## SPEC CPU®2017 Integer Rate Result

### Specifications:

**CPU Name:** Intel Xeon Silver 4316  
**Max MHz:** 3400  
**Nominal:** 2300  
**Enabled:** 20 cores, 1 chip, 2 threads/core  
**Orderable:** 1 chip  
**L1 Cache:** 32 KB I + 48 KB D on chip per core  
**L2 Cache:** 1.25 MB I+D on chip per core  
**L3 Cache:** 30 MB I+D on chip per chip  
**Other:** None  
**Memory:** 512 GB (8 x 64 GB 2Rx4 PC4-3200AA-R, running at 2666)  
**Storage:** 1 x 480 GB NVMe SSD, RAID 0  
**Other:** None  

**OS:** Red Hat Enterprise Linux 8.3 (Ootpa)  
**Kernel:** 4.18.0-240.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:** HPE BIOS Version U56 v1.50 05/13/2021 released May-2021  
**File System:** xfs  
**System State:** Run level 3 (multi-user)  
**Base Pointers:** 64-bit  
**Peak Pointers:** 32/64-bit  
**Other:**jemalloc memory allocator V5.0.1  
**Power Management:** BIOS set to prefer performance at the cost of additional power usage

### Performance:

<table>
<thead>
<tr>
<th>Test Name</th>
<th>Copies</th>
<th>SPECrate®2017_int_base</th>
<th>SPECrate®2017_int_peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>perlbench_r</td>
<td>40</td>
<td>111</td>
<td>118</td>
</tr>
<tr>
<td>gcc_r</td>
<td>40</td>
<td>246</td>
<td></td>
</tr>
<tr>
<td>mcf_r</td>
<td>40</td>
<td>179</td>
<td></td>
</tr>
<tr>
<td>omnetpp_r</td>
<td>40</td>
<td>97.9</td>
<td></td>
</tr>
<tr>
<td>xalancbmk_r</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>x264_r</td>
<td>40</td>
<td></td>
<td></td>
</tr>
<tr>
<td>deppsjeng_r</td>
<td>40</td>
<td>105</td>
<td>103</td>
</tr>
<tr>
<td>leela_r</td>
<td>40</td>
<td>78.8</td>
<td></td>
</tr>
</tbody>
</table>

### Hardware Details:

- **CPU Name:** Intel Xeon Silver 4316  
- **Max MHz:** 3400  
- **Nominal:** 2300  
- **Enabled:** 20 cores, 1 chip, 2 threads/core  
- **Orderable:** 1 chip  
- **L1 Cache:** 32 KB I + 48 KB D on chip per core  
- **L2 Cache:** 1.25 MB I+D on chip per core  
- **L3 Cache:** 30 MB I+D on chip per chip  
- **Other:** None  
- **Memory:** 512 GB (8 x 64 GB 2Rx4 PC4-3200AA-R, running at 2666)  
- **Storage:** 1 x 480 GB NVMe SSD, RAID 0  
- **Other:** None

### Software Details:

- **OS:** Red Hat Enterprise Linux 8.3 (Ootpa)  
- **Kernel:** 4.18.0-240.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:** HPE BIOS Version U56 v1.50 05/13/2021 released May-2021  
- **File System:** xfs  
- **System State:** Run level 3 (multi-user)  
- **Base Pointers:** 64-bit  
- **Peak Pointers:** 32/64-bit  
- **Other:**jemalloc memory allocator V5.0.1  
- **Power Management:** BIOS set to prefer performance at the cost of additional power usage
## Results Table

