# SPEC CPU®2017 Integer Speed Result

**New H3C Technologies Co., Ltd.**

**H3C UniServer R6700 G3 (Intel Xeon Gold 6230)**

<table>
<thead>
<tr>
<th>SPECspeed®2017_int_base</th>
<th>SPECspeed®2017_int_peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.9</td>
<td>11.1</td>
</tr>
</tbody>
</table>

**CPU2017 License:** 9066

**Test Sponsor:** New H3C Technologies Co., Ltd.

**Tested by:** New H3C Technologies Co., Ltd.

<table>
<thead>
<tr>
<th>Test Date:</th>
<th>Hardware Availability:</th>
<th>Software Availability:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sep-2020</td>
<td>Mar-2019</td>
<td>Apr-2020</td>
</tr>
</tbody>
</table>

**Threads**

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>perlbench_s</td>
<td>6.61</td>
</tr>
<tr>
<td>gcc_s</td>
<td>9.80</td>
</tr>
<tr>
<td>mcf_s</td>
<td>10.2</td>
</tr>
<tr>
<td>omnetpp_s</td>
<td>8.67</td>
</tr>
<tr>
<td>xalancbmk_s</td>
<td>13.2</td>
</tr>
<tr>
<td>x264_s</td>
<td>16.0</td>
</tr>
<tr>
<td>deepsjeng_s</td>
<td>5.74</td>
</tr>
<tr>
<td>leela_s</td>
<td>4.77</td>
</tr>
<tr>
<td>exchange2_s</td>
<td>16.4</td>
</tr>
<tr>
<td>xz_s</td>
<td>24.0</td>
</tr>
</tbody>
</table>

---

**SPECspeed®2017_int_base (10.9)--- SPECspeed®2017_int_peak (11.1)**

## Hardware

**CPU Name:** Intel Xeon Gold 6230

- **Max MHz:** 3900
- **Nominal:** 2100
- **Enabled:** 80 cores, 4 chips
- **Orderable:** 1,2,3,4 chips
- **Cache L1:** 32 KB I + 32 KB D on chip per core
- **L2:** 1 MB I+D on chip per core
- **L3:** 27.5 MB I+D on chip per chip
- **Memory:** 384 GB (24 x 16 GB 2Rx8 PC4-2933V-R)
- **Storage:** 1 x 960 GB SATA SSD
- **Other:** None

## Software

**OS:** Red Hat Enterprise Linux release 8.2 (Ootpa)

- **Compiler:** C/C++: Version 19.1.1.217 of Intel C/C++ Compiler Build 20200306 for Linux;
- **Fortran:** Version 19.1.1.217 of Intel Fortran Compiler Build 20200306 for Linux

**Parallel:** Yes

**Firmware:** Version 2.00.33 released Aug-2019 BIOS

**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 set to prefer performance at the cost of additional power usage
New H3C Technologies Co., Ltd.

H3C UniServer R6700 G3 (Intel Xeon Gold 6230)

SPEC CPU®2017 Integer Speed Result

SPECspeed®2017_int_base = 10.9

SPECspeed®2017_int_peak = 11.1

Results Table

<table>
<thead>
<tr>
<th>Benchmark</th>
<th>Threads</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
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<td>Base</td>
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<tr>
<td>600.perlbench_s</td>
<td>80</td>
<td>269</td>
<td>6.60</td>
<td>269</td>
<td>6.61</td>
<td>267</td>
<td>6.65</td>
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<tr>
<td>602.gcc_s</td>
<td>80</td>
<td>405</td>
<td>9.83</td>
<td>408</td>
<td>9.76</td>
<td>406</td>
<td>9.80</td>
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<tr>
<td>605.mcf_s</td>
<td>80</td>
<td>261</td>
<td>18.1</td>
<td>264</td>
<td>17.9</td>
<td>262</td>
<td>18.0</td>
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<tr>
<td>620.omnetpp_s</td>
<td>80</td>
<td>187</td>
<td>8.71</td>
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<td>8.35</td>
<td>188</td>
<td>8.67</td>
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<td>107</td>
<td>13.2</td>
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<td>13.2</td>
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<tr>
<td>625.x264_s</td>
<td>80</td>
<td>110</td>
<td>16.0</td>
<td>110</td>
<td>16.0</td>
<td>108</td>
<td>16.0</td>
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<tr>
<td>631.deepsjeng_s</td>
<td>80</td>
<td>249</td>
<td>5.74</td>
<td>250</td>
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<td>250</td>
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<tr>
<td>641.leela_s</td>
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<td>4.77</td>
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<td>4.77</td>
<td>357</td>
<td>4.77</td>
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<tr>
<td>648.exchange2_s</td>
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<td>16.4</td>
<td>179</td>
<td>16.4</td>
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<tr>
<td>657.xz_s</td>
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<table>
<thead>
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<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
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<td>24.1</td>
</tr>
</tbody>
</table>

