SPEC CPU®2017 Integer Rate Result

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New H3C Technologies Co., Ltd.

SPECrate®2017_int_base = 1220

H3C UniServer R3900 G7 (Intel Xeon 6980P)
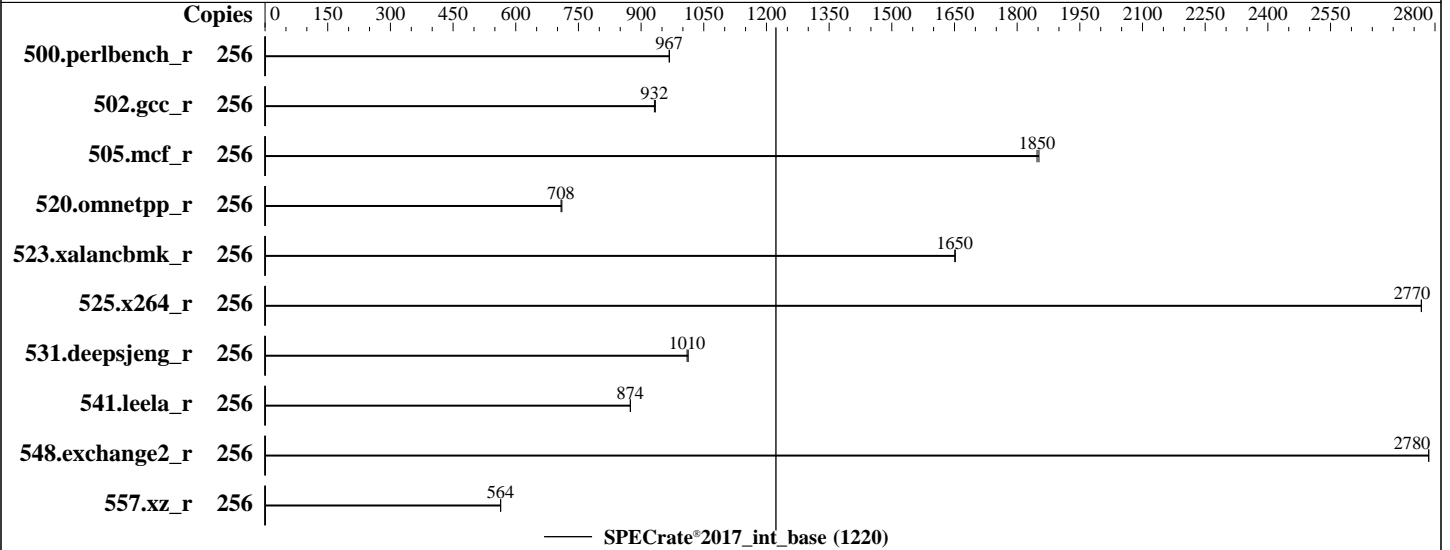
SPECrate®2017_int_peak = Not Run

CPU2017 License: 9066	**Test Date:** Sep-2024
Test Sponsor: New H3C Technologies Co., Ltd.	**Hardware Availability:** Oct-2024
Tested by: New H3C Technologies Co., Ltd.	**Software Availability:** Apr-2024

Copies

- 500.perlbench_r 256 — 967
- 502.gcc_r 256 — 932
- 505.mcf_r 256 — 1850
- 520.omnetpp_r 256 — 708
- 523.xalancbmk_r 256 — 1650
- 525.x264_r 256 — 2770
- 531.deepsjeng_r 256 — 1010
- 541.leela_r 256 — 874
- 548.exchange2_r 256 — 2780
- 557.xz_r 256 — 564

Scale: 0, 150, 300, 450, 600, 750, 900, 1050, 1200, 1350, 1500, 1650, 1800, 1950, 2100, 2250, 2400, 2550, 2800

—— **SPECrate®2017_int_base (1220)**

Hardware

CPU Name: Intel Xeon 6980P
 Max MHz: 3900
 Nominal: 2000
Enabled: 128 cores, 1 chip, 2 threads/core
Orderable: 1 chip
Cache L1: 64 KB I + 48 KB D on chip per core
 L2: 2 MB I+D on chip per core
 L3: 504 MB I+D on chip per chip
 Other: None
Memory: 768 GB (12 x 64 GB 4Rx8 PC5-12800B-R, running at 8800)
Storage: 1 x 3.84 TB NVME SSD
Other: CPU Cooling: Air

Software

OS: Red Hat Enterprise Linux 9.4 (Plow)
 5.14.0-427.13.1.el9_4.x86_64
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 7.10.01P91 released Sep-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.