| Benchmark       | Base | | | Peak | | |
|-----------------|------|----|----|------|----|----|----|----|
|                 | Copies | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio | Seconds | Ratio |
| 500.perlbench_r | 40   | 671  | 94.9 | 671  | 94.9 | 671  | 94.9 |       |     |       |     |
| 502.gcc_r       | 40   | 491  | 115  | 480  | 118  | 477  | 119  | 40    | 135 | 418    | 135  |
| 505.mcf_r       | 40   | 263  | 246  | 262  | 246  | 262  | 246  |       |     |       |     |
| 520.omnetpp_r   | 40   | 537  | 97.7 | 536  | 97.9 | 535  | 98.0 | 40    | 105 | 536    | 97.9 |
| 523.xalancbmk_r | 40   | 236  | 179  |       |       | 235  | 179  |       |     | 235    | 179  |
| 525.x264_r      | 40   | 243  | 288  | 242  | 289  | 242  | 289  | 40    | 123 | 231    | 123  |
| 531.deepsjeng_r | 40   | 436  | 105  | 436  | 105  | 436  | 105  | 40    | 105 | 436    | 105  |
| 541.leela_r     | 40   | 646  | 103  | 646  | 103  | 646  | 103  | 646   | 103 | 646    | 103  |
| 548.exchange2_r | 40   | 369  | 284  | 368  | 284  | 372  | 282  | 40    | 284 | 368    | 284  |
| 557.xz_r        | 40   | 548  | 78.9 |       |       | 548  | 78.8 | 550   | 78.6| 550    | 78.6 |

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"  
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

Environment Variables Notes

Environment variables set by runcpu before the start of the run:  
LD_LIBRARY_PATH = "/cpu2017/lib/intel64:/cpu2017/lib/ia32:/cpu2017/je5.0.1-32"  
MALLOC_CONF = "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  
runcpu command invoked through numactl i.e.:  
numactl --interleave=all runcpu <etc>  
NA: The test sponsor attests, as of date of publication, that CVE-2017-5754 (Meltdown)
General Notes (Continued)

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.

Submitted by: "Bhatnagar, Prateek" <prateek.bhatnagar@hpe.com>
Submitted: Mon Jun 21 10:34:24 EDT 2021
Submission: cpu2017-20210621-27592.sub

Platform Notes

The system ROM used for this result contains Intel microcode version 0xd0002a0 for the Intel Xeon Silver 4316 processor.

BIOS Configuration:
- Workload Profile set to General Throughput Compute
- Memory Patrol Scrubbing set to Disabled
- Advanced Memory Protection set to Advanced ECC
- XPT Remote Prefetcher set to Enabled
- Last Level Cache (LLC) Dead Line Allocation set to Disabled
- Enhanced Processor Performance set to Enabled
- Enhanced Processor Performance Profile set to Aggressive
- Thermal Configuration set to Maximum Cooling
- Workload Profile set to Custom
- DCU Stream Prefetcher set to Disabled
- Energy Efficient Turbo set to Enabled
- Adjacent Sector Prefetcher set to Disabled

Sysinfo program /cpu2017/bin/sysinfo
Rev: r6622 of 2021-04-07 982a61ec0915b55891ef0e16acaf64d
running on localhost.localdomain Wed Jun  9 10:39:34 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) Silver 4316 CPU @ 2.30GHz
  1 "physical id"s (chips)
  40 "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 : 20

(Continued on next page)
Hewlett Packard Enterprise
(Test Sponsor: HPE)
ProLiant DL110 Gen10 Plus
(2.30 GHz, Intel Xeon Silver 4316)

SPECrate®2017_int_base = 142
SPECrate®2017_int_peak = 147

Platform Notes (Continued)

siblings : 40
physical 0: cores 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19

From lscpu from util-linux 2.32.1:
Architecture: x86_64
CPU op-mode(s): 32-bit, 64-bit
Byte Order: Little Endian
CPU(s): 40
On-line CPU(s) list: 0-39
Thread(s) per core: 2
Core(s) per socket: 20
Socket(s): 1
NUMA node(s): 2
Vendor ID: GenuineIntel
CPU family: 6
Model: 106
Model name: Intel(R) Xeon(R) Silver 4316 CPU @ 2.30GHz
Stepping: 6
CPU MHz: 2736.475
BogoMIPS: 4600.00
Virtualization: VT-x
L1d cache: 48K
L1i cache: 32K
L2 cache: 1280K
L3 cache: 30720K
NUMA node0 CPU(s): 0-9,20-29
NUMA node1 CPU(s): 10-19,30-39

From numactl --hardware
WARNING: a numactl 'node' might or might not correspond to a physical chip.
available: 2 nodes (0-1)