SPECspeed®2017_int_base = 10.9
SPECspeed®2017_int_peak = 11.1

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

Compiler Notes

The inconsistent Compiler version information under Compiler Version section is due to a discrepancy in Intel Compiler. The correct version of C/C++ compiler is: Version 19.1.1.217 Build 20200306 Compiler for Linux
The correct version of Fortran compiler is: Version 19.1.1.217 Build 20200306 Compiler for Linux

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,scatter"
LD_LIBRARY_PATH = "/home/speccpu/lib/intel64:/home/speccpu/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
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)
New H3C Technologies Co., Ltd.
H3C UniServer R6700 G3 (Intel Xeon Gold 6230)

**General Notes (Continued)**

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

**Platform Notes**

BIOS Settings:
Set Hyper Threading to Disabled
Set XPT Prefetch to Auto
Set Patrol Scrub to Disabled

Sysinfo program /home/speccpu/bin/sysinfo
Rev: r6365 of 2019-08-21 295195f888a3d7edbe6e46a485a0011
running on localhost.localdomain Tue Sep  8 10:46:37 2020

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 6230 CPU @ 2.10GHz
  4 "physical id"s (chips)
  80 "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
  siblings : 20
  physical 0: cores 0 1 2 3 4 8 9 10 11 12 16 17 18 19 20 24 25 26 27 28
  physical 1: cores 0 1 2 3 4 8 9 10 11 12 16 17 18 19 20 24 25 26 27 28
  physical 2: cores 0 1 2 3 4 8 9 10 11 12 16 17 18 19 20 24 25 26 27 28
  physical 3: cores 0 1 2 3 4 8 9 10 11 12 16 17 18 19 20 24 25 26 27 28

From lscpu:
- Architecture: x86_64
- CPU op-mode(s): 32-bit, 64-bit
- Byte Order: Little Endian
- CPU(s): 80
- On-line CPU(s) list: 0-79
- Thread(s) per core: 1
- Core(s) per socket: 20
- Socket(s): 4

(Continued on next page)
New H3C Technologies Co., Ltd.
H3C UniServer R6700 G3 (Intel Xeon Gold 6230)

**SPEC CPU®2017 Integer Speed Result**

**SPECspeed®2017_int_base** = 10.9

**SPECspeed®2017_int_peak** = 11.1

CPU2017 License: 9066
Test Sponsor: New H3C Technologies Co., Ltd.
Tested by: New H3C Technologies Co., Ltd.
Test Date: Sep-2020
Hardware Availability: Mar-2019
Software Availability: Apr-2020

Platform Notes (Continued)

