



SPEC CPU®2017 Integer Speed Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

New H3C Technologies Co., Ltd.

H3C UniServer R4900 G6 (Intel Xeon Platinum 8571N)

SPECSpeed®2017_int_base = 14.8

SPECSpeed®2017_int_peak = 15.0

CPU2017 License: 9066

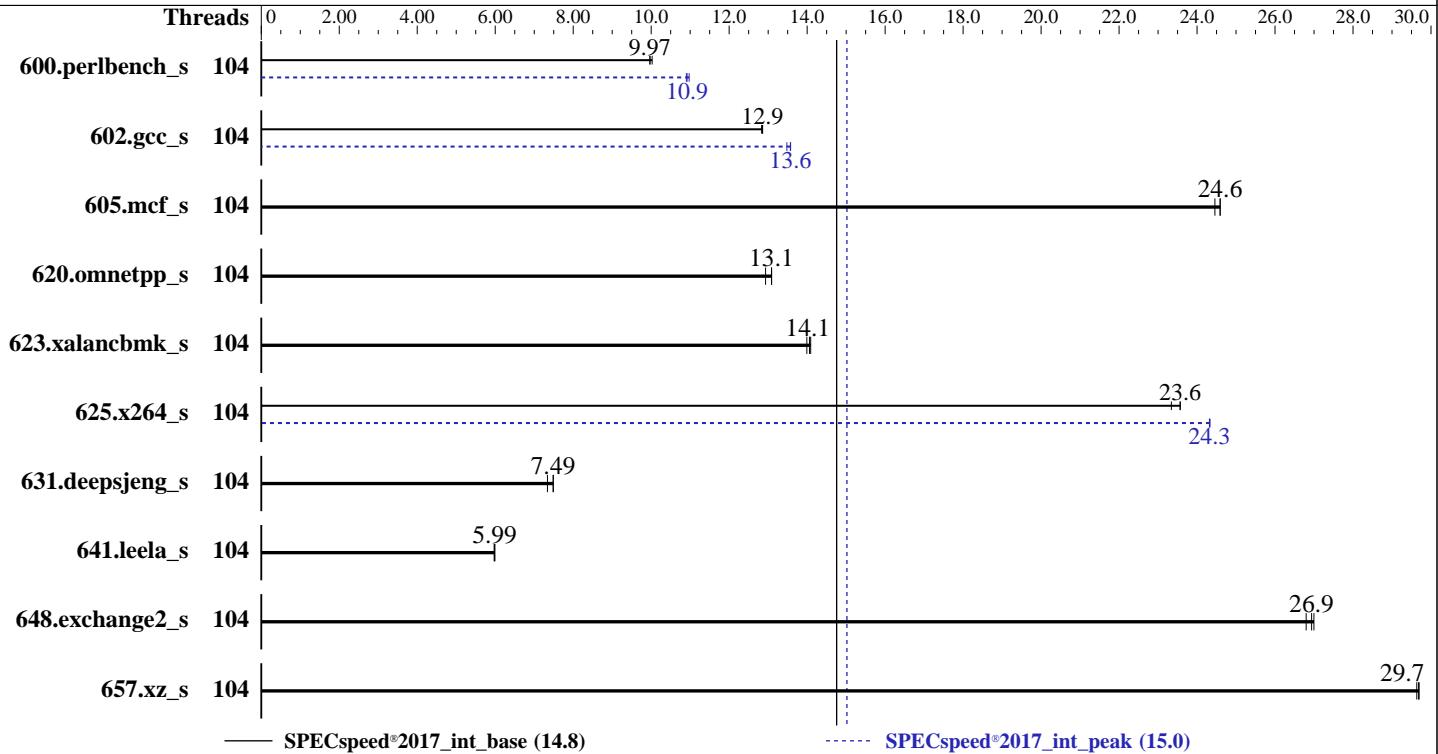
Test Date: Jul-2025

Test Sponsor: New H3C Technologies Co., Ltd.

Hardware Availability: Oct-2023

Tested by: New H3C Technologies Co., Ltd.

