## SPEC CPU®2017 Integer Rate Result

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

H3C UniServer B5700 G5 (Intel Xeon Gold 5318Y)

<table>
<thead>
<tr>
<th>SPECrate®2017_int_base</th>
<th>SPECrate®2017_int_peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>316</td>
<td>325</td>
</tr>
</tbody>
</table>

**CPU2017 License:** 9066  
**Test Date:** Jul-2021  
**Test Sponsor:** New H3C Technologies Co., Ltd.  
**Hardware Availability:** Apr-2021  
**Tested by:** New H3C Technologies Co., Ltd.  
**Software Availability:** Dec-2020

### Hardware

| Copy | 0 | 30 | 60 | 90 | 120 | 150 | 180 | 210 | 240 | 270 | 300 | 330 | 360 | 390 | 420 | 450 | 480 | 510 | 540 | 570 | 600 | 630 | 660 | 690 | 720 | 750 | 780 | 810 | 840 |
|------|---|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 500.perlbench_r | 96 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 502.gcc_r | 96 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 505.mcf_r | 96 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 520.omnetpp_r | 96 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 523.xalancbmk_r | 96 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 525.x264_r | 96 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 531.deepsjeng_r | 96 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 541.leela_r | 96 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 548.exchange2_r | 96 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 557.xz_r | 96 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

**Hardware**

<table>
<thead>
<tr>
<th><strong>CPU Name:</strong></th>
<th>Intel Xeon Gold 5318Y</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Max MHz:</strong></td>
<td>3400</td>
</tr>
<tr>
<td><strong>Nominal:</strong></td>
<td>2100</td>
</tr>
<tr>
<td><strong>Enabled:</strong></td>
<td>48 cores, 2 chips, 2 threads/core</td>
</tr>
<tr>
<td><strong>Orderable:</strong></td>
<td>1.2 Chips</td>
</tr>
<tr>
<td><strong>Cache L1:</strong></td>
<td>32 KB I + 48 KB D on chip per core</td>
</tr>
<tr>
<td><strong>L2:</strong></td>
<td>1.25 MB I+D on chip per core</td>
</tr>
<tr>
<td><strong>L3:</strong></td>
<td>36 MB I+D on chip per chip</td>
</tr>
<tr>
<td><strong>Other:</strong></td>
<td>None</td>
</tr>
<tr>
<td><strong>Memory:</strong></td>
<td>512 GB (16 x 32 GB 2Rx4 PC4-3200V-R, running at 2933)</td>
</tr>
<tr>
<td><strong>Storage:</strong></td>
<td>1 x 1.92 TB SATA SSD</td>
</tr>
<tr>
<td><strong>Other:</strong></td>
<td>None</td>
</tr>
</tbody>
</table>

### Software

<table>
<thead>
<tr>
<th><strong>OS:</strong></th>
<th>Red Hat Enterprise Linux release 8.3 (Ootpa) 4.18.0-240.el8.x86_64</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Compiler:</strong></td>
<td>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</td>
</tr>
<tr>
<td><strong>Parallel:</strong></td>
<td>No</td>
</tr>
<tr>
<td><strong>Firmware:</strong></td>
<td>Version 5.23 released Apr-2021 BIOS</td>
</tr>
<tr>
<td><strong>File System:</strong></td>
<td>xfs</td>
</tr>
<tr>
<td><strong>System State:</strong></td>
<td>Run level 3 (multi-user)</td>
</tr>
<tr>
<td><strong>Base Pointers:</strong></td>
<td>64-bit</td>
</tr>
<tr>
<td><strong>Peak Pointers:</strong></td>
<td>32/64-bit</td>
</tr>
<tr>
<td><strong>Other:</strong></td>
<td>jemalloc memory allocator V5.0.1</td>
</tr>
<tr>
<td><strong>Power Management:</strong></td>
<td>BIOS set to prefer performance at the cost of additional power usage</td>
</tr>
</tbody>
</table>
## Results Table

<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>
<th>Copies</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
<th>Seconds</th>
<th>Ratio</th>
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<tbody>
<tr>
<td>500.perlbench_r</td>
<td>96</td>
<td>689</td>
<td>222</td>
<td>686</td>
<td>223</td>
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<td>223</td>
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<td>253</td>
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<td>253</td>
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<tr>
<td>502.gcc_r</td>
<td>96</td>
<td>521</td>
<td>261</td>
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<td>505.mcf_r</td>
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<td>517</td>
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<tr>
<td>520.omnetpp_r</td>
<td>96</td>
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<td>615</td>
<td>205</td>
<td>612</td>
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<td>615</td>
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<td>206</td>
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<td>523.xalancbmk_r</td>
<td>96</td>
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<td>250</td>
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<td>407</td>
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<tr>
<td>525.x264_r</td>
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<td>531.deepsjeng_r</td>
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<td>541.leela_r</td>
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<td>646</td>
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<tr>
<td>557.xz_r</td>
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<td>577</td>
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<td>174</td>
<td>593</td>
<td>175</td>
<td>594</td>
<td>175</td>
</tr>
</tbody>
</table>