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Test Date: Sep-2024
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Results Table

| | Base | | | | | | | Peak | | | | | | |
Benchmark	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
500.perlbench_r	256	**421**	**967**	421	968									
502.gcc_r	256	**389**	**932**	388	934									
505.mcf_r	256	**224**	**1850**	223	1850									
520.omnetpp_r	256	**474**	**708**	473	710									
523.xalancbmk_r	256	164	1650	**164**	**1650**									
525.x264_r	256	**162**	**2770**	162	2770									
531.deepsjeng_r	256	290	1010	**290**	**1010**									
541.leela_r	256	**485**	**874**	485	874									
548.exchange2_r	256	241	2780	**241**	**2780**									
557.xz_r	256	490	564	**491**	**564**									

SPECrate®2017_int_base =   1220

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.
```

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H3C UniServer R3900 G7 (Intel Xeon 6980P)

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Test Date: Sep-2024
Hardware Availability: Oct-2024
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Platform Notes

```
 BIOS Settings:
  LLC dead line alloc = Disabled
  Power Performance Tuning = BIOS Controls EPB
  ENERGY_PERF_BIAS_CFG mode = Performance

  Sysinfo program /home/speccpu/bin/sysinfo
  Rev: r6732 of 2022-11-07 fe91c89b7ed5c36ae2c92cc097bec197
  running on localhost.localdomain Sun Sep 29 22:21:43 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 252 (252-32.el9_4)
  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.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
     22:21:43 up  7:14,  3 users,  load average: 22.78, 156.88, 216.24
    USER     TTY        LOGIN@   IDLE   JCPU   PCPU WHAT
    root     pts/0      15:13   13.00s  1.08s  0.00s sh intrate.sh
    root     pts/1      15:25   55.00s  0.02s  0.02s -bash
    root     pts/2      15:55    6:25m  0.03s  0.03s -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
```

(Continued on next page)

SPEC CPU®2017 Integer Rate Result

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SPECrate®2017_int_base =   1220

H3C UniServer R3900 G7 (Intel Xeon 6980P)   SPECrate®2017_int_peak = Not Run

CPU2017 License: 9066   **Test Date:**   Sep-2024
Test Sponsor: New H3C Technologies Co., Ltd.   **Hardware Availability:** Oct-2024
Tested by: New H3C Technologies Co., Ltd.   **Software Availability:** Apr-2024

Platform Notes (Continued)

```
  data seg size              (kbytes, -d) unlimited
  scheduling priority             (-e) 0
  file size                  (blocks, -f) unlimited
  pending signals                 (-i) 3091942
  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) 3091942
  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
 sh intrate.sh
 runcpu --nobuild --action validate --define default-platform-flags --define numcopies=256 -c
   ic2024.1-lin-sierraforest-rate-20240308.cfg --define smt-on --define cores=256 --define physicalfirst
   --define invoke_with_interleave --define drop_caches --reportable --tune base -o all intrate -n 2
 runcpu --nobuild --action validate --define default-platform-flags --define numcopies=256 --configfile
   ic2024.1-lin-sierraforest-rate-20240308.cfg --define smt-on --define cores=256 --define physicalfirst
   --define invoke_with_interleave --define drop_caches --reportable --tune base --output_format all
   --iterations 2 --nopower --runmode rate --tune base --size refrate intrate --nopreenv --note-preenv
   --logfile $SPEC/tmp/CPU2017.041/templogs/preenv.intrate.041.0.log --lognum 041.0 --from_runcpu 2
 specperl $SPEC/bin/sysinfo
 $SPEC = /home/speccpu


  -----------------------------------------------------------
6. /proc/cpuinfo
    model name      : Intel(R) Xeon(R) 6980P
    vendor_id       : GenuineIntel
    cpu family      : 6
    model           : 173
    stepping        : 1
    microcode       : 0x810002e0
    bugs            : spectre_v1 spectre_v2 spec_store_bypass swapgs
    cpu cores       : 128
    siblings        : 256
    1 physical ids (chips)
    256 processors (hardware threads)
    physical id 0: core ids 0-41,64-106,128-170
    physical id 0: apicids 0-83,128-213,256-341
  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)

New H3C Technologies Co., Ltd.