(Continued on next page)
Hewlett Packard Enterprise  
(Test Sponsor: HPE)  
ProLiant DL110 Gen10 Plus  
(2.30 GHz, Intel Xeon Silver 4316)  

SPEC CPU®2017 Integer Rate Result  
Copyright 2017-2021 Standard Performance Evaluation Corporation  

SPECrate®2017_int_base = 142  
SPECrate®2017_int_peak = 147  

Platform Notes (Continued)  

cpu: 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 30 31 32 33 34 35 36 37 38 39  
node 0 size: 251316 MB  
node 0 free: 256992 MB  
node 1 cpus: 10 11 12 13 14 15 16 17 18 19 30 31 32 33 34 35 36 37 38 39  
node 1 size: 251474 MB  
node 1 free: 256870 MB  
node distances:  
  node 0 1  
  0: 10 20  
  1: 20 10  

From /proc/meminfo  
  MemTotal: 528049920 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="8.3 (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.el8.x86_64 #1 SMP Wed Sep 23 05:13:10 EDT 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): Not affected  
CVE-2018-3639 (Speculative Store Bypass): Mitigation: Speculative Store Bypass disabled via prctl and seccomp  
CVE-2017-5753 (Spectre variant 1): Mitigation: usercopy/swapgs  

(Continued on next page)
PEC CPU®2017 Integer Rate Result

Hewlett Packard Enterprise
(Test Sponsor: HPE)
ProLiant DL110 Gen10 Plus
(2.30 GHz, Intel Xeon Silver 4316)

SPECrate®2017_int_base = 142
SPECrate®2017_int_peak = 147

CPU2017 License: 3
Test Sponsor: HPE
Tested by: HPE

Platform Notes (Continued)

barriers and __user pointer sanitization
Mitigation: Enhanced IBRS, IBPB:
conditional, RSB filling

CVE-2017-5715 (Spectre variant 2):
CVE-2020-0543 (Special Register Buffer Data Sampling): Not affected
CVE-2019-11135 (TSX Asynchronous Abort): Not affected

run-level 3 Jun 9 10:35

SPEC is set to: /cpu2017
Filesystem Type Size Used Avail Use% Mounted on
/dev/nvme1n1p4 xfs 442G 140G 302G 32% /

From /sys/devices/virtual/dmi/id
Vendor: HPE
Product: ProLiant DL110 Gen10 Plus
Product Family: ProLiant
Serial: T912PP0032

Additional information from dmidecode 3.2 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:
8x Micron 36ASF8G72PZ-3G2B2 64 GB 2 rank 3200, configured at 2666

BIOS:
BIOS Vendor: HPE
BIOS Version: U56
BIOS Date: 05/13/2021
BIOS Revision: 1.50
Firmware Revision: 2.40

(End of data from sysinfo program)

Compiler Version Notes

==============================================================================
C       | 500.perlbench_r(peak)
Intel(R) C Intel(R) 64 Compiler Classic for applications running on Intel(R)
64, Version 2021.1 Build 20210112_000000
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.
==============================================================================

(Continued on next page)
Hewlett Packard Enterprise
(Test Sponsor: HPE)
ProLiant DL110 Gen10 Plus
(2.30 GHz, Intel Xeon Silver 4316)

SPECrated®2017_int_base = 142
SPECrated®2017_int_peak = 147

CPU2017 License: 3
Test Sponsor: HPE
Tested by: HPE

Test Date: Jun-2021
Hardware Availability: Jun-2021
Software Availability: Jun-2021

Compiler Version Notes (Continued)

C       | 502.gcc_r(peak)
---------------------------
Intel(R) oneAPI DPC++/C++ Compiler for applications running on IA-32, Version 2021.1 Build 20201113
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.

C       | 500.perlbench_r(base) 502.gcc_r(base) 505.mcf_r(base, peak) 525.x264_r(base, peak) 557.xz_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       | 500.perlbench_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.

C       | 502.gcc_r(peak)
---------------------------
Intel(R) oneAPI DPC++/C++ Compiler for applications running on IA-32, Version 2021.1 Build 20201113
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.

