



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

New H3C Technologies Co., Ltd.

SPECrate®2017\_int\_base = 736

H3C UniServer R4900 G7 (Intel Xeon 6530P)

SPECrate®2017\_int\_peak = Not Run

CPU2017 License: 9066

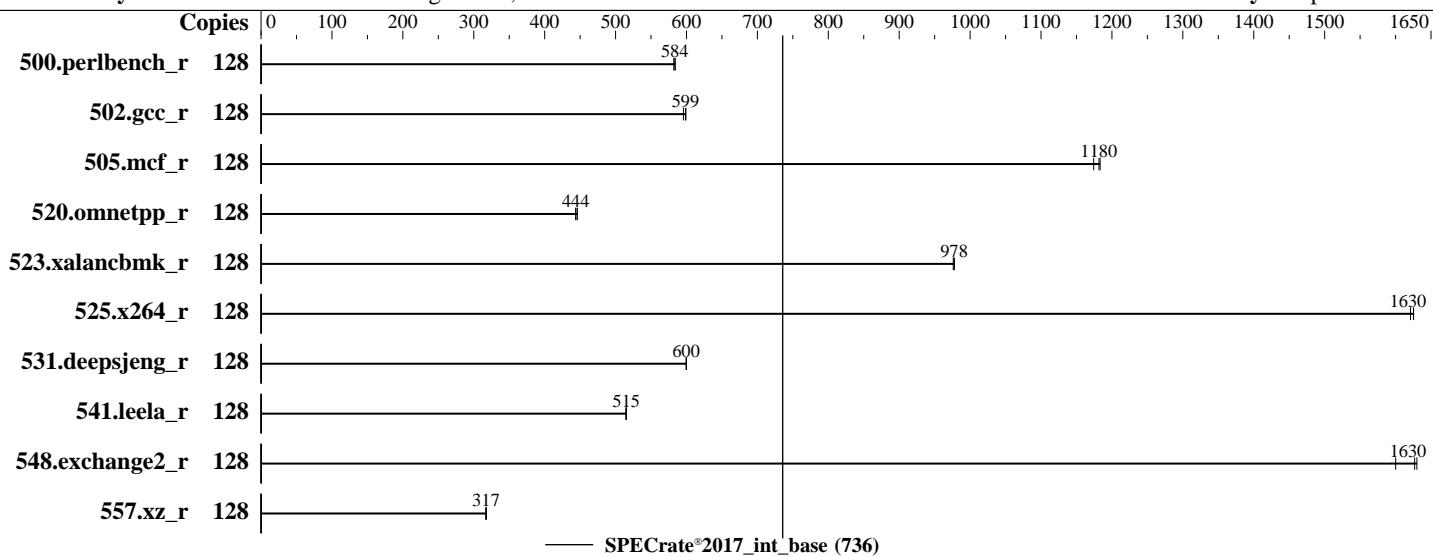
Test Date: Aug-2025

Test Sponsor: New H3C Technologies Co., Ltd.

Hardware Availability: Mar-2025

Tested by: New H3C Technologies Co., Ltd.

Software Availability: Apr-2024



## Hardware

CPU Name: Intel Xeon 6530P  
Max MHz: 4100  
Nominal: 2300  
Enabled: 64 cores, 2 chips, 2 threads/core  
Orderable: 1,2 chips  
Cache L1: 64 KB I + 48 KB D on chip per core  
L2: 2 MB I+D on chip per core  
L3: 144 MB I+D on chip per chip  
Other: None  
Memory: 512 GB (16 x 32 GB 2Rx8 PC5-6400B-R)  
Storage: 1 x 3.84 TB SATA SSD  
Other: CPU Cooling: Air

## Software

OS: Red Hat Enterprise Linux 9.4 (Plow)  
Compiler: 5.14.0-427.13.1.el9\_4.x86\_64  
C/C++: Version 2024.1 of Intel oneAPI DPC++/C++ Compiler for Linux;  
Fortran: Version 2024.1 of Intel Fortran Compiler for Linux;  
Parallel: No  
Firmware: Version 7.00.12 released Apr-2025 BIOS  
File System: xfs  
System State: Run level 5 (multi-user)  
Base Pointers: 64-bit  
Peak Pointers: Not Applicable  
Other: None  
Power Management: BIOS and OS set to prefer performance at the cost of additional power usage.