Software Availability: Mar-2024



Hardware		Software	
CPU Name:	Intel Xeon Platinum 8571N	OS:	SUSE Linux Enterprise Server 15 SP5
Max MHz:	4000	Compiler:	5.14.21-150500.53-default
Nominal:	2400	Parallel:	C/C++: Version 2024.1 of Intel oneAPI DPC++/C++ Compiler for Linux;
Enabled:	52 cores, 1 chip, 2 threads/core	Firmware:	Fortran: Version 2024.1 of Intel Fortran Compiler for Linux;
Orderable:	1 chip	File System:	Yes
Cache L1:	32 KB I + 48 KB D on chip per core	System State:	Version 6.10.52 released May-2025 BIOS
L2:	2 MB I+D on chip per core	Base Pointers:	btrfs
L3:	300 MB I+D on chip per chip	Peak Pointers:	Run level 3 (multi-user)
Other:	None	Other:	64-bit
Memory:	512 GB (8 x 64 GB 2Rx4 PC5-5600B-R, running at 4800)	Power Management:	64-bit
Storage:	1 x 960 GB SATA SSD		jemalloc memory allocator V5.0.1
Other:	CPU Cooling: Air		BIOS and OS set to prefer performance at the cost of additional power usage.



SPEC CPU®2017 Integer Speed Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

New H3C Technologies Co., Ltd.

H3C UniServer R4900 G6 (Intel Xeon Platinum 8571N)

SPECspeed®2017_int_base = 14.8

SPECspeed®2017_int_peak = 15.0

CPU2017 License: 9066

Test Date: Jul-2025

Test Sponsor: New H3C Technologies Co., Ltd.

Hardware Availability: Oct-2023

Tested by: New H3C Technologies Co., Ltd.

Software Availability: Mar-2024

Results Table

Benchmark	Base							Peak						
	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Threads	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
600.perlbench_s	104	177	10.0	178	9.97	<u>178</u>	<u>9.97</u>	104	163	10.9	162	11.0	<u>163</u>	<u>10.9</u>
602.gcc_s	104	<u>310</u>	<u>12.9</u>	310	12.9	310	12.8	104	<u>293</u>	<u>13.6</u>	293	13.6	<u>295</u>	13.5
605.mcf_s	104	<u>192</u>	<u>24.6</u>	192	24.6	193	24.5	104	<u>192</u>	<u>24.6</u>	192	24.6	<u>193</u>	24.5
620.omnetpp_s	104	126	12.9	<u>125</u>	<u>13.1</u>	125	13.1	104	126	12.9	<u>125</u>	<u>13.1</u>	125	13.1
623.xalancbmk_s	104	<u>101</u>	<u>14.1</u>	101	14.1	101	14.0	104	<u>101</u>	<u>14.1</u>	101	14.1	101	14.0
625.x264_s	104	<u>74.9</u>	<u>23.6</u>	75.6	23.3	74.8	23.6	104	72.5	24.3	72.5	24.3	<u>72.5</u>	<u>24.3</u>
631.deepsjeng_s	104	191	7.49	195	7.34	<u>191</u>	<u>7.49</u>	104	191	7.49	195	7.34	<u>191</u>	<u>7.49</u>
641.leela_s	104	<u>285</u>	<u>5.99</u>	286	5.97	285	5.99	104	<u>285</u>	<u>5.99</u>	286	5.97	<u>285</u>	5.99
648.exchange2_s	104	110	26.8	109	27.0	<u>109</u>	<u>26.9</u>	104	110	26.8	109	27.0	<u>109</u>	<u>26.9</u>
657.xz_s	104	208	29.7	<u>208</u>	<u>29.7</u>	209	29.6	104	208	29.7	<u>208</u>	<u>29.7</u>	209	29.6
SPECspeed®2017_int_base = 14.8							SPECspeed®2017_int_peak = 15.0							

