

SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

My Corporation

SPECrate®2017_int_base = 8.02

SPECrate®2017_int_peak = Not Run

CPU2017 License: nnn (Your SPEC license number)

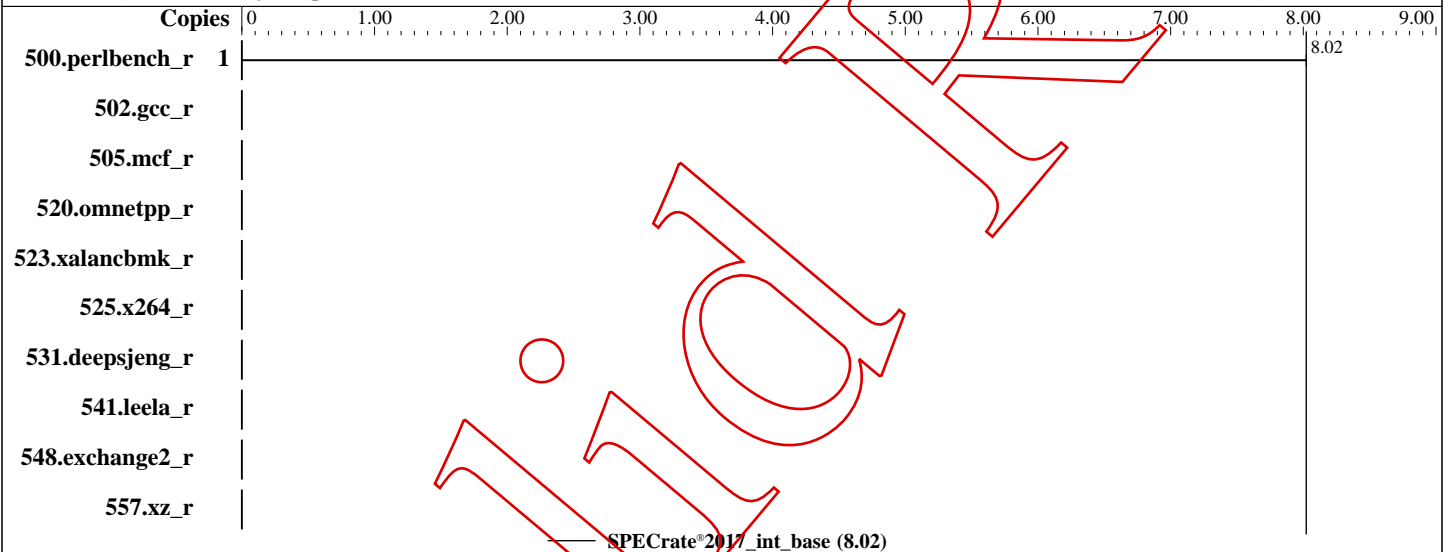
Test Sponsor: My Corporation

Tested by: My Corporation

Test Date: Oct-2024

Hardware Availability:

Software Availability:



Hardware

CPU Name: 06/8f
Max MHz:
Nominal:
Enabled: cores, 1 chip, threads/core
Orderable:
Cache L1:
L2:
L3:
Other:
Memory: 1.785 GB fixme: If using DDR4, the format is:
'N GB (N x N GB nRxn PC4-nnnX-X)'
Storage: 51 GB add more disk info here
Other:

Software

OS: Ubuntu 24.04 LTS
6.8.0-35-generic
Compiler: C/C++/Fortran: Version 10.1.0 of GCC, the GNU Compiler Collection
Parallel: No
Firmware:
File System: ext4
System State: Run level 5 (add definition here)
Base Pointers: 64-bit
Peak Pointers: Not Applicable
Other:
Power Management:

Errors

'reportable' flag not set during run
557.xz_r (base) did not have enough runs!
502.gcc_r (base) did not have enough runs!
505.mcf_r (base) did not have enough runs!
548.exchange2_r (base) did not have enough runs!
531.deepsjeng_r (base) did not have enough runs!
500.perlbench_r (base) did not have enough runs!
523.xalancbmk_r (base) did not have enough runs!
525.x264_r (base) did not have enough runs!
520.omnetpp_r (base) did not have enough runs!
541.leela_r (base) did not have enough runs!

SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

My Corporation

SPECrate®2017_int_base = 8.02

SPECrate®2017_int_peak = Not Run

CPU2017 License: nnn (Your SPEC license number)

Test Sponsor: My Corporation

Tested by: My Corporation

Test Date: Oct-2024

Hardware Availability:

Software Availability:

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
500.perlbench_r	1	198	8.02											
502.gcc_r														
505.mcf_r														
520.omnetpp_r														
523.xalancbmk_r														
525.x264_r														
531.deepsjeng_r														
541.leela_r														
548.exchange2_r														
557.xz_r														

SPECrate®2017_int_base = 8.02

SPECrate®2017_int_peak = Not Run

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

Environment Variables Notes

Environment variables set by runcpu before the start of the run:

LD_LIBRARY_PATH = "/usr/lib64:/usr/lib:/lib64"