C       | 500.perlbench_r(base) 502.gcc_r(base) 505.mcf_r(base, peak) 525.x264_r(base, peak) 557.xz_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       | 500.perlbench_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.

(Continued on next page)
Hewlett Packard Enterprise
(Test Sponsor: HPE)
ProLiant DL110 Gen10 Plus
(2.30 GHz, Intel Xeon Silver 4316)

SPEC CPU®2017 Integer Rate Result
Copyright 2017-2021 Standard Performance Evaluation Corporation

SPECrate®2017_int_base = 142
SPECrate®2017_int_peak = 147

CPU2017 License: 3
Test Sponsor: HPE
Tested by: HPE

Test Date: Jun-2021
Hardware Availability: Jun-2021
Software Availability: Jun-2021

Base Compiler Invocation

C benchmarks:
icx

C++ benchmarks:
icpx

Fortran benchmarks:
ifort

Compiler Version Notes (Continued)

-----------------------------------------------------------------------------------------------
C | 502.gcc_r(peak)
-----------------------------------------------------------------------------------------------
Intel(R) oneAPI DPC++/C++ Compiler for applications running on IA-32, Version 2021.1 Build 20201113
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.
-----------------------------------------------------------------------------------------------
C | 500.perlbench_r(base) 502.gcc_r(base) 505.mcf_r(base, peak)
   | 525.x264_r(base, peak) 557.xz_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++ | 520.omnetpp_r(base, peak) 523.xalancbmk_r(base, peak)
     | 531.deepsjeng_r(base, peak) 541.leela_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.
-----------------------------------------------------------------------------------------------
Fortran | 548.exchange2_r(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.
**SPEC CPU®2017 Integer Rate Result**

Copyright 2017-2021 Standard Performance Evaluation Corporation

Hewlett Packard Enterprise  
(Test Sponsor: HPE)  
ProLiant DL110 Gen10 Plus  
(2.30 GHz, Intel Xeon Silver 4316)

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECrate®2017_int_base</td>
<td>142</td>
</tr>
<tr>
<td>SPECrate®2017_int_peak</td>
<td>147</td>
</tr>
</tbody>
</table>

CPU2017 License: 3  
Test Sponsor: HPE  
Tested by: HPE

**Base Portability Flags**

- 500.perlbench_r: -DSPEC_LP64 -DSPEC_LINUX_X64  
- 502.gcc_r: -DSPEC_LP64  
- 505.mcf_r: -DSPEC_LP64  
- 520.omnetpp_r: -DSPEC_LP64  
- 523.xalancbmk_r: -DSPEC_LP64 -DSPEC_LINUX  
- 525.x264_r: -DSPEC_LP64  
- 531.deepsjeng_r: -DSPEC_LP64  
- 541.leela_r: -DSPEC_LP64  
- 548.exchange2_r: -DSPEC_LP64  
- 557.xz_r: -DSPEC_LP64

**Base Optimization Flags**

C benchmarks:  
- -w -std=c11 -m64 -Wl,-z,muldefs -xCORE-AVX512 -O3 -ffast-math  
- -flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4  
- -mbranches-within-32B-boundaries  
- -L/opt/intel/oneapi/compiler/2021.1.1/linux/compiler/lib/intel64_lin  
- -lqkmalloc  

C++ benchmarks:  
- -w -m64 -Wl,-z,muldefs -xCORE-AVX512 -O3 -ffast-math -flto  
- -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4  
- -mbranches-within-32B-boundaries  
- -L/opt/intel/oneapi/compiler/2021.1.1/linux/compiler/lib/intel64_lin  
- -lqkmalloc  

Fortran benchmarks:  
- -w -m64 -Wl,-z,muldefs -xCORE-AVX512 -O3 -ipo -no-prec-div  
- -qopt-mem-layout-trans=4 -nostandard-realloc-lhs -align array32byte  
- -auto -mbranches-within-32B-boundaries  
- -L/opt/intel/oneapi/compiler/2021.1.1/linux/compiler/lib/intel64_lin  
- -lqkmalloc