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

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"
MALLOC_CONF = "retain:true"
OMP_STACKSIZE = "192M"
```

General Notes

Binaries compiled on a system with 2x Intel Xeon Platinum 8280M CPU + 384GB RAM memory using Redhat Enterprise Linux 8.0

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.:
```

```
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

sources available from jemalloc.net or <https://github.com/jemalloc/jemalloc/releases>



SPEC CPU®2017 Integer Speed Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

New H3C Technologies Co., Ltd.

H3C UniServer R4900 G6 (Intel Xeon Platinum 8571N)

SPECspeed®2017_int_base = 14.8

SPECspeed®2017_int_peak = 15.0

CPU2017 License: 9066

Test Date: Jul-2025

Test Sponsor: New H3C Technologies Co., Ltd.

Hardware Availability: Oct-2023

Tested by: New H3C Technologies Co., Ltd.

Software Availability: Mar-2024

Platform Notes

BIOS Settings:

Intel VT for Directed I/O = Disabled
CPU C6 report = Enabled
SNC = Enable SNC2 (2-clusters)

BMC Settings:

Fan mode = powerful mode

Sysinfo program /home/speccpu/bin/sysinfo
Rev: r6732 of 2022-11-07 fe91c89b7ed5c36ae2c92cc097bec197
running on localhost Thu Jul 10 16:39:42 2025

SUT (System Under Test) info as seen by some common utilities.

Table of contents

1. uname -a
2. w
3. Username
4. ulimit -a
5. sysinfo process ancestry
6. /proc/cpuinfo
7. lscpu
8. numactl --hardware
9. /proc/meminfo
10. who -r
11. Systemd service manager version: systemd 249 (249.16+suse.171.gdad0071f15)
12. Services, from systemctl list-unit-files
13. Linux kernel boot-time arguments, from /proc/cmdline
14. cpupower frequency-info
15. tuned-adm active
16. sysctl
17. /sys/kernel/mm/transparent_hugepage
18. /sys/kernel/mm/transparent_hugepage/khugepaged
19. OS release
20. Disk information
21. /sys/devices/virtual/dmi/id
22. dmidecode
23. BIOS

1. uname -a
Linux localhost 5.14.21-150500.53-default #1 SMP PREEMPT_DYNAMIC Wed May 10 07:56:26 UTC 2023 (b630043)
x86_64 x86_64 x86_64 GNU/Linux

2. w
16:39:42 up 1 min, 1 user, load average: 0.06, 0.03, 0.01
USER TTY FROM LOGIN@ IDLE JCPU PCPU WHAT
root ttym1 - 16:39 6.00s 4.66s 0.01s -bash

3. Username
From environment variable \$USER: root

4. ulimit -a
core file size (blocks, -c) unlimited
data seg size (kbytes, -d) unlimited

(Continued on next page)



SPEC CPU®2017 Integer Speed Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

New H3C Technologies Co., Ltd.

H3C UniServer R4900 G6 (Intel Xeon Platinum 8571N)

SPECspeed®2017_int_base = 14.8

SPECspeed®2017_int_peak = 15.0

CPU2017 License: 9066

Test Date: Jul-2025

Test Sponsor: New H3C Technologies Co., Ltd.

Hardware Availability: Oct-2023

Tested by: New H3C Technologies Co., Ltd.

Software Availability: Mar-2024

Platform Notes (Continued)

```
scheduling priority          (-e) 0
file size                  (blocks, -f) unlimited
pending signals             (-i) 2062279
max locked memory          (kbytes, -l) 64
max memory size            (kbytes, -m) unlimited
open files                 (-n) 1024
pipe size                  (512 bytes, -p) 8
POSIX message queues       (bytes, -q) 819200
real-time priority          (-r) 0
stack size                 (kbytes, -s) unlimited
cpu time                   (seconds, -t) unlimited
max user processes          (-u) 2062279
virtual memory              (kbytes, -v) unlimited
file locks                 (-x) unlimited
```

5. sysinfo process ancestry

```
/usr/lib/systemd/systemd --switched-root --system --deserialize 29
login -- root
-bash
-bash
runcpu --nobuild --action validate --define default-platform-flags -c
  ic2024.1-lin-sapphirerapids-speed-20240308.cfg --define cores=104 --tune base,peak -o all --define
  intspeedaffinity --define drop_caches intspeed
runcpu --nobuild --action validate --define default-platform-flags --configfile
  ic2024.1-lin-sapphirerapids-speed-20240308.cfg --define cores=104 --tune base,peak --output_format all
  --define intspeedaffinity --define drop_caches --nopower --runmode speed --tune base:peak --size refspeed
  intspeed --nopreenv --note-preenv --logfile $SPEC/tmp/CPU2017.068/templogs/preenv.intspeed.068.0.log
  --lognum 068.0 --from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /home/speccpu
```

6. /proc/cpuinfo