- NUMA node(s): 4
- Vendor ID: GenuineIntel
- CPU family: 6
- Model: 85
- Model name: Intel(R) Xeon(R) Gold 6230 CPU @ 2.10GHz
- Stepping: 7
- CPU MHz: 800.209
- CPU max MHz: 3900.0000
- CPU min MHz: 800.0000
- BogoMIPS: 4200.00
- Virtualization: VT-x
- L1d cache: 32K
- L1i cache: 32K
- L2 cache: 1024K
- L3 cache: 28160K
- NUMA node0 CPU(s): 0-19
- NUMA node1 CPU(s): 20-39
- NUMA node2 CPU(s): 40-59
- NUMA node3 CPU(s): 60-79
- Flags: fpu vme de pse tsc msr pae mca cmov pat pse36 clflush dts acpi mmx fxsr sse sse2 ss ht tm pbe syscall nx pdpe1gb rdtscp 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 cdp_l3 invpcid_single intel_puin ssbd mba ibrs ibpb stibp ibrs_enabled tpr_shadow vmob vmi flexpriority ept vpid fsgsb base tsc_adjust bmi1 hle avx2 smep bmi2 ersed_inverse rtm cqm mpx rdt_a avx512f avx512dq rdseed adx smap clflushopt clwb intel_pt avx512cd avx512bw avx512vl xsxsave xsaveopt xsaves xsavec xsavec128 xmm14 cqm_lll4 cqm_occ_desc cqm_mbb_total cqm_mbb_local dtime ida arat pln pts hwp hwp_act_window hwp_epp hwp_pkg_req pku ospke avx512_vnni md_clear flush_l1d arch_capabilities

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
node 0 size: 95071 MB
node 0 free: 94526 MB
node 1 cpus: 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39
node 1 size: 96735 MB
node 1 free: 96206 MB
node 2 cpus: 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59
node 2 size: 96699 MB
node 2 free: 96489 MB

(Continued on next page)
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SPECspeed®2017_int_peak = 11.1

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Test Date: Sep-2020
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Platform Notes (Continued)

node 3 cpus: 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79
node 3 size: 96762 MB
node 3 free: 96559 MB
node distances:
node 0 1 2 3
0: 10 21 21 21
1: 21 10 21 21
2: 21 21 10 21
3: 21 21 21 10

From /proc/meminfo
MemTotal: 394516384 kB
HugePages_Total: 0
Hugepagesize: 2048 kB

From /etc/*release* /etc/*version*
os-release:
NAME="Red Hat Enterprise Linux"
VERSION="8.2 (Ootpa)"
ID="rhel"
ID_LIKE="fedora"
VERSION_ID="8.2"
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:

itlb_multihit: KVM: Mitigation: Split huge pages
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 barriers and __user pointer sanitization
CVE-2017-5715 (Spectre variant 2): Mitigation: Enhanced IBRS, IBPB: conditional, RSB filling
tsx_async_abort: Mitigation: Clear CPU buffers; SMT disabled

(Continued on next page)
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</table>

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**Test Sponsor:** New H3C Technologies Co., Ltd.  
**Test Date:** Sep-2020  
**Hardware Availability:** Mar-2019  
**Tested by:** New H3C Technologies Co., Ltd.  
**Software Availability:** Apr-2020

---

## Platform Notes (Continued)

**run-level 3 Sep 8 10:43**

SPEC is set to: /home/speccpu

<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/mapper/rhel-home</td>
<td>xfs</td>
<td>839G</td>
<td>13G</td>
<td>826G</td>
<td>2%</td>
<td>/home</td>
</tr>
</tbody>
</table>

From /sys/devices/virtual/dmi/id

- BIOS: American Megatrends Inc. 2.00.33 08/22/2019
- Vendor: New H3C Technologies Co., Ltd.
- Product: UniServer R6700 G3
- Product Family: Rack
- Serial: 210200A01SH18B000020

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:**
- 24x Hynix HMA82GR7CJR8N-WM 16 GB 2 rank 2933
- 24x NO DIMM NO DIMM

(End of data from sysinfo program)

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## Compiler Version Notes

```
==============================================================================
C       | 600.perlbench_s(base) 602.gcc_s(base, peak) 605.mcf_s(base, peak)
       | 625.x264_s(base, peak) 657.xz_s(base, peak)
==============================================================================
Intel(R) C Compiler for applications running on Intel(R) 64, Version 2021.1
NextGen Build 20200304
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.
```

```
==============================================================================
C       | 600.perlbench_s(peak)
==============================================================================
Intel(R) C Intel(R) 64 Compiler for applications running on Intel(R) 64,
Version 19.1.1.217 Build 20200306
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.
```

```
==============================================================================
C       | 600.perlbench_s(base) 602.gcc_s(base, peak) 605.mcf_s(base, peak)
       | 625.x264_s(base, peak) 657.xz_s(base, peak)
==============================================================================
```

(Continued on next page)
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Copyright 2017-2020 Standard Performance Evaluation Corporation

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Software Availability: Apr-2020

Compiler Version Notes (Continued)

Intel(R) C Compiler for applications running on Intel(R) 64, Version 2021.1
NextGen Build 20200304
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.

