Nettrix

R620 G40 (Intel Xeon Platinum 8380 CPU @ 2.30GHz)

SPECrate®2017_int_base = 602
SPECrate®2017_int_peak = 625

CPU2017 License: 6138
Test Sponsor: Nettrix
Tested by: Nettrix

Hardware

CPU Name: Intel Xeon Platinum 8380
Max MHz: 3400
Nominal: 2300
Enabled: 80 cores, 2 chips, 2 threads/core
Orderable: 1, 2 chip(s)
Cache L1: 32 KB I + 48 KB D on chip per core
L2: 1.25 MB I+D on chip per core
L3: 60 MB I+D on chip per chip
Other: None
Memory: 4 TB (32 x 128 GB 4Rx4 PC4-3200AA-L)
Storage: 1x 2 TB SATA HDD, 7200RPM
Other: None

Software

OS: SUSE Linux Enterprise Server 15 SP2 Kernel
Compiler: C/C++: Version 2021.1 of Intel oneAPI DPC++/C++
Fortran: Version 2021.1 of Intel Fortran Compiler
C/C++: Version 2021.1 of Intel C/C++ Compiler
Parallel: No
Firmware: Nettrix BIOS Version 0PYH001029 released Apr-2021
File System: ext4
System State: Run level 5 (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
**SPEC CPU®2017 Integer Rate Result**

**Nettrix**

R620 G40 (Intel Xeon Platinum 8380 CPU @ 2.30GHz)

<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>
</tr>
</thead>
<tbody>
<tr>
<td>500.perlbench_r</td>
<td>160</td>
<td>607</td>
<td>420</td>
<td>608</td>
<td>419</td>
<td>608</td>
<td>419</td>
</tr>
<tr>
<td>502.gcc_r</td>
<td>160</td>
<td>547</td>
<td>414</td>
<td>544</td>
<td>416</td>
<td>545</td>
<td>416</td>
</tr>
<tr>
<td>505.mcf_r</td>
<td>160</td>
<td>250</td>
<td>1030</td>
<td>250</td>
<td>1030</td>
<td>251</td>
<td>1030</td>
</tr>
<tr>
<td>520.omnetpp_r</td>
<td>160</td>
<td>194</td>
<td>440</td>
<td>194</td>
<td>440</td>
<td>194</td>
<td>440</td>
</tr>
<tr>
<td>523.xalancbmk_r</td>
<td>160</td>
<td>371</td>
<td>494</td>
<td>370</td>
<td>496</td>
<td>369</td>
<td>496</td>
</tr>
<tr>
<td>525.x264_r</td>
<td>160</td>
<td>550</td>
<td>482</td>
<td>555</td>
<td>477</td>
<td>556</td>
<td>477</td>
</tr>
<tr>
<td>531.deepsjeng_r</td>
<td>160</td>
<td>306</td>
<td>1370</td>
<td>307</td>
<td>1370</td>
<td>306</td>
<td>1370</td>
</tr>
<tr>
<td>557.xz_r</td>
<td>160</td>
<td>514</td>
<td>336</td>
<td>514</td>
<td>336</td>
<td>513</td>
<td>337</td>
</tr>
</tbody>
</table>

**Operating System Notes**

Stack size set to unlimited using "ulimit -s unlimited"

Tuning Kernel Parameters:
- `sched_migration_cost_ns=1000`
- `sched_rt_runtime_us=990000`
- `sched_latency_ns=24000000`
- `sched_min_granularity_ns=8000000`
- `dirty_background_ratio=10`
- `dirty_ratio=40`
- `dirty_writeback_centisecs=1500`
- `dirty_expire_centisecs=10000`
- `swappiness=10`
- `numa_balancing=0`

**Environment Variables Notes**

Environment variables set by runcpu before the start of the run:

```
LD_LIBRARY_PATH = "/home/admin/benchmarks/SPECCpu2017/lib/intel64:/home/admin/benchmarks/SPECCpu2017/lib/ia32:/home/admin/benchmarks/SPECCpu2017/je5.0.1-32"
MALLOC_CONF = "retain:true"
```
SPEC CPU®2017 Integer Rate Result

Nettrix

R620 G40(Intel Xeon Platinum 8380 CPU @ 2.30GHz)

SPECrate®2017_int_base = 602

SPECrate®2017_int_peak = 625

CPU2017 License: 6138
Test Sponsor: Nettrix
Tested by: Nettrix

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

General Notes

Binaries compiled on a system with 1x Intel Core i9-7940X CPU + 64GB RAM memory using openSUSE Leap 15.2
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 numactl i.e.:
umactl --interleave=all runcpu <etc>

Platform Notes

The system ROM used for this result contains Intel microcode version 0D000280 for the Intel Xeon Platinum 8380 processor.