```
model name      : INTEL(R) XEON(R) PLATINUM 8571N
vendor_id       : GenuineIntel
cpu family     : 6
model          : 207
stepping        : 2
microcode       : 0x21000160
bugs            : spectre_v1 spectre_v2 spec_store_bypass swapgs eibrss_pbrss
cpu cores       : 52
siblings         : 104
1 physical ids (chips)
104 processors (hardware threads)
physical id 0: core ids 0-51
physical id 0: apicids 0-103
Caution: /proc/cpuinfo data regarding chips, cores, and threads is not necessarily reliable, especially for
virtualized systems. Use the above data carefully.
```

7. lscpu

```
From lscpu from util-linux 2.37.4:
Architecture:           x86_64
CPU op-mode(s):         32-bit, 64-bit
Address sizes:          52 bits physical, 57 bits virtual
Byte Order:              Little Endian
CPU(s):                 104
On-line CPU(s) list:    0-103
```

(Continued on next page)



SPEC CPU®2017 Integer Speed Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

New H3C Technologies Co., Ltd.

H3C UniServer R4900 G6 (Intel Xeon Platinum 8571N)

SPECspeed®2017_int_base = 14.8

SPECspeed®2017_int_peak = 15.0

CPU2017 License: 9066

Test Date: Jul-2025

Test Sponsor: New H3C Technologies Co., Ltd.

Hardware Availability: Oct-2023

Tested by: New H3C Technologies Co., Ltd.

Software Availability: Mar-2024

Platform Notes (Continued)

Vendor ID:	GenuineIntel
Model name:	INTEL(R) XEON(R) PLATINUM 8571N
CPU family:	6
Model:	207
Thread(s) per core:	2
Core(s) per socket:	52
Socket(s):	1
Stepping:	2
CPU max MHz:	4000.0000
CPU min MHz:	800.0000
BogoMIPS:	4800.00
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 aperfmpmer tsc_known_freq pni pclmulqdq dtes64 monitor ds_cpl vmx smx est tm2 ssse3 sdbg fma cx16 xtrp 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_13 cat_12 cdp_13 invpcid_single cdp_12 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 avx512bw avx512vl xsaveopt xsavec xgetbv1 xsaves cqm_llc cqm_occup_llc cqm_mbm_total cqm_mbm_local avx_vnni avx512_bf16 wbnoinvd dtherm ida arat pln pts hwp hwp_act_window hwp_epp hwp_pkg_req hfi avx512vbmi umip pku ospke waitpkg avx512_vbmi2 gfni vaes vpclmulqdq avx512_vnni avx512_bitalg tme avx512_vpopcntdq la57 rdpid bus_lock_detect cldemote movdiri movdir64b enqcmd fsrm md_clear serialize tsxlptrk pconfig arch_lbr avx512_fp16 amx_tile flush_lll arch_capabilities
Virtualization:	VT-x
L1d cache:	2.4 MiB (52 instances)
L1i cache:	1.6 MiB (52 instances)
L2 cache:	104 MiB (52 instances)
L3 cache:	300 MiB (1 instance)
NUMA node(s):	2
NUMA node0 CPU(s):	0-25,52-77
NUMA node1 CPU(s):	26-51,78-103
Vulnerability Itlb multihit:	Not affected
Vulnerability L1tf:	Not affected
Vulnerability Mds:	Not affected
Vulnerability Meltdown:	Not affected
Vulnerability Mmio stale data:	Not affected
Vulnerability Retbleed:	Not affected
Vulnerability Spec store bypass:	Mitigation; Speculative Store Bypass disabled via prctl and seccomp
Vulnerability Spectre v1:	Mitigation; usercopy/swapgs barriers and __user pointer sanitization
Vulnerability Spectre v2:	Mitigation; Enhanced IBRS, IBPB conditional, RSB filling, PBRSB-eIBRS SW sequence
Vulnerability Srbds:	Not affected
Vulnerability Tsx async abort:	Not affected

From lscpu --cache:

NAME	ONE-SIZE	ALL-SIZE	WAYS	TYPE	LEVEL	SETS	PHY-LINE	COHERENCY-SIZE
L1d	48K	2.4M	12	Data	1	64	1	64
L1i	32K	1.6M	8	Instruction	1	64	1	64
L2	2M	104M	16	Unified	2	2048	1	64
L3	300M	300M	20	Unified	3	245760	1	64

8. numactl --hardware

NOTE: a numactl 'node' might or might not correspond to a physical chip.

(Continued on next page)



SPEC CPU®2017 Integer Speed Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

New H3C Technologies Co., Ltd.

H3C UniServer R4900 G6 (Intel Xeon Platinum 8571N)

SPECspeed®2017_int_base = 14.8

SPECspeed®2017_int_peak = 15.0

CPU2017 License: 9066

Test Date: Jul-2025

Test Sponsor: New H3C Technologies Co., Ltd.

Hardware Availability: Oct-2023

Tested by: New H3C Technologies Co., Ltd.

Software Availability: Mar-2024

Platform Notes (Continued)