_____________________________

C       | 600.perlbench_s(peak)
_____________________________

Intel(R) C Intel(R) 64 Compiler for applications running on Intel(R) 64,
Version 19.1.1.217 Build 20200306
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.

_____________________________

C++     | 620.omnetpp_s(base, peak) 623.xalancbmk_s(base, peak)
        | 631.deepsjeng_s(base, peak) 641.leela_s(base, peak)
_____________________________

Intel(R) C++ Compiler for applications running on Intel(R) 64, Version 2021.1
NextGen Build 20200304
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.

_____________________________

Fortran | 648.exchange2_s(base, peak)
_____________________________

Intel(R) Fortran Intel(R) 64 Compiler for applications running on Intel(R) 64,
Version 19.1.1.217 Build 20200306
Copyright (C) 1985-2020 Intel Corporation. All rights reserved.

Base Compiler Invocation

C benchmarks:
icc

C++ benchmarks:
icpc

Fortran benchmarks:
ifort
New H3C Technologies Co., Ltd. | SPEC CPU®2017 Integer Speed Result

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Base Portability Flags

600.perlbench_s: -DSPEC_LP64 -DSPEC_LINUX_X64
602.gcc_s: -DSPEC_LP64
605.mcf_s: -DSPEC_LP64
620.omnetpp_s: -DSPEC_LP64
623.xmlancbmk_s: -DSPEC_LP64 -DSPEC_LINUX
625.x264_s: -DSPEC_LP64
631.deepsjeng_s: -DSPEC_LP64
641.leela_s: -DSPEC_LP64
648.exchange2_s: -DSPEC_LP64
657.xz_s: -DSPEC_LP64

Base Optimization Flags

C benchmarks:
-m64 -gnextgen -std=c11
-W1,-plugin-opt=-x86-branches-within-32B-boundaries -Wl,-z,muldefs
-xCORE-AVX512 -O3 -ffast-math -flto -mfpmath=sse -funroll-loops
-fuse-ld=gold -qopt-mem-layout-trans=4 -fopenmp -DSPEC_OPENMP
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc

C++ benchmarks:
-m64 -gnextgen -Wl,-plugin-opt=-x86-branches-within-32B-boundaries
-Wl,-z,muldefs -xCORE-AVX512 -O3 -ffast-math -flto -mfpmath=sse
-funroll-loops -fuse-ld=gold -qopt-mem-layout-trans=4
-L/usr/local/IntelCompiler19/compilers_and_libraries_2020.1.217/linux/compiler/lib/intel64_lin
-lqkmalloc

Fortran benchmarks:
-m64 -W1,-plugin-opt=-x86-branches-within-32B-boundaries -xCORE-AVX512
-O3 -ipo -no-prec-div -qopt-mem-layout-trans=4
-nostandard-realloc-lhs -align array32byte
-mbranches-within-32B-boundaries

Peak Compiler Invocation

C benchmarks:
icc

C++ benchmarks:
icpc

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New H3C Technologies Co., Ltd. H3C UniServer R6700 G3 (Intel Xeon Gold 6230)

**SPECspeed®2017_int_base = 10.9**

**SPECspeed®2017_int_peak = 11.1**

**CPU2017 License:** 9066  
**Test Sponsor:** New H3C Technologies Co., Ltd.  
**Test Date:** Sep-2020  
**Hardware Availability:** Mar-2019  
**Tested by:** New H3C Technologies Co., Ltd.  
**Software Availability:** Apr-2020