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

New H3C Technologies Co., Ltd.

SPECrate®2017\_int\_base = 736

H3C UniServer R4900 G7 (Intel Xeon 6530P)

SPECrate®2017\_int\_peak = Not Run

CPU2017 License: 9066

Test Date: Aug-2025

Test Sponsor: New H3C Technologies Co., Ltd.

Hardware Availability: Mar-2025

Tested by: New H3C Technologies Co., Ltd.

Software Availability: Apr-2024

## Results Table

Benchmark	Base								Peak							
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
500.perlbench_r	128	<b>349</b>	<b>584</b>	349	584	350	582									
502.gcc_r	128	304	596	<b>303</b>	<b>599</b>	302	599									
505.mcf_r	128	176	1170	175	1180	<b>175</b>	<b>1180</b>									
520.omnetpp_r	128	376	446	<b>378</b>	<b>444</b>	378	444									
523.xalancbmk_r	128	<b>138</b>	<b>978</b>	138	978	138	976									
525.x264_r	128	138	1630	138	1620	<b>138</b>	<b>1630</b>									
531.deepsjeng_r	128	244	600	245	600	<b>245</b>	<b>600</b>									
541.leela_r	128	412	515	<b>412</b>	<b>515</b>	411	515									
548.exchange2_r	128	<b>206</b>	<b>1630</b>	210	1600	206	1630									
557.xz_r	128	435	318	<b>436</b>	<b>317</b>	436	317									

SPECrate®2017\_int\_base = 736

SPECrate®2017\_int\_peak = Not Run

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 2x Intel Xeon Platinum 8280M CPU + 384GB RAM  
memory using Red Hat Enterprise Linux 8.4

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.



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

New H3C Technologies Co., Ltd.

SPECrate®2017\_int\_base = 736

H3C UniServer R4900 G7 (Intel Xeon 6530P)

SPECrate®2017\_int\_peak = Not Run

CPU2017 License: 9066

Test Date: Aug-2025

Test Sponsor: New H3C Technologies Co., Ltd.

Hardware Availability: Mar-2025

Tested by: New H3C Technologies Co., Ltd.

Software Availability: Apr-2024

## Platform Notes

BIOS Settings:

SNC = Enable

BMC Settings:

Fan mode = powerful mode

```
Sysinfo program /home/speccpu/bin/sysinfo
Rev: r6732 of 2022-11-07 fe91c89b7ed5c36ae2c92cc097bec197
running on localhost.localdomain Mon Aug 18 13:53:54 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 252 (252-32.el9\_4)
12. Failed units, from systemctl list-units --state=failed
13. Services, from systemctl list-unit-files
14. Linux kernel boot-time arguments, from /proc/cmdline
15. cpupower frequency-info
16. tuned-adm active
17. sysctl
18. /sys/kernel/mm/transparent\_hugepage
19. /sys/kernel/mm/transparent\_hugepage/khugepaged
20. OS release
21. Disk information
22. /sys/devices/virtual/dmi/id
23. dmidecode
24. BIOS

-----

1. uname -a  
Linux localhost.localdomain 5.14.0-427.13.1.el9\_4.x86\_64 #1 SMP PREEMPT\_DYNAMIC Wed Apr 10 10:29:16 EDT  
2024 x86\_64 x86\_64 x86\_64 GNU/Linux

2. w  
13:53:54 up 2:37, 1 user, load average: 0.00, 0.07, 11.59  
USER TTY LOGIN@ IDLE JCPU PCPU WHAT  
root pts/0 11:17 42.00s 0.80s 0.01s -bash

3. Username  
From environment variable \$USER: root

4. ulimit -a  
real-time non-blocking time (microseconds, -R) unlimited  
core file size (blocks, -c) 0  
data seg size (kbytes, -d) unlimited

(Continued on next page)



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

New H3C Technologies Co., Ltd.

SPECrate®2017\_int\_base = 736

H3C UniServer R4900 G7 (Intel Xeon 6530P)

SPECrate®2017\_int\_peak = Not Run

CPU2017 License: 9066

Test Date: Aug-2025

Test Sponsor: New H3C Technologies Co., Ltd.

Hardware Availability: Mar-2025

Tested by: New H3C Technologies Co., Ltd.

Software Availability: Apr-2024

## Platform Notes (Continued)

scheduling priority	(-e) 0
file size	(blocks, -f) unlimited
pending signals	(-i) 2059949
max locked memory	(kbytes, -l) 8192
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) 2059949
virtual memory	(kbytes, -v) unlimited
file locks	(-x) unlimited

### 5. sysinfo process ancestry