```
available: 2 nodes (0-1)
node 0 cpus: 0-25,52-77
node 0 size: 257578 MB
node 0 free: 256777 MB
node 1 cpus: 26-51,78-103
node 1 size: 258014 MB
node 1 free: 257106 MB
node distances:
node    0      1
  0:   10    12
  1:    12    10

-----
9. /proc/meminfo
MemTotal:      527966560 kB

-----
10. who -r
run-level 3 Jul 10 16:38

-----
11. Systemd service manager version: systemd 249 (249.16+suse.171.gdad0071f15)
Default Target      Status
multi-user          running

-----
12. Services, from systemctl list-unit-files
STATE           UNIT FILES
enabled         apparmor audtfd cron firewalld getty@ irqbalance issue-generator kbdsettings postfix
                purge-kernels rollback sshd systemd-pstore wicked wickedd-auto4 wickedd-dhcp4
                wickedd-dhcp6 wickedd-nanny
enabled-runtime systemd-remount-fs
disabled        boot-sysctl ca-certificates chrony-wait chronyd console-getty cups cups-browsed
                debug-shell ebttables grub2-once haveged haveged-switch-root issue-add-ssh-keys kexec-load
                lunmask rpmconfigcheck serial-getty@ systemd-boot-check-no-failures
                systemd-network-generator systemd-sysext systemd-time-wait-sync systemd-timesyncd tuned
indirect        pcscd wickedd

-----
13. Linux kernel boot-time arguments, from /proc/cmdline
BOOT_IMAGE=/boot/vmlinuz-5.14.21-150500.53-default
root=UUID=5b1bbac0-75ae-47d9-95db-594b94b8ab43
splash=silent
mitigations=auto
quiet
security=apparmor

-----
14. cpupower frequency-info
analyzing CPU 0:
current policy: frequency should be within 800 MHz and 4.00 GHz.
The governor "performance" may decide which speed to use
within this range.
boost state support:
Supported: yes
Active: yes

-----
15. tuned-adm active
It seems that tuned daemon is not running, preset profile is not activated.
```

(Continued on next page)



SPEC CPU®2017 Integer Speed Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

New H3C Technologies Co., Ltd.

H3C UniServer R4900 G6 (Intel Xeon Platinum 8571N)

SPECspeed®2017_int_base = 14.8

SPECspeed®2017_int_peak = 15.0

CPU2017 License: 9066

Test Date: Jul-2025

Test Sponsor: New H3C Technologies Co., Ltd.

Hardware Availability: Oct-2023

Tested by: New H3C Technologies Co., Ltd.

Software Availability: Mar-2024

Platform Notes (Continued)

Preset profile: throughput-performance