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**Peak Compiler Invocation (Continued)**

Fortran benchmarks:

`ifort`

---

**Peak Portability Flags**

600.perlbench_s: -DSPEC_LP64 -DSPEC_LINUX_X64  
602.gcc_s: -DSPEC_LP64(*) -DSPEC_LP64  
605.mcf_s: -DSPEC_LP64  
620.omnetpp_s: -DSPEC_LP64  
623.xalancbmk_s: -DSPEC_LP64 -DSPEC_LINUX  
625.x264_s: -DSPEC_LP64  
631.deepsjeng_s: -DSPEC_LP64  
641.leela_s: -DSPEC_LP64  
648.exchange2_s: -DSPEC_LP64  
657.xz_s: -DSPEC_LP64

(*) Indicates a portability flag that was found in a non-portability variable.

---

**Peak Optimization Flags**

C benchmarks:

600.perlbench_s: -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/usr/local/jemalloc64-5.0.1/lib -ljemalloc

602.gcc_s: -m64 -qnextgen -std=c11 -fuse-ld=gold  
-Wl,-plugin-opt=-x86-branches-within-32B-boundaries  
-Wl,-z,muldefs -fprofile-generate(pass 1)  
-fprofile-use=default.profdatalpass 2 -xCORE-AVX512 -flto  
-Ofast(pass 1) -O3 -ffast-math -qopt-mem-layout-trans=4  
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc

605.mcf_s: basepeak = yes

625.x264_s: -m64 -qnextgen -std=c11  
-Wl,-plugin-opt=-x86-branches-within-32B-boundaries  
-Wl,-z,muldefs -xCORE-AVX512 -flto -O3 -ffast-math  
-fuse-ld=gold -qopt-mem-layout-trans=4 -fno-alias  
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc

(Continued on next page)
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SPECspeed\textsuperscript{\textregistered}2017\textsubscript{\textcopyright}\textprime\textsubscript{\texttrademark}\textsubscript{\textregistered}_{\textsubscript{\textcopyright}2017\textsubscript{\textregistered} \textsubscript{\textcopyright}int\_base = 10.9

\textbf{SPECspeed\textsuperscript{\textregistered}2017\textsubscript{\textcopyright}int\_peak = 11.1}

\begin{tabular}{|l|l|}
\hline
\textbf{CPU2017 License:} & 9066 \\
\textbf{Test Sponsor:} & New H3C Technologies Co., Ltd. \\
\textbf{Tested by:} & New H3C Technologies Co., Ltd. \\
\hline
\textbf{Test Date:} & Sep-2020 \\
\textbf{Hardware Availability:} & Mar-2019 \\
\textbf{Software Availability:} & Apr-2020 \\
\hline
\end{tabular}

\textbf{Peak Optimization Flags (Continued)}

\begin{itemize}
\item 657.xz\_s: basepeak \textsubscript{\textregistered} = yes
\item C++ benchmarks:
\item 620.omnetpp\_s: basepeak \textsubscript{\textregistered} = yes
\item 623.xalancbmk\_s: basepeak \textsubscript{\textregistered} = yes
\item 631.deepsjeng\_s: basepeak \textsubscript{\textregistered} = yes
\item 641.leela\_s: basepeak \textsubscript{\textregistered} = yes
\item Fortran benchmarks:
\item 648.exchange2\_s: basepeak \textsubscript{\textregistered} = yes
\end{itemize}

The flags files that were used to format this result can be browsed at
http://www.spec.org/cpu2017/flags/New_H3C-Platform-Settings-V1.4-CLX-RevB.html

You can also download the XML flags sources by saving the following links:
http://www.spec.org/cpu2017/flags/Intel-ic19.1u1-official-linux64_revA.xml
http://www.spec.org/cpu2017/flags/New_H3C-Platform-Settings-V1.4-CLX-RevB.xml

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For questions about this result, please contact the tester. For other inquiries, please contact info@spec.org.

Tested with SPEC CPU\textsuperscript{\textregistered}2017 v1.1.0 on 2020-09-07 22:46:36-0400.
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