



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

## New H3C Technologies Co., Ltd.

H3C UniServer R4900 G6 Ultra (Intel Xeon Platinum 8592V)

SPECrate®2017\_int\_base = 1090

SPECrate®2017\_int\_peak = Not Run

CPU2017 License: 9066

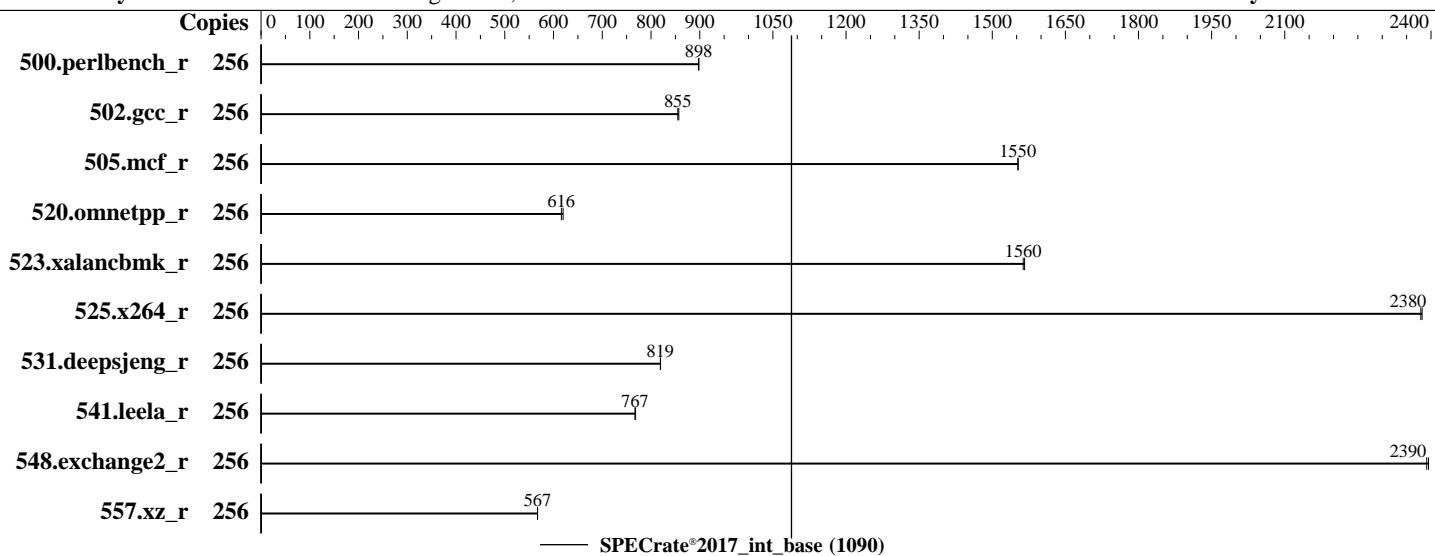
Test Sponsor: New H3C Technologies Co., Ltd.

Tested by: New H3C Technologies Co., Ltd.

Test Date: Nov-2024

Hardware Availability: Oct-2023

Software Availability: Mar-2024



— SPECrate®2017\_int\_base (1090)

### Hardware

CPU Name: Intel Xeon Platinum 8592V  
Max MHz: 3900  
Nominal: 2000  
Enabled: 128 cores, 2 chips, 2 threads/core  
Orderable: 1,2 chips  
Cache L1: 32 KB I + 48 KB D on chip per core  
L2: 2 MB I+D on chip per core  
L3: 320 MB I+D on chip per chip  
Other: None  
Memory: 1 TB (16 x 64 GB 2Rx4 PC5-5600B-R, running at 4800)  
Storage: 1 x 3.2 TB NVME SSD  
Other: CPU Cooling: Air

### Software

OS: SUSE Linux Enterprise Server 15 SP5 5.14.21-150500.53-default  
Compiler: 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 6.10.45 released Aug-2024 BIOS  
File System: xfs  
System State: Run level 3 (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 2017-2024 Standard Performance Evaluation Corporation

## New H3C Technologies Co., Ltd.

H3C UniServer R4900 G6 Ultra (Intel Xeon Platinum 8592V)