BIOS Configuration:
Application Performance Profile Set to Computing Throughput Mode
SNC set to Enable SNC2(2-clusters)
XPT Prefetch set to Enabled
KTI Prefetch set to Disabled
Stale AtoS set to Enabled
Patrol Scrub set to Disabled
LLC Dead Line Allocation set to Disabled

BMC Settings:
Cooling Policy set to Manual Mode
Fan Duty set to 95

Sysinfo program /home/admin/benchmarks/SPECCpu2017/bin/sysinfo
Rev: r6622 of 2021-04-07 982a61ec0915b55891ef0e16acaf64d
running on localhost Fri May 21 09:35:29 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) Platinum 8380 CPU @ 2.30GHz
  2 "physical id"s (chips)
  160 "processors"

(Continued on next page)
Nettrix

R620 G40(Intel Xeon Platinum 8380 CPU @ 2.30GHz)

SPEC CPU®2017 Integer Rate Result

Copyright 2017-2021 Standard Performance Evaluation Corporation

SPECrate®2017_int_base = 602

SPECrate®2017_int_peak = 625

Nettrix

R620 G40(Intel Xeon Platinum 8380 CPU @ 2.30GHz)

CPU2017 License: 6138
Test Sponsor: Nettrix
Test Date: May-2021
Hardware Availability: Apr-2021
Tested by: Nettrix
Software Availability: Apr-2021

Platform Notes (Continued)

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 : 40
siblings : 80
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 28 29 30 31 32 33 34 35 36 37 38 39
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 28 29 30 31 32 33 34 35 36 37 38 39

From lscpu from util-linux 2.33.1:
Architecture: x86_64
CPU op-mode(s): 32-bit, 64-bit
Byte Order: Little Endian
Address sizes: 46 bits physical, 57 bits virtual
CPU(s): 160
On-line CPU(s) list: 0-159
Thread(s) per core: 2
Core(s) per socket: 40
Socket(s): 2
NUMA node(s): 4
Vendor ID: GenuineIntel
CPU family: 6
Model: 106
Model name: Intel(R) Xeon(R) Platinum 8380 CPU @ 2.30GHz
Stepping: 6
CPU MHz: 1143.043
CPU max MHz: 3400.0000
CPU min MHz: 800.0000
BogoMIPS: 4600.00
Virtualization: VT-x
L1d cache: 48K
L1i cache: 32K
L2 cache: 1280K
L3 cache: 61440K
NUMA node0 CPU(s): 0-19,80-99
NUMA node1 CPU(s): 20-39,100-119
NUMA node2 CPU(s): 40-59,120-139
NUMA node3 CPU(s): 60-79,140-159
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 rdtsscp
lm constant-tsc art 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
xtrnor pcrm dca sse4_1 sse4_2 x2apic movbe popcnt tsc_deadline_timer aes xsave
avx f16c rdrand lahf_lm abml atm 3dnowprefetch cpuid_fault epb cat_l3 invpcid_single ssbd
mba ibrs ibpb stibp ibrs_enhanced tpr_shadow vnmi flexpriority ept vpid ept_ad
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

(Continued on next page)
Platform Notes (Continued)

avx512bw avx512vl xsaveopt xsaves cqm_llc cqm_occup_llc cqm_mbm_total
cqm_mbm_local whiolo dtherm ida arat pln pts avx512vbmi umip pkp ospke
avx512_vbmi2 gfni vaes vpclmulqdq avx512_vnni avx512_bitalg tme avx512_vpopcntdq
la57 rdpid md_clear pconfig flush_l1d arch_capabilities

/proc/cpuinfo cache data
  cache size : 61440 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 14 15 16 17 18 19 80 81 82 83 84 85 86 87
88 89 90 91 92 93 94 95 96 97 98 99
node 0 size: 1031771 MB
node 0 free: 1020862 MB
node 1 cpus: 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119
node 1 size: 1032181 MB
node 1 free: 1022794 MB
node 2 cpus: 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139
node 2 size: 1032184 MB
node 2 free: 1022794 MB
node 3 cpus: 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159
node 3 size: 1032184 MB
node 3 free: 1023940 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: 4227358284 kB
  HugePages_Total: 0
  Hugepagesize: 2048 kB