**Peak Compiler Invocation**

C benchmarks (except as noted below):  
icx  
500.perlbench_r: icc

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

Hewlett Packard Enterprise
(Test Sponsor: HPE)
ProLiant DL110 Gen10 Plus
(2.30 GHz, Intel Xeon Silver 4316)

SPECrates: 2017_int_base = 142
SPECrates: 2017_int_peak = 147

CPU2017 License: 3
Test Sponsor: HPE
Tested by: HPE

SPECrates: 2017_int_base = 142
SPECrates: 2017_int_peak = 147

Test Date: Jun-2021
Hardware Availability: Jun-2021
Software Availability: Jun-2021

Peak Compiler Invocation (Continued)

C++ benchmarks:
icpx

Fortran benchmarks:
ifort

Peak Portability Flags

500.perlbench_r: -DSPEC_LP64 -DSPEC_LINUX_X64
502.gcc_r: -D_FILE_OFFSET_BITS=64
505.mcf_r: -DSPEC_LP64
520.omnetpp_r: -DSPEC_LP64
523.xalancbmk_r: -DSPEC_LP64 -DSPEC_LINUX
525.x264_r: -DSPEC_LP64
531.deepsjeng_r: -DSPEC_LP64
541.leela_r: -DSPEC_LP64
548.exchange2_r: -DSPEC_LP64
557.xz_r: -DSPEC_LP64

Peak Optimization Flags

C benchmarks:
500.perlbench_r: -Wl,-z,muldefs -prof-gen(pass 1) -prof-use(pass 2)
-xCORE-AVX512 -ipo -O3 -no-prec-div
-qopt-mem-layout-trans=4 -fno-strict-overflow
-mbranches-within-32B-boundaries
-L/opt/intel/oneapi/compiler/2021.1.1/linux/compiler/lib/intel64_lin
-lqkmalloc

502.gcc_r: -m32
-L/opt/intel/oneapi/compiler/2021.1.1/linux/compiler/lib/ia32_lin
-std=gnu89 -Wl,-z,muldefs -fprofile-generate(pass 1)
-fprofile-use=default.profdata(pass 2) -xCORE-AVX512 -flto
-Ofast(pass 1) -O3 -ffast-math -qopt-mem-layout-trans=4
-mbranches-within-32B-boundaries
-L/usr/local/jemalloc32-5.0.1/lib -ljemalloc

505.mcf_r: basepeak = yes

525.x264_r: -w -std=c11 -m64 -Wl,-z,muldefs -xCORE-AVX512 -flto
-O3 -ffast-math -qopt-mem-layout-trans=4 -fno-alias

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

Hewlett Packard Enterprise
(Test Sponsor: HPE)
ProLiant DL110 Gen10 Plus
(2.30 GHz, Intel Xeon Silver 4316)

SPECrate®2017_int_base = 142
SPECrate®2017_int_peak = 147

CPU2017 License: 3
Test Sponsor: HPE
 Tested by: HPE

525.x264_r (continued):
- -mbranches-within-32B-boundaries
- -L/opt/intel/oneapi/compiler/2021.1.1/linux/compiler/lib/intel64_lin
  -lqkmalloc

557.xz_r: basepeak = yes

C++ benchmarks:
520.omnetpp_r: basepeak = yes
523.xalancbmk_r: basepeak = yes
531.deepsjeng_r: basepeak = yes
541.leela_r: basepeak = yes

Fortran benchmarks:
548.exchange2_r: basepeak = yes

The flags files that were used to format this result can be browsed at
http://www.spec.org/cpu2017/flags/HPE-Platform-Flags-Intel-V1.0-ICX-revC.html

You can also download the XML flags sources by saving the following links:
http://www.spec.org/cpu2017/flags/HPE-Platform-Flags-Intel-V1.0-ICX-revC.xml
http://www.spec.org/cpu2017/flags/Intel-ic2021-official-linux64_revA.xml

SPEC CPU and SPECrate 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 v1.1.8 on 2021-06-09 11:39:33-0400.
Report generated on 2021-07-06 18:36:56 by CPU2017 PDF formatter v6442.
Originally published on 2021-07-06.