**SPECrate®2017\_int\_base = 1090**

**SPECrate®2017\_int\_peak = Not Run**

CPU2017 License: 9066

Test Date: Nov-2024

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							
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
500.perlbench_r	256	454	898	<b>454</b>	<b>898</b>											
502.gcc_r	256	<b>424</b>	<b>855</b>	423	857											
505.mcf_r	256	<b>266</b>	<b>1550</b>	266	1550											
520.omnetpp_r	256	<b>545</b>	<b>616</b>	542	620											
523.xalancbmk_r	256	<b>173</b>	<b>1560</b>	173	1570											
525.x264_r	256	188	2380	<b>188</b>	<b>2380</b>											
531.deepsjeng_r	256	<b>358</b>	<b>819</b>	358	819											
541.leela_r	256	<b>553</b>	<b>767</b>	552	768											
548.exchange2_r	256	280	2390	<b>281</b>	<b>2390</b>											
557.xz_r	256	<b>487</b>	<b>567</b>	487	567											

**SPECrate®2017\_int\_base = 1090**

**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/speccpunew/lib/intel64:/home/speccpunew/lib/ia32:/home/speccpunew/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 2017-2024 Standard Performance Evaluation Corporation

## New H3C Technologies Co., Ltd.

H3C UniServer R4900 G6 Ultra (Intel Xeon Platinum 8592V)

SPECrate®2017\_int\_base = 1090

SPECrate®2017\_int\_peak = Not Run

CPU2017 License: 9066

Test Date: Nov-2024

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:

SNC = Enable SNC2 (2-clusters)  
Intel VT for Directed I/O = Disabled  
Package C State = C6(Retention) state  
BMC Settings:

Fan mode = powerful mode

```
Sysinfo program /home/speccpu2017/bin/sysinfo
Rev: r6732 of 2022-11-07 fe91c89b7ed5c36ae2c92cc097bec197
running on localhost Wed Nov 20 15:27:26 2024
```

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
15:27:26 up 31 min, 2 users, load average: 0.12, 53.81, 103.50
USER   TTY      FROM          LOGIN@    IDLE    JCPU   PCPU WHAT
root    pts/0    172.16.66.164  15:26    38.00s  0.02s  0.02s -bash
root    pts/0    172.16.66.164  15:26    38.00s  0.02s  0.02s -bash
```

```
3. Username
From environment variable $USER: root
```

```
4. ulimit -a
core file size      (blocks, -c) unlimited
```

(Continued on next page)



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

## New H3C Technologies Co., Ltd.

H3C UniServer R4900 G6 Ultra (Intel Xeon Platinum 8592V)

SPECrate®2017\_int\_base = 1090

SPECrate®2017\_int\_peak = Not Run

CPU2017 License: 9066

Test Date: Nov-2024

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)

```
data seg size          (kbytes, -d) unlimited
scheduling priority   (-e) 0
file size              (blocks, -f) unlimited
pending signals        (-i) 4126479
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) 4126479
virtual memory          (kbytes, -v) unlimited
file locks              (-x) unlimited
```

---

```
5. sysinfo process ancestry
/usr/lib/systemd/systemd --switched-root --system --deserialize 30
login -- root
-bash
sh intrate.sh
runcpu --nobuild --action validate --define default-platform-flags --define numcopies=256 -c
  ic2024.1-lin-sapphirerapids-rate-20240308.cfg --define smt-on --define cores=128 --define physicalfirst
  --define invoke_with_interleave --define drop_caches --tune base -o all intrate -n 2
runcpu --nobuild --action validate --define default-platform-flags --define numcopies=256 --configfile
  ic2024.1-lin-sapphirerapids-rate-20240308.cfg --define smt-on --define cores=128 --define physicalfirst
  --define invoke_with_interleave --define drop_caches --tune base --output_format all --iterations 2
  --nopower --runmode rate --tune base --size refrate intrate --nopreenv --note-preenv --logfile
  $SPEC/tmp/CPU2017.012/templogs/preenv.intrate.012.0.log --lognum 012.0 --from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /home/specpunew
```

---