H3C UniServer R3900 G7 (Intel Xeon 6980P)

SPECrate®2017_int_base =   1220

SPECrate®2017_int_peak = Not Run

CPU2017 License: 9066
Test Sponsor: New H3C Technologies Co., Ltd.
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Test Date: Sep-2024
Hardware Availability: Oct-2024
Software Availability: Apr-2024

Platform Notes (Continued)

```
Byte Order:                      Little Endian
CPU(s):                          256
On-line CPU(s) list:             0-255
Vendor ID:                       GenuineIntel
BIOS Vendor ID:                  Intel(R) Corporation
Model name:                      Intel(R) Xeon(R) 6980P
BIOS Model name:                 Intel(R) Xeon(R) 6980P
CPU family:                      6
Model:                           173
Thread(s) per core:              2
Core(s) per socket:              128
Socket(s):                       1
Stepping:                        1
CPU(s) scaling MHz:              82%
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 aperfmperf 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_l3 cat_l2
                                 cdp_l3 cdp_l2 ssbd mba ibrs ibpb stibp ibrs_enhanced tpr_shadow
                                 flexpriority ept vpid ept_ad fsgsbase tsc_adjust bmi1 avx2 smep bmi2
                                 erms invpcid 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
                                 split_lock_detect avx_vnni avx512_bf16 wbnoinvd dtherm ida arat pln pts
                                 hwp hwp_act_window hwp_epp hwp_pkg_req vnmi 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 tsxldtrk pconfig arch_lbr ibt amx_bf16
                                 avx512_fp16 amx_tile amx_int8 flush_l1d arch_capabilities
Virtualization:                  VT-x
L1d cache:                       6 MiB (128 instances)
L1i cache:                       8 MiB (128 instances)
L2 cache:                        256 MiB (128 instances)
L3 cache:                        504 MiB (1 instance)
NUMA node(s):                    3
NUMA node0 CPU(s):               0-41,128-169
NUMA node1 CPU(s):               42-84,170-212
NUMA node2 CPU(s):               85-127,213-255
Vulnerability Gather data sampling: Not affected
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 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 Not affected
Vulnerability Srbds:             Not affected
Vulnerability Tsx async abort:   Not affected

From lscpu --cache:
```

(Continued on next page)

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SPECrate®2017_int_peak = Not Run

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Test Date: Sep-2024
Hardware Availability: Oct-2024
Software Availability: Apr-2024