```
16. sysctl
kernel.numa_balancing          1
kernel.randomize_va_space       2
vm.compaction_proactiveness    20
vm.dirty_background_bytes       0
vm.dirty_background_ratio       10
vm.dirty_bytes                  0
vm.dirty_expire_centisecs      3000
vm.dirty_ratio                 20
vm.dirty_writeback_centisecs   500
vm.dirtytime_expire_seconds    43200
vm.extfrag_threshold           500
vm.min_unmapped_ratio          1
vm.nr_hugepages                0
vm.nr_hugepages_mempolicy      0
vm.nr_overcommit_hugepages     0
vm.swappiness                   60
vm.watermark_boost_factor      15000
vm.watermark_scale_factor       10
vm.zone_reclaim_mode           0
```

```
17. /sys/kernel/mm/transparent_hugepage
defrag           always defer defer+madvise [madvise] never
enabled          [always] madvise never
hpage_pmd_size  2097152
shmem_enabled   always within_size advise [never] deny force
```

```
18. /sys/kernel/mm/transparent_hugepage/khugepaged
alloc_sleep_millisecs  60000
defrag                 1
max_ptes_none          511
max_ptes_shared         256
max_ptes_swap           64
pages_to_scan           4096
scan_sleep_millisecs   10000
```

```
19. OS release
From /etc/*-release /etc/*-version
os-release SUSE Linux Enterprise Server 15 SP5
```

```
20. Disk information
SPEC is set to: /home/speccpu
Filesystem      Type  Size  Used Avail Use% Mounted on
/dev/sda2        btrfs  892G  160G  731G  18% /home
```

```
21. /sys/devices/virtual/dmi/id
Vendor:          New H3C Technologies Co., Ltd.
Product:         H3C UniServer R4900 G6
Product Family:  Rack
Serial:          210235A4HEH242000028
```

(Continued on next page)



SPEC CPU®2017 Integer Speed Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

New H3C Technologies Co., Ltd.

H3C UniServer R4900 G6 (Intel Xeon Platinum 8571N)

SPECspeed®2017_int_base = 14.8

SPECspeed®2017_int_peak = 15.0

CPU2017 License: 9066

Test Date: Jul-2025

Test Sponsor: New H3C Technologies Co., Ltd.

Hardware Availability: Oct-2023

Tested by: New H3C Technologies Co., Ltd.

Software Availability: Mar-2024

Platform Notes (Continued)

22. dmidecode

Additional information from dmidecode 3.4 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 Hynix HMCG94AGBRA179N 64 GB 2 rank 5600, configured at 4800

23. BIOS

(This section combines info from /sys/devices and dmidecode.)

BIOS Vendor: American Megatrends International, LLC.

BIOS Version: 6.10.52

BIOS Date: 05/26/2025

BIOS Revision: 5.32

Compiler Version Notes

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

Intel(R) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2024.1.0 Build 20240308
Copyright (C) 1985-2024 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) oneAPI DPC++/C++ Compiler for applications running on Intel(R) 64, Version 2024.1.0 Build 20240308
Copyright (C) 1985-2024 Intel Corporation. All rights reserved.

Fortran | 648.exchange2_s(base, peak)

Intel(R) Fortran Compiler for applications running on Intel(R) 64, Version 2024.1.0 Build 20240308
Copyright (C) 1985-2024 Intel Corporation. All rights reserved.

Base Compiler Invocation

C benchmarks:

icx

C++ benchmarks:

icpx

Fortran benchmarks:

ifx



SPEC CPU®2017 Integer Speed Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

New H3C Technologies Co., Ltd.

H3C UniServer R4900 G6 (Intel Xeon Platinum 8571N)

SPECspeed®2017_int_base = 14.8

SPECspeed®2017_int_peak = 15.0

CPU2017 License: 9066

Test Sponsor: New H3C Technologies Co., Ltd.

Tested by: New H3C Technologies Co., Ltd.

Test Date: Jul-2025

Hardware Availability: Oct-2023

Software Availability: Mar-2024

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.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

Base Optimization Flags

C benchmarks:

```
-w -std=c11 -m64 -Wl,-z,muldefs -xsapphirerapids -O3 -ffast-math  
-flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4 -fopenmp  
-DSPEC_OPENMP -L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

C++ benchmarks:

```
-w -std=c++14 -m64 -Wl,-z,muldefs -xsapphirerapids -O3 -ffast-math  
-flto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4  
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

Fortran benchmarks:

```
-w -m64 -Wl,-z,muldefs -xsapphirerapids -O3 -ffast-math -flto  
-mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4  
-nostandard-realloc-lhs -align array32byte  
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

Peak Compiler Invocation

C benchmarks:

icx

C++ benchmarks:

icpx

Fortran benchmarks:

ifx



SPEC CPU®2017 Integer Speed Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

New H3C Technologies Co., Ltd.