**SPECrate®2017_int_base = 316**  
**SPECrate®2017_int_peak = 325**

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 = 
"/home/speccpu/lib/intel64:/home/speccpu/lib/ia32:/home/speccpu/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  
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
```

(Continued on next page)
New H3C Technologies Co., Ltd.  
H3C UniServer B5700 G5 (Intel Xeon Gold 5318Y)

<table>
<thead>
<tr>
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<th>9066</th>
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<td>New H3C Technologies Co., Ltd.</td>
</tr>
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<td>Tested by:</td>
<td>New H3C Technologies Co., Ltd.</td>
</tr>
<tr>
<td>Test Date:</td>
<td>Jul-2021</td>
</tr>
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<td>Hardware Availability:</td>
<td>Apr-2021</td>
</tr>
<tr>
<td>Software Availability:</td>
<td>Dec-2020</td>
</tr>
</tbody>
</table>

**General Notes (Continued)**

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) 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.

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 SNC to enabled
Set Patrol Scrub to disabled
Set XPT Prefetch to enabled

Sysinfo program /home/speccpu/bin/sysinfo
Rev: r6622 of 2021-04-07 982a61ec0915b55891ef0e16acaf64d
running on localhost.localdomain Wed Jul 7 11:51:19 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 5318Y CPU @ 2.10GHz
  2 "physical id"s (chips)
    96 "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 : 24
  siblings : 48
  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
  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

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):                96
On-line CPU(s) list:   0-95
Thread(s) per core:    2
Core(s) per socket:    24

(Continued on next page)
New H3C Technologies Co., Ltd.

H3C UniServer B5700 G5 (Intel Xeon Gold 5318Y)

**Platform Notes (Continued)**

- **Socket(s):** 2
- **NUMA node(s):** 4
- **Vendor ID:** GenuineIntel
- **CPU family:** 6
- **Model:** 106
- **Model name:** Intel(R) Xeon(R) Gold 5318Y CPU @ 2.10GHz
- **Stepping:** 6
- **CPU MHz:** 2599.910
- **CPU max MHz:** 3400.0000
- **CPU min MHz:** 800.0000
- **BogoMIPS:** 4200.00
- **Virtualization:** VT-x
- **L1d cache:** 48K
- **L1i cache:** 32K
- **L2 cache:** 1280K
- **L3 cache:** 36864K
- **NUMA node0 CPU(s):** 0-11, 48-59
- **NUMA node1 CPU(s):** 12-23, 60-71
- **NUMA node2 CPU(s):** 24-35, 72-83
- **NUMA node3 CPU(s):** 36-47, 84-95
- **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 rdtscp lm constant_tsc art arch_perfmon pebs bts rep_good nopl xtopology nonstop_tsc cpuid cpuid_fault epb cat_l3 invpcid_single intel_pknos bsd mba ibrs ibpb stibp ibrs_enhanced trp_shadow vmx flexpriority ept vpid ept_ad fsgsbase tsc_adjust bmi1 hle avx2 smep bmi2 erms invpcid cqm rdt_a avx512f avx512dq rdseed adx smap avx512ifma clflushopt clwb intel_pt avx512cd sha ni avx512bw avx512vl xsaveopt xsaveopt xsaves xsave xsaves cqm_llc cqm_occup_llc cqm_mbb_total cqm_mbb_local split_lock_detect wbinvd dtherm ida arat pln pts hwp hwp_act_window hwp_epp hwp_kpg_remap avx512vmbi umip pku ospke avx512_vmbi2 gfn vaes vpclmulqdq avx512_vnni avx512_bitalg tme avx512_vpctndq 1a57 rdpid md_clear pconfig flush_lld arch_capabilities

/proc/cpuinfo cache data
- **cache size:** 36864 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 48 49 50 51 52 53 54 55 56 57 58 59
- **node 0 size:** 125691 MB
- **node 0 free:** 127890 MB
- **node 1 cpus:** 12 13 14 15 16 17 18 19 20 21 22 23 60 61 62 63 64 65 66 67 68 69 70 71
- **node 1 size:** 126216 MB
- **node 1 free:** 128653 MB

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

New H3C Technologies Co., Ltd.  SPECrate®2017_int_base = 316
H3C UniServer B5700 G5 (Intel Xeon Gold 5318Y)  SPECrate®2017_int_peak = 325

CPU2017 License: 9066
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Platform Notes (Continued)

node 2 cpus: 24 25 26 27 28 29 30 31 32 33 34 35 72 73 74 75 76 77 78 79 80 81 82 83
node 2 size: 126194 MB
node 2 free: 128613 MB
node 3 cpus: 36 37 38 39 40 41 42 43 44 45 46 47 84 85 86 87 88 89 90 91 92 93 94 95
node 3 size: 126206 MB
node 3 free: 128644 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:       527737716 kB
  HugePages_Total:       0
  Hugepagesize:       2048 kB

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

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

(Continued on next page)
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<tbody>
<tr>
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</tr>
</tbody>
</table>

## Platform Notes (Continued)

<table>
<thead>
<tr>
<th>CVE-2017-5754 (Meltdown):</th>
<th>Not affected</th>
</tr>
</thead>
<tbody>
<tr>
<td>CVE-2018-3639 (Speculative Store Bypass):</td>
<td>Mitigation: Speculative Store Bypass disabled via prctl and seccomp</td>
</tr>
<tr>
<td>CVE-2017-5753 (Spectre variant 1):</td>
<td>Mitigation: usercopy/swapgs barriers and __user pointer sanitization</td>
