 2020-09-24 e8664e66d2d7080afeaa89d4b38e2f1c
running on localhost.localdomain Sun Apr 18 02:10:15 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 6348 CPU @ 2.60GHz

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

Dell Inc.

PowerEdge MX750c (Intel Xeon Gold 6348, 2.60 GHz)

SPECRate®2017_fp_base = 390
SPECRate®2017_fp_peak = 409

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

Platform Notes (Continued)

2 "physical id"s (chips)
112 "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 : 28
siblings : 56
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
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
25 26 27

From ls(cpu):
Architecture: x86_64
CPU op-mode(s): 32-bit, 64-bit
Byte Order: Little Endian
CPU(s): 112
On-line CPU(s) list: 0-111
Thread(s) per core: 2
Core(s) per socket: 28
Socket(s): 2
NUMA node(s): 4
Vendor ID: GenuineIntel
CPU family: 6
Model: 106
Model name: Intel(R) Xeon(R) Gold 6348 CPU @ 2.60GHz
Stepping: 6
CPU MHz: 1993.401
BogoMIPS: 5200.00
Virtualization: VT-x
L1d cache: 48K
L1i cache: 32K
L2 cache: 1280K
L3 cache: 43008K
NUMA node0 CPU(s): 0-13,56-69
NUMA node1 CPU(s): 14-27,70-83
NUMA node2 CPU(s): 28-41,84-97
NUMA node3 CPU(s): 42-55,98-111
Flags: fpu vme de pse tsc msr pae mce cmov pat pse36 clflush dts acpi mmx fxsr sse sse2 ss ht tm pbe syscall nx pdaeplb rdtsscp lm constant-tsc art arch_perfmon pebs bts rep_good nopl xtopology nonstop_tsc cpuid aperfmperf 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 ssbd mba ibrs ibpb ibrs enhanced tpr_shadow vnmi flexpriority ept vpid fsgsbase tsc_adjust bmi1 hle avx2 smep bmi2 erms invpcid rtm cqm rdt_a avx512f avx512dq rdseed adx smap avx512ifma clflushopt clwb intel_pt avx512cd sha ni avx512bw
avx512v1 xsaveopt xsavec xsavec xgetbv1 xsaves cqm_llc cqm_occup_llc cqm_mbb_total

(Continued on next page)
Dell Inc.  
PowerEdge MX750c (Intel Xeon Gold 6348, 2.60 GHz)  

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

**Platform Notes (Continued)**

cqm_mbm_local wbnoinvd dtether ida arat pln pts avx512vbmi umip pku ospke
avx512_v bmi2 gfini vaes vpclmuldq avx512_vnni avx512_bitalg tme avx512_vpopcntdq
la57 rdpid md_clear pconfig flush_l1d arch_capabilities

/proc/cpuinfo cache data

```
cache size : 43008 KB
```

---

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 56 57 68 69
node 0 size: 257437 MB
node 0 free: 242364 MB
node 2 cpus: 14 15 16 17 18 19 20 21 22 23 24 25 26 27 70 71 72 73 74 75 76 77 78 79 80 81 82 83
node 1 size: 258041 MB
node 1 free: 237876 MB
node 2 cpus: 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 98 99 100 101 102 103 104 105 106 107 108 109 110 111
node 3 size: 258011 MB
node 3 free: 247334 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:       1056288856 kB
HugePages_Total:       0
Hugepagesize:       2048 kB
/sbin/tuned-adm active
Current active profile: throughput-performance
```

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