```
/usr/lib/systemd/systemd rhgb --switched-root --system --deserialize 31
sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups
sshd: root [priv]
sshd: root@pts/0
-bash
-bash
runcpu --nobuild --action validate --define default-platform-flags --define numcopies=128 -c
  ic2024.1-lin-sapphirerapids-rate-20240308.cfg --define smt-on --define cores=64 --define physicalfirst
  --define invoke_with_interleave --define drop_caches --tune base -o all intrate
runcpu --nobuild --action validate --define default-platform-flags --define numcopies=128 --configfile
  ic2024.1-lin-sapphirerapids-rate-20240308.cfg --define smt-on --define cores=64 --define physicalfirst
  --define invoke_with_interleave --define drop_caches --tune base --output_format all --nopower --runmode
  rate --tune base --size reframe intrate --nopreenv --note-preenv --logfile
  $SPEC/tmp/CPU2017.010/templogs/preenv.intrate.010.0.log --lognum 010.0 --from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /home/speccpu
```

### 6. /proc/cpuinfo

```
model name      : Intel(R) Xeon(R) 6530P
vendor_id       : GenuineIntel
cpu family     : 6
model          : 173
stepping        : 1
microcode       : 0x1000380
bugs            : spectre_v1 spectre_v2 spec_store_bypass swapgs
cpu cores       : 32
siblings         : 64
2 physical ids (chips)
128 processors (hardware threads)
physical id 0: core ids 0-31
physical id 1: core ids 0-31
physical id 0: apicids 0-63
physical id 1: apicids 128-191
```

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
```

(Continued on next page)



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

New H3C Technologies Co., Ltd.

SPECrate®2017\_int\_base = 736

H3C UniServer R4900 G7 (Intel Xeon 6530P)

SPECrate®2017\_int\_peak = Not Run

CPU2017 License: 9066

Test Date: Aug-2025

Test Sponsor: New H3C Technologies Co., Ltd.

Hardware Availability: Mar-2025

Tested by: New H3C Technologies Co., Ltd.

Software Availability: Apr-2024

## Platform Notes (Continued)

Address sizes:	52 bits physical, 57 bits virtual
Byte Order:	Little Endian
CPU(s):	128
On-line CPU(s) list:	0-127
Vendor ID:	GenuineIntel
BIOS Vendor ID:	Intel(R) Corporation
Model name:	Intel(R) Xeon(R) 6530P
BIOS Model name:	Intel(R) Xeon(R) 6530P
CPU family:	6
Model:	173
Thread(s) per core:	2
Core(s) per socket:	32
Socket(s):	2
Stepping:	1
CPU(s) scaling MHz:	100%
CPU max MHz:	4100.0000
CPU min MHz:	800.0000
BogoMIPS:	4600.00
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 nogl xtopology nonstop_tsc cpuid aperfmpf perf tsc_known_freq 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_13 cat_12 cdp_13 cdp_12 ssbd mba ibrs ibpb stibp ibrs_enhanced tpr_shadow flexpriority ept vpid ept_ad fsgsbase tsc_adjust bmil avx2 smep bmi2 erms invpcid cqm rdt_a avx512f avx512dq rdseed adx smap avx512ifma clflushopt clwb intel_pt avx512cd sha_ni avx512bw avx512vl xsavewopt xsavew xcgetbvl xsaves cqmm_llc cqmm_occup_llc cqmm_mbm_total cqmm_mbm_local split_lock_detect avx_vnni avx512_bf16 wbnoinvd dtherm ida arat pln pts hwp hwp_act_window hwp_epp hwp_pkg_req hfi vnmi avx512vbmi umip pkru ospke waitpkg avx512_vbmi2 gfni vaes vpclmulqdq avx512_vnni avx512_bitalg tme avx512_vpopsndq la57 rdpid bus_lock_detect cldemote movdiri movdir64b enqcmd fsrm md_clear serialize tsxldtrk pconfig arch_lbr ibt amx_bf16 avx512_fp16 amx_tile amx_int8 flush_l1d arch_capabilities
Virtualization:	VT-x
L1d cache:	3 MiB (64 instances)
L1i cache:	4 MiB (64 instances)
L2 cache:	128 MiB (64 instances)
L3 cache:	288 MiB (2 instances)
NUMA node(s):	2
NUMA node0 CPU(s):	0-31,64-95
NUMA node1 CPU(s):	32-63,96-127
Vulnerability Gather data sampling:	Not affected
Vulnerability Itlb multihit:	Not affected
Vulnerability Llft:	Not affected
Vulnerability Mds:	Not affected
Vulnerability Meltdown:	Not affected
Vulnerability Mmio stale data:	Not affected
Vulnerability Retbleed:	Not affected
Vulnerability Spec rstack overflow:	Not affected
Vulnerability Spec store bypass:	Mitigation: Speculative Store Bypass disabled via prctl
Vulnerability Spectre v1:	Mitigation: usercopy/swapgs barriers and __user pointer sanitization
Vulnerability Spectre v2:	Mitigation: Enhanced / Automatic IBRS, IBPB conditional, RSB filling, PBRSB-eIBRS
Vulnerability Srbds:	Not affected
Vulnerability Tsx async abort:	Not affected