/sys/devices/system/cpu/cpu*/cpufreq/scaling_governor has
  ondemand

From /etc/*release*/etc/*version*
  os-release:
    NAME="SLES"
    VERSION="15-SP2"
    VERSION_ID="15.2"

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

PRETTY_NAME="SUSE Linux Enterprise Server 15 SP2"
ID="sles"
ID_LIKE="suse"
ANSI_COLOR="0;32"
CPE_NAME="cpe:/o:suse:sles:15:sp2"

uname -a:
  Linux localhost 5.3.18-24.61-preempt #1 SMP PREEMPT Wed Apr 14 10:10:07 UTC 2021
    (c41a65c) 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):
CVE-2020-0543 (Special Register Buffer Data Sampling): Not affected
CVE-2019-11135 (TSX Asynchronous Abort): Not affected

run-level 5 May 20 09:26

SPEC is set to: /home/admin/benchmarks/SPECcpu2017

<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>/dev/sdc1</td>
<td>ext4</td>
<td>1.4T</td>
<td>92G</td>
<td>1.2T</td>
<td>7%</td>
<td>/home/admin/benchmarks/SPECcpu2017</td>
</tr>
</tbody>
</table>

From /sys/devices/virtual/dmi/id
  Vendor: Nettrix
  Product: N/A
  Product Family: Family
  Serial: N/A

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:
  32x Hynix HMABAGL7ABR4N-XN 128 GB 4 rank 3200

BIOS:

(Continued on next page)
Nettrix

R620 G40(Intel Xeon Platinum 8380 CPU @ 2.30GHz)

SPEC CPU®2017 Integer Rate Result

SPECrate®2017_int_base = 602
SPECrate®2017_int_peak = 625

CPU2017 License: 6138
Test Sponsor: Nettrix
Tested by: Nettrix

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

Platform Notes (Continued)

BIOS Vendor: American Megatrends International, LLC.
BIOS Version: 0PYH001029
BIOS Date: 04/14/2021
BIOS Revision: 0.29

(End of data from sysinfo program)

Compiler Version Notes

C | 500.perlbench_r(peak) 557.xz_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)
---|---------------------------------------------------------------
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) 557.xz_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.

(Continued on next page)
### Compiler Version Notes (Continued)

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)
```

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) 557.xz_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)
```

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.
Nettrix

R620 G40 (Intel Xeon Platinum 8380 CPU @ 2.30GHz)

SPECraten®2017_int_base = 602
SPECraten®2017_int_peak = 625

Compiler Version Notes (Continued)

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.

Base Compiler Invocation

C benchmarks:
- icx

C++ benchmarks:
- icpx

Fortran benchmarks:
- ifort

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 -W1,-z,muldefs -xCORE-AVX512 -O3 -ffast-math
- -f1to -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

(Continued on next page)
Nettrix

R620 G40(Intel Xeon Platinum 8380 CPU @ 2.30GHz)

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

| SPECrate®2017_int_base = 602 |
| SPECrate®2017_int_peak = 625 |

CPU2017 License: 6138
Test Sponsor: Nettrix
Test Date: May-2021
Hardware Availability: Apr-2021
Tested by: Nettrix
Software Availability: Apr-2021

Base Optimization Flags (Continued)

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
557.xz_r: icc

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
Nettrix

R620 G40 (Intel Xeon Platinum 8380 CPU @ 2.30GHz)

SPEC CPU®2017 Integer Rate Result

Copyright 2017-2021 Standard Performance Evaluation Corporation

SPECrate®2017_int_base = 602
SPECrate®2017_int_peak = 625

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
-Oofast(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
-mbranches-within-32B-boundaries
-L/opt/intel/oneapi/compiler/2021.1.1/linux/compiler/lib/intel64_lin
-lqkmalloc

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
### SPEC CPU®2017 Integer Rate Result

**Nettrix**

**R620 G40 (Intel Xeon Platinum 8380 CPU @ 2.30GHz)**

<table>
<thead>
<tr>
<th>CPU2017 License</th>
<th>Test Sponsor</th>
<th>Tested by</th>
<th>Test Date</th>
<th>Hardware Availability</th>
<th>Software Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>6138</td>
<td>Nettrix</td>
<td>Nettrix</td>
<td>May-2021</td>
<td>Apr-2021</td>
<td>Apr-2021</td>
</tr>
</tbody>
</table>

**SPECrate®2017_int_base** = 602

**SPECrate®2017_int_peak** = 625

---

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 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 2021-05-20 21:35:28-0400.

Report generated on 2021-06-17 11:18:03 by CPU2017 PDF formatter v6442.

Originally published on 2021-06-16.