```
NAME="Red Hat Enterprise Linux"
VERSION="8.2 (Ootpa)"
ID="rhel"
ID_LIKE="fedora"
VERSION_ID="8.2"
```

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

Dell Inc. PowerEdge MX750c (Intel Xeon Gold 6348, 2.60 GHz)

SPECrate®2017_fp_peak = 409
SPECrate®2017_fp_base = 390

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

Test Date: Apr-2021
Hardware Availability: Apr-2021
Software Availability: Feb-2021

Platform Notes (Continued)

PLATFORM_ID="platform:el8"
PRETTY_NAME="Red Hat Enterprise Linux 8.2 (Ootpa)"
ANSI_COLOR="0;31"
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

uname -a:
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): Mitigation: Speculative Store Bypass disabled via prctl and seccomp
CVE-2018-3639 (Speculative Store Bypass): Mitigation: usercopy/swapgs barriers and __user pointer sanitization
CVE-2017-5753 (Spectre variant 1): Mitigation: Enhanced IBRS, IBPB: conditional, RSB filling
CVE-2017-5715 (Spectre variant 2): No status reported
CVE-2020-0543 (Special Register Buffer Data Sampling): Not affected
CVE-2019-11135 (TSX Asynchronous Abort): Not affected

run-level 3 Apr 17 21:08

SPEC is set to: /mnt/ramdisk/cpu2017-1.1.7-ic2021.1
Filesystem Type Size Used Avail Use% Mounted on
tmpfs tmpfs 125G 50G 76G 40% /mnt/ramdisk

Memory:
15x 00AD063200AD HMA84GR7CJR4N-XN 32 GB 2 rank 3200
17x 00AD063200AD HMAA4GR7AJR8N-XN 32 GB 2 rank 3200

(Continued on next page)
Dell Inc. PowerEdge MX750c (Intel Xeon Gold 6348, 2.60 GHz)

CPU2017 License: 55
Test Sponsor: Dell Inc.
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*** SPEC CPU®2017 Floating Point Rate Result ***

SPECrate®2017_fp_base = 390
SPECrate®2017_fp_peak = 409

Platform Notes (Continued)

BIOS:
  BIOS Vendor: Dell Inc.
  BIOS Version: 1.1.2
  BIOS Date: 04/09/2021
  BIOS Revision: 1.1

(End of data from sysinfo program)

Compiler Version Notes

==============================================================================
C               | 519.lbm_r(base, peak) 538.imagick_r(base, peak)
| 544.nab_r(base, 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++             | 508.namd_r(base, peak) 510.parest_r(base, peak)
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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          | 511.povray_r(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.
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++, C          | 511.povray_r(base) 526.blender_r(base, peak)
==============================================================================
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(Continued on next page)
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SPECRate®2017_fp_peak = 409
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CPU2017 License: 55
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Compiler Version Notes (Continued)

Version 2021.1 Build 20201113
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==============================================================================
C++, C   | 511.povray_r(peak)
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Intel(R) C Intel(R) 64 Compiler Classic for applications running on Intel(R)
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C++, C, Fortran | 507.cactuBSSN_r(base, peak)
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Intel(R) Fortran Intel(R) 64 Compiler Classic for applications running on
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==============================================================================
Fortran | 503.bwaves_r(base, peak) 549.fotonik3d_r(base, peak)
554.roms_r(base, peak)
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Intel(R) Fortran Intel(R) 64 Compiler Classic for applications running on
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## Dell Inc.

PowerEdge MX750c (Intel Xeon Gold 6348, 2.60 GHz)

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<th>Tested by</th>
<th>CPU2017 License</th>
<th>Test Date</th>
<th>Hardware Availability</th>
<th>Software Availability</th>
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**Compiler Version Notes (Continued)**

```
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
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.

```
Fortran, C  | 521.wrf_r(base) 527.cam4_r(base, 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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```
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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```
Fortran, C  | 521.wrf_r(base) 527.cam4_r(base, peak)
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SPEC CPU®2017 Floating Point Rate Result

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SPECrate®2017_fp_base = 390
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CPU2017 License: 55
Test Sponsor: Dell Inc.
Tested by: Dell Inc.

Test Date: Apr-2021
Hardware Availability: Apr-2021
Software Availability: Feb-2021

Base Compiler Invocation

C benchmarks:
icx

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.ibm_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
-fflto -mfpmath=sse -funroll-loops -gopt-mem-layout-trans=4
-mbranches-within-32B-boundaries -ljemalloc
-L/usr/local/jemalloc64-5.0.1/lib

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

**Dell Inc.**

PowerEdge MX750c (Intel Xeon Gold 6348, 2.60 GHz)

| SPECrate®2017_fp_base = 390 | SPECrate®2017_fp_peak = 409 |

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

### 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`

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### Peak Compiler Invocation

**C benchmarks:**
- `icx`

**C++ benchmarks:**
- `icpx`

(Continued on next page)
Dell Inc.  

PowerEdge MX750c (Intel Xeon Gold 6348, 2.60 GHz)  

| SPECrate®2017_fp_base | 390 |
| SPECrate®2017_fp_peak | 409 |

**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

544.nab_r: -w -std=c11 -m64 -Wl,-z,muldefs -xCORE-AVX512 -flto  
-Ofast -qopt-mem-layout-trans=4  
-fimf-accuracy-bits=14:sqrt  
-mbranches-within-32B-boundaries -ljemalloc  
-L/usr/local/jemalloc64-5.0.1/lib

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)
Dell Inc. PowerEdge MX750c (Intel Xeon Gold 6348, 2.60 GHz)

SPECrate®2017_fp_peak = 409
SPECrate®2017_fp_base = 390

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

Test Date: Apr-2021
Hardware Availability: Apr-2021
Software Availability: Feb-2021

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

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<th>Dell Inc.</th>
<th>SPECrate®2017_fp_base = 390</th>
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### CPU2017 License: 55
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You can also download the XML flags sources by saving the following links:


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