(Continued on next page)



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

New H3C Technologies Co., Ltd.

SPECrate®2017\_int\_base = 736

H3C UniServer R4900 G7 (Intel Xeon 6530P)

SPECrate®2017\_int\_peak = Not Run

CPU2017 License: 9066

Test Date: Aug-2025

Test Sponsor: New H3C Technologies Co., Ltd.

Hardware Availability: Mar-2025

Tested by: New H3C Technologies Co., Ltd.

Software Availability: Apr-2024

## Platform Notes (Continued)

From lscpu --cache:

NAME	ONE-SIZE	ALL-SIZE	WAYS	TYPE	LEVEL	SETS	PHY-LINE	COHERENCY-SIZE
L1d	48K	3M	12	Data	1	64	1	64
L1i	64K	4M	16	Instruction	1	64	1	64
L2	2M	128M	16	Unified	2	2048	1	64
L3	144M	288M	16	Unified	3	147456	1	64

-----  
8. numactl --hardware

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

available: 2 nodes (0-1)

node 0 cpus: 0-31,64-95

node 0 size: 257028 MB

node 0 free: 237226 MB

node 1 cpus: 32-63,96-127

node 1 size: 258023 MB

node 1 free: 239568 MB

node distances:

node 0 1

0: 10 21

1: 21 10

-----  
9. /proc/meminfo

MemTotal: 527412644 kB

-----  
10. who -r

run-level 5 Aug 18 11:17

-----  
11. Systemd service manager version: systemd 252 (252-32.el9\_4)

Default Target Status

graphical degraded

-----  
12. Failed units, from systemctl list-units --state=failed

UNIT LOAD ACTIVE SUB DESCRIPTION

\* sep5.service loaded failed failed systemd script to load sep5 driver at boot time

-----  
13. Services, from systemctl list-unit-files

STATE	UNIT	FILES
enabled	ModemManager NetworkManager NetworkManager-dispatcher NetworkManager-wait-online	
	accounts-daemon atd auditd avahi-daemon bluetooth chronyd crond cups dbus-broker firewalld	
	gdm getty@ insights-client-boot irqbalance iscsi-onboot iscsi-starter kdump libstoragemgmt	
	lm_sensors low-memory-monitor lvm2-monitor mcelog mdmonitor microcode multipathd	
	nis-domainname nvmefc-boot-connections ostree-remount pmcd pmie pmlogger	
	power-profiles-daemon qemu-guest-agent rhsmcertd rpcbind rsyslog rtkit-daemon	
	selinux-autorelabel-mark sep5 smartd sshd sssd switcheroo-control sysstat	
	systemd-boot-update systemd-network-generator tuned udisks2 upower vgautils virtqemuud	
	vmtoolsd	