Platform Notes

Sysinfo program /home/tdx/speccpu2017/bin/sysinfo
Rev: r6732 of 2022-11-07 fe91c89b7ed5c36ae2c92cc097bec197
running on tdx-guest Wed Oct 23 11:09:14 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 255 (255.4-1ubuntu8.1)
12. Services, from systemctl list-unit-files
13. Linux kernel boot-time arguments, from /proc/cmdline
14. cpupower frequency-info
15. sysctl
16. /sys/kernel/mm/transparent_hugepage
17. /sys/kernel/mm/transparent_hugepage/khugepaged
18. OS release

(Continued on next page)

SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

My Corporation

SPECrate®2017_int_base = 8.02

SPECrate®2017_int_peak = Not Run

CPU2017 License: nnn (Your SPEC license number)

Test Sponsor: My Corporation

Tested by: My Corporation

Test Date: Oct-2024

Hardware Availability:

Software Availability:

Platform Notes (Continued)

19. Disk information

20. /sys/devices/virtual/dmi/id

21. dmidecode

22. BIOS

1. uname -a

Linux tdx-guest 6.8.0-35-generic #35-Ubuntu SMP PREEMPT_DYNAMIC Mon May 20 15:51:52 UTC 2024 x86_64 x86_64
x86_64 GNU/Linux

2. w

11:09:14 up 6 min, 1 user, load average: 0.31, 0.52, 0.26
USER TTY FROM LOGIN@ IDLE JCPU PCPU WHAT
root hvc0 - 11:03 2.00s 1.87s 0.01s w

3. Username

From environment variable \$USER: root

4. ulimit -a

time(seconds) unlimited
file(blocks) unlimited
data(kbytes) unlimited
stack(kbytes) 8192
coredump(blocks) 0
memory(kbytes) unlimited
locked memory(kbytes) 233908
process 7107
nofiles 1024
vmemory(kbytes) unlimited
locks unlimited
rtprio 0

5. sysinfo process ancestry

/sbin/init
/bin/login -p --
-bash
runcpu --config=tdx --tune=base 500.perlbench_r
runcpu --configfile/tdx --tune base --noreportable --nopower --runmode rate --tune base --size refrate
500.perlbench_r --nopreenv --note-preenv --logfile \$SPEC/tmp/CPU2017.007/templogs/preenv.intrate.007.0.log
--lognum 007.0 --from_runcpu 2
specperl \$SPEC/bin/sysinfo
\$SPEC = /home/tdx/speccpu2017

6. /proc/cpuinfo

model name : 06/8f
vendor_id : GenuineIntel
cpu family : 6
model : 143
stepping : 8
microcode : 0x2b0005d1
bugs : spectre_v1 spectre_v2 spec_store_bypass swapgs eibrs_pbrsb bhi
cpu cores : 16
siblings : 16
1 physical ids (chips)

(Continued on next page)

SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

My Corporation

SPECrate®2017_int_base = 8.02

SPECrate®2017_int_peak = Not Run

CPU2017 License: nnn (Your SPEC license number)

Test Sponsor: My Corporation

Tested by: My Corporation

Test Date: Oct-2024

Hardware Availability:

Software Availability:

Platform Notes (Continued)

16 processors (hardware threads)

physical id 0: core ids 0-15

physical id 0: apicids 0-15

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 2.39.3:

```
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):                      16
On-line CPU(s) list:         0-15
Vendor ID:                   GenuineIntel
BIOS Vendor ID:              QEMU
Model name:                  06/8f
BIOS Model name:             pc-q35-8.2 CPU @ 2.0GHz
BIOS CPU family:             1
CPU family:                  6
Model:                       143
Thread(s) per core:          1
Core(s) per socket:          16
Socket(s):                   1
Stepping:                    8
BogoMIPS:                    4800.00
Flags:                        fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat
                                clflush dts mmx fxsr sse sse2 ss ht tm syscall nx pdpe1gb rdtscp lm
                                constant_tsc bts rep_good nopl tsc_reliable nonstop_tsc cpuid
                                tsc_known_freq pni pclmulqdq dtes64 ds_cpl sse3 fma cx16 pdcm pcid
                                sse4_1 sse4_2 x2apic movbe popcnt tsc_deadline_timer aes xsave avx
                                f16c rdrand hypervisor lahf_lm abm 3dnowprefetch cpuid_fault ssbd
                                ibrs ibpb stibp ibrs_enhanced tdx_guest fsgsbase bmi1 avx2 smep bmi2
                                erms invpcid avx512f avx512dq rdseed adx smap avx512ifma clflushopt
                                clwb avx512cd sha_ni avx512bw avx512vl xsaveopt xsavec xgetbv1 xsaves
                                avx_vnni avx512_bf16 wbnoinvd avx512vbmi umip pku ospke avx512_vbmi2
                                gfni vaes vpclmulqdq avx512_vnni avx512_bitalg avx512_vpopcntdq la57
                                rdpid bus_lock_detect cldemote movdiri movdir64b fsrm md_clear
                                serialize tsxldtrk amx_bf16 avx512_fp16 amx_tile amx_int8 flush_l1d
                                arch_capabilities
Hypervisor vendor:           KVM
Virtualization type:         full
L1d cache:                   512 KiB (16 instances)
L1i cache:                   512 KiB (16 instances)
L2 cache:                    64 MiB (16 instances)
L3 cache:                    16 MiB (1 instance)
NUMA node(s):                1
NUMA node0 CPU(s):           0-15
Vulnerability Gather data sampling: Not affected
Vulnerability Itlb multihit:  Not affected
Vulnerability Lltf:          Not affected
Vulnerability Mds:           Not affected
Vulnerability Meltdown:      Not affected
Vulnerability Mmio stale data: Not affected
Vulnerability Reg file data sampling: Not affected
Vulnerability Retbleed:      Not affected
Vulnerability Spec rstack overflow: Not affected
Vulnerability Spec store bypass: Mitigation; Speculative Store Bypass disabled via prctl
```