</tr>
<tr>
<td>CVE-2017-5715 (Spectre variant 2):</td>
<td>Mitigation: Enhanced IBRS, IBPB: conditional, RSB filling</td>
</tr>
<tr>
<td>CVE-2020-0543 (Special Register Buffer Data Sampling):</td>
<td>Not affected</td>
</tr>
<tr>
<td>CVE-2019-11135 (TSX Asynchronous Abort):</td>
<td>Not affected</td>
</tr>
</tbody>
</table>

run-level 3 Jul 7 23:45

SPEC is set to: /home/speccpu

Filesystem | Type | Size | Used | Avail | Use% | Mounted on |
--- | --- | --- | --- | --- | --- | --- |
/dev/mapper/rhel-home | xfs | 1.7T | 94G | 1.6T | 6% | /home |

From /sys/devices/virtual/dmi/id

| Vendor: New H3C Technologies Co., Ltd. |
| Product: B5700 G5 |
| Product Family: Rack |
| Serial: 210235A3W9H212000013 |

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:
- 16x Hynix HMA84GR7DJR4N-XN 32 GB 2 rank 3200, configured at 2933
- 16x NO DIMM NO DIMM

BIOS:
- BIOS Vendor: American Megatrends International, LLC.
- BIOS Version: 5.23
- BIOS Date: 04/23/2021
- BIOS Revision: 5.21

(End of data from sysinfo program)

## Compiler Version Notes

==============================================================================
<table>
<thead>
<tr>
<th>C</th>
<th>500.perlbench_r(peak) 557.xz_r(peak)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intel(R) C Intel(R) 64 Compiler Classic for applications running on Intel(R)</td>
<td></td>
</tr>
</tbody>
</table>

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Software Availability: Dec-2020

Compiler Version Notes (Continued)

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  
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Intel(R) C Intel(R) 64 Compiler Classic for applications running on Intel(R) 64, Version 2021.1 Build 20201112_000000  
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<table>
<thead>
<tr>
<th>C</th>
</tr>
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<tbody>
<tr>
<td>502.gcc_r(peak)</td>
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</tbody>
</table>

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Intel(R) oneAPI DPC++/C++ Compiler for applications running on IA-32, Version 2021.1 Build 20201113  
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<td>500.perlbench_r(base) 502.gcc_r(base) 505.mcf_r(base, peak) 525.x264_r(base, peak) 557.xz_r(base)</td>
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Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2021.1 Build 20201113  
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Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2021.1 Build 20201113  
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<th>Fortran</th>
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<td>548.exchange2_r(base, peak)</td>
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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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### Base Compiler Invocation

C benchmarks:  
`icx`

(Continued on next page)
New H3C Technologies Co., Ltd. SPEC CPU®2017 Integer Rate Result
H3C UniServer B5700 G5 (Intel Xeon Gold 5318Y) SPECrate®2017_int_base = 316
SPECrate®2017_int_peak = 325

CPU2017 License: 9066
Test Sponsor: New H3C Technologies Co., Ltd.
Test Date: Jul-2021
Tested by: New H3C Technologies Co., Ltd.
Hardware Availability: Apr-2021
Software Availability: Dec-2020

Base Compiler Invocation (Continued)

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 -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
# SPEC CPU®2017 Integer Rate Result

New H3C Technologies Co., Ltd.  
H3C UniServer B5700 G5 (Intel Xeon Gold 5318Y)  

| SPECrate®2017_int_base | 316 |
| SPECrate®2017_int_peak | 325 |

**CPU2017 License:** 9066  
**Test Sponsor:** New H3C Technologies Co., Ltd.  
**Tested by:** New H3C Technologies Co., Ltd.  
**Test Date:** Jul-2021  
**Hardware Availability:** Apr-2021  
**Software Availability:** Dec-2020

## 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

## 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

(Continued on next page)
New H3C Technologies Co., Ltd.  
H3C UniServer B5700 G5 (Intel Xeon Gold 5318Y)

| SPECrate®2017_int_base = 316 |
| SPECrate®2017_int_peak = 325 |

**CPU2017 License:** 9066  
**Test Sponsor:** New H3C Technologies Co., Ltd.  
**Tested by:** New H3C Technologies Co., Ltd.

**Test Date:** Jul-2021  
**Hardware Availability:** Apr-2021  
**Software Availability:** Dec-2020

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### Peak Optimization Flags (Continued)

502.gcc_r (continued):
-`-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`

557.xz_r: `-Wl,-z,muldefs -xCORE-AVX512 -ipo -O3 -no-prec-div  
-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:

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


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  
http://www.spec.org/cpu2017/flags/New_H3C-Platform-Settings-V1.0-CPX-RevC.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®2017 v1.1.8 on 2021-07-07 11:51:18-0400.  
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