enabled	systemd-remount-fs
---------	--------------------

disabled	arp-ethers autofs blk-availability brltty canberra-system-bootup canberra-system-shutdown
----------	---

	canberra-system-shutdown-reboot chrony-wait chronyd-restricted cni-dhcp console-getty
--	---

	cpupower cups-browsed dbus-daemon debug-shell dnf-system-upgrade dnsmasq dovecot
--	--

	fancontrol fcoe grafana-server gssproxy httpd httpd@ ibacm iprdump iprinit iprule ipsec
--	---

	iscsi-init iscsid iscsiuiio kpatch kvm_stat ledmon libvirt-guests libvirtfd llpad
--	---

	man-db-restart-cache-update named named-chroot netavark-dhcp-proxy
--	--

	netavark-firewalld-reload nfs-blkmap nfs-server nftables nmb numad nvmf-autoconnect
--	---

(Continued on next page)



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

New H3C Technologies Co., Ltd.

SPECrate®2017\_int\_base = 736

H3C UniServer R4900 G7 (Intel Xeon 6530P)

SPECrate®2017\_int\_peak = Not Run

CPU2017 License: 9066

Test Date: Aug-2025

Test Sponsor: New H3C Technologies Co., Ltd.

Hardware Availability: Mar-2025

Tested by: New H3C Technologies Co., Ltd.

Software Availability: Apr-2024

## Platform Notes (Continued)

```
ostree-readonly-sysroot-migration ostree-state-overlay@ pesign pmfind pmie_farm
pmlogger_farm pmproxy podman podman-auto-update podman-clean-transient podman-kube@
podman-restart postfix powertop psacct ras-mc-ctl rasdaemon rdisc rhcd rhsm rhsm-facts
rpmdb-rebuild rrdcached saslauthd selinux-check-proper-disable serial-getty@ smb snmpd
snmptrapd spamassassin speech-dispatcherd srp_daemon srp_daemon_port@ sshd-keygen@
systemd-boot-check-no-failures systemd-nspawn@ systemd-pstore systemd-sysext target
targetclid tog-pegasus trace-cmd virtinterfaced virtlockd virtlogd virtnetworkd
virtnodeudev virtnwfilterd virtproxyd virtsecretd virtstoraged vsftpd wpa_supplicant
iscsi pcscd spice-vdagentd sssd-autofs sssd-kcm sssd-nss sssd-pac sssd-pam sssd-ssh
sssd-sudo systemd-sysupdate systemd-sysupdate-reboot vsftpd@
```

```
-----  
14. Linux kernel boot-time arguments, from /proc/cmdline  
BOOT_IMAGE=(hd0,gpt2)/vmlinuz-5.14.0-427.13.1.el9_4.x86_64  
root=/dev/mapper/rhel-root  
ro  
crashkernel=1G-4G:192M,4G-64G:256M,64G-:512M  
resume=/dev/mapper/rhel-swap  
rd.lvm.lv=rhel/root  
rd.lvm.lv=rhel/swap  
rhgb  
quiet
```

```
-----  
15. cpupower frequency-info  
analyzing CPU 114:  
    current policy: frequency should be within 800 MHz and 4.10 GHz.  
              The governor "performance" may decide which speed to use  
              within this range.  
    boost state support:  
      Supported: yes  
      Active: yes
```

```
-----  
16. tuned-adm active  
It seems that tuned daemon is not running, preset profile is not activated.  
Preset profile: throughput-performance
```

```
-----  
17. 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
```

(Continued on next page)



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

New H3C Technologies Co., Ltd.

SPECrate®2017\_int\_base = 736

H3C UniServer R4900 G7 (Intel Xeon 6530P)

SPECrate®2017\_int\_peak = Not Run

CPU2017 License: 9066

Test Date: Aug-2025

Test Sponsor: New H3C Technologies Co., Ltd.

Hardware Availability: Mar-2025

Tested by: New H3C Technologies Co., Ltd.