Platform Notes (Continued)

```
      NAME ONE-SIZE ALL-SIZE WAYS TYPE           LEVEL   SETS PHY-LINE COHERENCY-SIZE
      L1d      48K       6M   12 Data              1     64       1              64
      L1i      64K       8M   16 Instruction       1     64       1              64
      L2        2M     256M   16 Unified           2   2048       1              64
      L3      504M     504M   16 Unified           3 516096       1              64


    --------------------------------------------------------------
    8. numactl --hardware
    NOTE: a numactl 'node' might or might not correspond to a physical chip.
      available: 3 nodes (0-2)
      node 0 cpus: 0-41,128-169
      node 0 size: 257032 MB
      node 0 free: 238513 MB
      node 1 cpus: 42-84,170-212
      node 1 size: 258026 MB
      node 1 free: 241218 MB
      node 2 cpus: 85-127,213-255
      node 2 size: 257969 MB
      node 2 free: 240825 MB
      node distances:
      node   0   1   2
        0:  10  12  12
        1:  12  10  12
        2:  12  12  10


    --------------------------------------------------------------
    9. /proc/meminfo
       MemTotal:       791581060 kB


    --------------------------------------------------------------
    10. who -r
       run-level 3 Sep 29 15:08


    --------------------------------------------------------------
    11. Systemd service manager version: systemd 252 (252-32.el9_4)
       Default Target  Status
       multi-user      running


    --------------------------------------------------------------
    12. Services, from systemctl list-unit-files
       STATE           UNIT FILES
       enabled         NetworkManager NetworkManager-dispatcher NetworkManager-wait-online atd auditd bluetooth
                       chronyd crond dbus-broker firewalld getty@ insights-client-boot irqbalance iscsi-onboot
                       iscsi-starter kdump libstoragemgmt low-memory-monitor lvm2-monitor mcelog mdmonitor
                       microcode multipathd nis-domainname nvmefc-boot-connections rhsmcertd rsyslog rtkit-daemon
                       selinux-autorelabel-mark smartd sshd sssd systemd-boot-update systemd-network-generator
                       tuned udisks2 upower
       enabled-runtime systemd-remount-fs
       disabled        arp-ethers blk-availability canberra-system-bootup canberra-system-shutdown
                       canberra-system-shutdown-reboot chrony-wait chronyd-restricted console-getty cpupower
                       debug-shell dnf-system-upgrade iprdump iprinit iprupdate ipsec iscsi-init iscsid iscsiuio
                       kpatch kvm_stat ledmon man-db-restart-cache-update nftables nvmf-autoconnect pesign psacct
                       rdisc rhcd rhsm rhsm-facts rpmdb-rebuild selinux-check-proper-disable serial-getty@
                       sshd-keygen@ systemd-boot-check-no-failures systemd-pstore systemd-sysext
       indirect        iscsi sssd-autofs sssd-kcm sssd-nss sssd-pac sssd-pam sssd-ssh sssd-sudo systemd-sysupdate
                       systemd-sysupdate-reboot


    --------------------------------------------------------------
    13. Linux kernel boot-time arguments, from /proc/cmdline
       BOOT_IMAGE=(hd0,gpt2)/vmlinuz-5.14.0-427.13.1.el9_4.x86_64
```

(Continued on next page)

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Platform Notes (Continued)

```
  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


  -------------------------------------------------------------
14. cpupower frequency-info
  analyzing CPU 97:
    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                   40
  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
```

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Platform Notes (Continued)

```
    scan_sleep_millisecs    10000


    ----------------------------------------------------------
    19. 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)


    ----------------------------------------------------------
    20. Disk information
    SPEC is set to: /home/speccpu
      Filesystem              Type  Size  Used Avail Use% Mounted on
      /dev/mapper/rhel-home xfs   3.5T  315G  3.2T   9% /home


    ----------------------------------------------------------
    21. /sys/devices/virtual/dmi/id
        Vendor:          New H3C Technologies Co., Ltd.
        Product:         H3C UniServer R3900 G7
        Serial:          210235A526H249000010


    ----------------------------------------------------------
    22. 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:
        12x Hynix HMCG98BDJHA381N 64 GB 4 rank 12800, configured at 8800


    ----------------------------------------------------------
    23. BIOS
    (This section combines info from /sys/devices and dmidecode.)
      BIOS Vendor:       American Megatrends International, LLC.
      BIOS Version:      7.10.01P91
      BIOS Date:         09/25/2024
      BIOS Revision:     5.35
      Firmware Revision: 1.16
```

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)
--------------------------------------------------------------------------------------------------
```

(Continued on next page)

New H3C Technologies Co., Ltd.

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H3C UniServer R3900 G7 (Intel Xeon 6980P)

SPECrate®2017_int_peak = Not Run

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Test Date: Sep-2024
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Software Availability: Apr-2024

Compiler Version Notes (Continued)

```
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`

Base Optimization Flags

C benchmarks:
`-w -std=c11 -m64 -Wl,-z,muldefs -xsierraforest -O3 -ffast-math`
`-flto -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 -xsierraforest -O3 -ffast-math`
`-flto -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 -xsierraforest -O3 -ffast-math -flto`

(Continued on next page)

New H3C Technologies Co., Ltd.

SPECrate®2017_int_base =   1220

H3C UniServer R3900 G7 (Intel Xeon 6980P)

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: Sep-2024
Hardware Availability: Oct-2024
Software Availability: Apr-2024

Base Optimization Flags (Continued)

Fortran benchmarks (continued):
```
-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-V1.0-SPR-RevE.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-V1.0-SPR-RevE.xml

Tested with SPEC CPU®2017 v1.1.9 on 2024-09-29 10:21:43-0400.
Report generated on 2024-10-23 13:34:04 by CPU2017 PDF formatter v6716.
Originally published on 2024-10-23.