H3C UniServer R4900 G6 (Intel Xeon Platinum 8571N)

SPECspeed®2017_int_base = 14.8

SPECspeed®2017_int_peak = 15.0

CPU2017 License: 9066

Test Date: Jul-2025

Test Sponsor: New H3C Technologies Co., Ltd.

Hardware Availability: Oct-2023

Tested by: New H3C Technologies Co., Ltd.

Software Availability: Mar-2024

Peak Portability Flags

Same as Base Portability Flags

Peak Optimization Flags

C benchmarks:

```
600.perlbench_s: -w -m64 -std=c11 -Wl,-z,muldefs  
-fprofile-generate(pass 1)  
-fprofile-use=default.profdata(pass 2) -xCORE-AVX2(pass 1)  
-flto -Ofast(pass 1) -xCORE-AVX512 -O3 -ffast-math  
-mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4  
-fiopenmp -DSPEC_OPENMP -fno-strict-overflow  
-L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

```
602.gcc_s: -w -m64 -std=c11 -Wl,-z,muldefs  
-fprofile-generate(pass 1)  
-fprofile-use=default.profdata(pass 2) -xCORE-AVX2(pass 1)  
-flto -Ofast(pass 1) -xCORE-AVX512 -O3 -ffast-math  
-mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4  
-fiopenmp -DSPEC_OPENMP -L/usr/local/jemalloc64-5.0.1/lib  
-ljemalloc
```

```
605.mcf_s: basepeak = yes
```

```
625.x264_s: -w -std=c11 -m64 -Wl,-z,muldefs -xsapphirerapids -O3  
-ffast-math -flto -mfpmath=sse -funroll-loops  
-qopt-mem-layout-trans=4 -fiopenmp -DSPEC_OPENMP  
-fno-alias -L/usr/local/jemalloc64-5.0.1/lib -ljemalloc
```

```
657.xz_s: basepeak = yes
```

C++ benchmarks:

```
620.omnetpp_s: basepeak = yes
```

```
623.xalancbmk_s: basepeak = yes
```

```
631.deepsjeng_s: basepeak = yes
```

```
641.leela_s: basepeak = yes
```

Fortran benchmarks:

(Continued on next page)



SPEC CPU®2017 Integer Speed Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

New H3C Technologies Co., Ltd.

H3C UniServer R4900 G6 (Intel Xeon Platinum 8571N)

SPECSpeed®2017_int_base = 14.8

SPECSpeed®2017_int_peak = 15.0

CPU2017 License: 9066

Test Date: Jul-2025

Test Sponsor: New H3C Technologies Co., Ltd.

Hardware Availability: Oct-2023

Tested by: New H3C Technologies Co., Ltd.

Software Availability: Mar-2024

Peak Optimization Flags (Continued)

648.exchange2_s: basepeak = yes

The flags files that were used to format this result can be browsed at

<http://www.spec.org/cpu2017/flags/Intel-ic2024-official-linux64.html>

http://www.spec.org/cpu2017/flags/New_H3C-Platform-Settings-intel-RevB.html

You can also download the XML flags sources by saving the following links:

<http://www.spec.org/cpu2017/flags/Intel-ic2024-official-linux64.xml>

http://www.spec.org/cpu2017/flags/New_H3C-Platform-Settings-intel-RevB.xml

SPEC CPU and SPECSpeed 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 v1.1.9 on 2025-07-10 04:39:42-0400.

Report generated on 2025-07-30 15:13:41 by CPU2017 PDF formatter v6716.

Originally published on 2025-07-29.