```
6. /proc/cpuinfo
model name      : INTEL(R) XEON(R) PLATINUM 8592V
vendor_id       : GenuineIntel
cpu family     : 6
model          : 207
stepping        : 2
microcode       : 0x21000200
bugs            : spectre_v1 spectre_v2 spec_store_bypass swapgs eibrp_pbrsb
cpu cores       : 64
siblings         : 128
2 physical ids (chips)
256 processors (hardware threads)
physical id 0: core ids 0-63
physical id 1: core ids 0-63
physical id 0: apicids 0-127
physical id 1: apicids 128-255
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
```

(Continued on next page)



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

## New H3C Technologies Co., Ltd.

H3C UniServer R4900 G6 Ultra (Intel Xeon Platinum 8592V)

**SPECrate®2017\_int\_base = 1090**

**SPECrate®2017\_int\_peak = Not Run**

**CPU2017 License:** 9066

**Test Date:** Nov-2024

**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)

Byte Order:	Little Endian
CPU(s):	256
On-line CPU(s) list:	0-255
Vendor ID:	GenuineIntel
Model name:	INTEL(R) XEON(R) PLATINUM 8592V
CPU family:	6
Model:	207
Thread(s) per core:	2
Core(s) per socket:	64
Socket(s):	2
Stepping:	2
CPU max MHz:	3900.0000
CPU min MHz:	800.0000
BogoMIPS:	4000.00
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 aperf mperf 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 rdrandlahf_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 cqmq rdt_a avx512f avx512dq rdseed adx smap avx512ifma clflushopt clwb intel_pt avx512cd sha_ni avx512bw avx512vl xsaveopt xsavec xgetbv1 xsaves cqmq_llc cqmq_occup_llc cqmq_mbm_total cqmq_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_l1d arch_capabilities
Virtualization:	VT-x
L1d cache:	6 MiB (128 instances)
L1i cache:	4 MiB (128 instances)
L2 cache:	256 MiB (128 instances)
L3 cache:	640 MiB (2 instances)
NUMA node(s):	4
NUMA node0 CPU(s):	0-31,128-159
NUMA node1 CPU(s):	32-63,160-191
NUMA node2 CPU(s):	64-95,192-223
NUMA node3 CPU(s):	96-127,224-255
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 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	6M	12	Data	1	64	1	64
L1i	32K	4M	8	Instruction	1	64	1	64
L2	2M	256M	16	Unified	2	2048	1	64

(Continued on next page)



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

## New H3C Technologies Co., Ltd.

H3C UniServer R4900 G6 Ultra (Intel Xeon Platinum 8592V)

SPECrate®2017\_int\_base = 1090

SPECrate®2017\_int\_peak = Not Run

CPU2017 License: 9066

Test Date: Nov-2024

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)

L3

320M

640M 20 Unified

3 262144

1

64

-----  
8. numactl --hardware

NOTE: a numactl 'node' might or might not correspond to a physical chip.  
available: 4 nodes (0-3)  
node 0 cpus: 0-31,128-159  
node 0 size: 257663 MB  
node 0 free: 254790 MB  
node 1 cpus: 32-63,160-191  
node 1 size: 257997 MB  
node 1 free: 254778 MB  
node 2 cpus: 64-95,192-223  
node 2 size: 258031 MB  
node 2 free: 255342 MB  
node 3 cpus: 96-127,224-255  
node 3 size: 257957 MB  
node 3 free: 255098 MB  
node distances:  
node 0 1 2 3  
0: 10 12 21 21  
1: 12 10 21 21  
2: 21 21 10 12  
3: 21 21 12 10

-----  
9. /proc/meminfo

MemTotal: 1056409296 kB

-----  
10. who -r  
run-level 3 Nov 20 14:57

-----  
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	YaST2-Firstboot YaST2-Second-Stage apparmor cron display-manager getty@ issue-generator kbdsettings klog lvm2-monitor nsqd nvmefc-boot-connections purge-kernels rollback rsyslog smartd sshd systemd-pstore wicked wickedd-auto4 wickedd-dhcp4 wickedd-dhcp6 wickedd-nanny
enabled-runtime	systemd-remount-fs
disabled	auditd autofs autoyast-initscripts blk-availability boot-sysctl ca-certificates chrony-wait chronyd console-getty cups cups-browsed debug-shell ebttables exchange-bmc-os-info fancontrol firewalld gpm grub2-once haveged haveged-switch-root ipmi ipmievd irqbalance issue-add-ssh-keys kdump kdump-early kexec-load lm_sensors lunmask man-db-create multipathd ndctl-monitor nfs nfs-blkmap nmb nvmf-autoconnect postfix rpcbind rpmconfigcheck rsyncd serial-getty@ smartd_generate_opts smb snmpd snmptrapd svnservice sysstat systemd-boot-check-no-failures systemd-network-generator systemd-sysext systemd-time-wait-sync systemd-timesyncd tuned vncserver@
indirect	pcscd wickedd

-----  
13. Linux kernel boot-time arguments, from /proc/cmdline

BOOT\_IMAGE=/boot/vmlinuz-5.14.21-150500.53-default  
root=UUID=befabla9-6492-412a-9d0b-079466ad03eb  
splash=silent

(Continued on next page)



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

## New H3C Technologies Co., Ltd.

H3C UniServer R4900 G6 Ultra (Intel Xeon Platinum 8592V)

SPECrate®2017\_int\_base = 1090

SPECrate®2017\_int\_peak = Not Run

CPU2017 License: 9066

Test Sponsor: New H3C Technologies Co., Ltd.

Tested by: New H3C Technologies Co., Ltd.

Test Date: Nov-2024

Hardware Availability: Oct-2023

Software Availability: Mar-2024

## Platform Notes (Continued)