Software Availability: Apr-2024

## Platform Notes (Continued)

-----  
18. /sys/kernel/mm/transparent\_hugepage  
defrag always defer defer+madvise [madvise] never  
enabled [always] madvise never  
hugepage\_pmd\_size 2097152  
shmem\_enabled always within\_size advise [never] deny force

-----  
19. /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

-----  
20. OS release  
From /etc/\*-release /etc/\*-version  
os-release Red Hat Enterprise Linux 9.4 (Plow)  
redhat-release Red Hat Enterprise Linux release 9.4 (Plow)  
system-release Red Hat Enterprise Linux release 9.4 (Plow)

-----  
21. Disk information  
SPEC is set to: /home/speccpu  
Filesystem Type Size Used Avail Use% Mounted on  
/dev/mapper/rhel-home xfs 2.9T 193G 2.7T 7% /home

-----  
22. /sys/devices/virtual/dmi/id  
Vendor: New H3C Technologies Co., Ltd.  
Product: H3C UniServer R4900 G7  
Product Family: Rack  
Serial: 210235A51GH249000016

-----  
23. dmidecode  
Additional information from dmidecode 3.5 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 HMCG88AHBRA290N 32 GB 2 rank 6400

-----  
24. BIOS  
(This section combines info from /sys/devices and dmidecode.)  
BIOS Vendor: American Megatrends International, LLC.  
BIOS Version: 7.00.12  
BIOS Date: 04/21/2025  
BIOS Revision: 5.35  
Firmware Revision: 2.5



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

New H3C Technologies Co., Ltd.

SPECrate®2017\_int\_base = 736

H3C UniServer R4900 G7 (Intel Xeon 6530P)

SPECrate®2017\_int\_peak = Not Run

CPU2017 License: 9066

Test Date: Aug-2025

Test Sponsor: New H3C Technologies Co., Ltd.

Hardware Availability: Mar-2025

Tested by: New H3C Technologies Co., Ltd.

Software Availability: Apr-2024

## Compiler Version Notes

```
=====
C      | 500.perlbench_r(base) 502.gcc_r(base) 505.mcf_r(base) 525.x264_r(base) 557.xz_r(base)
-----
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++     | 520.omnetpp_r(base) 523.xalancbmk_r(base) 531.deepsjeng_r(base) 541.leela_r(base)
-----
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 | 548.exchange2_r(base)
-----
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

## 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
```



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2025 Standard Performance Evaluation Corporation

New H3C Technologies Co., Ltd.

SPECrate®2017\_int\_base = 736

H3C UniServer R4900 G7 (Intel Xeon 6530P)

SPECrate®2017\_int\_peak = Not Run

CPU2017 License: 9066

Test Date: Aug-2025

Test Sponsor: New H3C Technologies Co., Ltd.

Hardware Availability: Mar-2025

Tested by: New H3C Technologies Co., Ltd.

Software Availability: Apr-2024

## Base Optimization Flags

C benchmarks:

```
-w -std=c11 -m64 -Wl,-z,muldefs -xsapphirerapids -O3 -ffast-math  
-fsto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4  
-L/opt/intel/oneapi/compiler/2024.1/lib -lqkmalloc
```

C++ benchmarks:

```
-w -std=c++14 -m64 -Wl,-z,muldefs -xsapphirerapids -O3 -ffast-math  
-fsto -mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4  
-L/opt/intel/oneapi/compiler/2024.1/lib -lqkmalloc
```

Fortran benchmarks:

```
-w -m64 -Wl,-z,muldefs -xsapphirerapids -O3 -ffast-math -fsto  
-mfpmath=sse -funroll-loops -qopt-mem-layout-trans=4  
-nostandard-realloc-lhs -align array32byte -auto  
-L/opt/intel/oneapi/compiler/2024.1/lib -lqkmalloc
```

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-GNR-RevC.html](http://www.spec.org/cpu2017/flags/New_H3C-Platform-Settings-Intel-GNR-RevC.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-GNR-RevC.xml](http://www.spec.org/cpu2017/flags/New_H3C-Platform-Settings-Intel-GNR-RevC.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](mailto:info@spec.org).

Tested with SPEC CPU®2017 v1.1.9 on 2025-08-18 01:53:53-0400.

Report generated on 2025-09-23 16:56:00 by CPU2017 PDF formatter v6716.

Originally published on 2025-09-23.