```
resume=/dev/disk/by-uuid/64b85326-8619-4fc8-8127-1e8683bd7471
mitigations=auto
quiet
splash=silent
mitigations=auto

-----
14. cpupower frequency-info
analyzing CPU 0:
    current policy: frequency should be within 800 MHz and 3.90 GHz.
                    The governor "performance" may decide which speed to use
                    within this range.
    boost state support:
        Supported: yes
        Active: yes

-----
15. tuned-adm active
Current active 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                   10
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
```

(Continued on next page)



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

## New H3C Technologies Co., Ltd.

H3C UniServer R4900 G6 Ultra (Intel Xeon Platinum 8592V)

SPECrate®2017\_int\_base = 1090

SPECrate®2017\_int\_peak = Not Run

CPU2017 License: 9066

Test Date: Nov-2024

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)

19. OS release

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

-----  
20. Disk information

```
SPEC is set to: /home/specnew
Filesystem      Type  Size  Used Avail Use% Mounted on
/dev/nvme0n1p5  xfs   522G  397G  126G  76%  /home
```

-----  
21. /sys/devices/virtual/dmi/id

```
Vendor:          New H3C Technologies Co., Ltd.
Product:         H3C UniServer R4900 G6 Ultra
Product Family: Rack
Serial:          210235A4CHH244000019
```

-----  
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:

```
16x Hynix HMCG94AGBRA181N 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:    6.10.45
BIOS Date:       08/23/2024
BIOS Revision:   5.32
```

## 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.
-----
```



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

## New H3C Technologies Co., Ltd.

H3C UniServer R4900 G6 Ultra (Intel Xeon Platinum 8592V)

SPECrate®2017\_int\_base = 1090

SPECrate®2017\_int\_peak = Not Run

CPU2017 License: 9066

Test Sponsor: New H3C Technologies Co., Ltd.

Tested by: New H3C Technologies Co., Ltd.

Test Date: Nov-2024

Hardware Availability: Oct-2023

Software Availability: Mar-2024

## 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

## 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  
-L/opt/intel/oneapi/compiler/2024.1/lib -lgkmalloc

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/opt/intel/oneapi/compiler/2024.1/lib -lgkmalloc

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 -auto  
-L/opt/intel/oneapi/compiler/2024.1/lib -lgkmalloc



# SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

## New H3C Technologies Co., Ltd.

H3C UniServer R4900 G6 Ultra (Intel Xeon Platinum 8592V)

SPECrate®2017\_int\_base = 1090

SPECrate®2017\_int\_peak = Not Run

CPU2017 License: 9066

Test Date: Nov-2024

Test Sponsor: New H3C Technologies Co., Ltd.

Hardware Availability: Oct-2023

Tested by: New H3C Technologies Co., Ltd.

Software Availability: Mar-2024

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](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](http://www.spec.org/cpu2017/flags/New_H3C-Platform-Settings-intel-RevB.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 2024-11-20 02:27:26-0500.

Report generated on 2024-12-18 18:28:16 by CPU2017 PDF formatter v6716.

Originally published on 2024-12-17.