(Continued on next page)

SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

My Corporation

SPECrate®2017_int_base = 8.02

SPECrate®2017_int_peak = Not Run

CPU2017 License: nnn (Your SPEC license number)

Test Sponsor: My Corporation

Tested by: My Corporation

Test Date: Oct-2024

Hardware Availability:

Software Availability:

Platform Notes (Continued)

Vulnerability Spectre v1: Mitigation; usercopy/swaps barriers and __user pointer sanitization
Vulnerability Spectre v2: Mitigation; Enhanced / Automatic IBRS; IBPB conditional; RSB filling;
PBRSE-eIBRS SW sequence; BHI BHI_DIS_S
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	32K	512K	8	Data	1	64	1	64
L1i	32K	512K	8	Instruction	1	64	1	64
L2	4M	64M	16	Unified	2	4096	1	64
L3	16M	16M	16	Unified	3	16384	1	64

8. numactl --hardware

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

available: 1 nodes (0)
node 0 cpus: 0-15
node 0 size: 1827 MB
node 0 free: 969 MB
node distances:
node 0
0: 10

9. /proc/meminfo

MemTotal: 1871272 kB

10. who -r

run-level 5 Oct 23 11:03

11. Systemd service manager version: systemd 255 (255.4-lubuntu8.1)

Default Target Status
graphical running

12. Services, from systemctl list-unit-files

STATE	UNIT FILES
enabled	ModemManager apparmor appport blk-availability cloud-config cloud-final cloud-init cloud-init-local console-setup cron dmesg e2scrub_reap finalrd getty@ grub-common grub-initrd-fallback keyboard-setup lvm2-monitor multipathd networkd-dispatcher open-iscsi open-vm-tools rsyslog secureboot-db setvtrgb snapd ssh sysstat systemd-networkd systemd-networkd-wait-online systemd-pstore systemd-resolved systemd-timesyncd ua-reboot-cmds ubuntu-advantage udisks2 ufw unattended-upgrades vgauth
enabled-runtime	netplan-ovs-cleanup systemd-fsck-root systemd-remount-fs
disabled	console-getty debug-shell iscsid nftables rsync systemd-boot-check-no-failures systemd-confext systemd-network-generator systemd-networkd-wait-online@ systemd-pcrlock-file-system systemd-pcrlock-firmware-code systemd-pcrlock-firmware-config systemd-pcrlock-machine-id systemd-pcrlock-make-policy systemd-pcrlock-secureboot-authority systemd-pcrlock-secureboot-policy systemd-sysext systemd-time-wait-sync
indirect	serial-getty@ systemd-sysupdate systemd-sysupdate-reboot uidd
masked	cryptdisks cryptdisks-early hwclock multipath-tools-boot pollinate screen-cleanup sudo x11-common

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

BOOT_IMAGE=/vmlinuz-6.8.0-35-generic

(Continued on next page)

SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

My Corporation

SPECrate®2017_int_base = 8.02

SPECrate®2017_int_peak = Not Run

CPU2017 License: nnn (Your SPEC license number)

Test Sponsor: My Corporation

Tested by: My Corporation

Test Date: Oct-2024

Hardware Availability:

Software Availability:

Platform Notes (Continued)

```
root=UUID=41106c9c-97fc-4396-8622-4f692c8c5bb1
ro
console=ttyl
console=ttyS0
```

14. cpupower frequency-info

```
analyzing CPU 1:
  Unable to determine current policy
  boost state support:
    Supported: no
    Active: no
```

15. sysctl

```
kernel.numa_balancing      0
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
```

16. /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
```

17. /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
```

18. OS release

```
From /etc/*-release /etc/*-version
os-release Ubuntu 24.04 LTS
```

19. Disk information

```
SPEC is set to: /home/tdx/speccpu2017
```

(Continued on next page)

SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

My Corporation

SPECrate®2017_int_base = 8.02

SPECrate®2017_int_peak = Not Run

CPU2017 License: nnn (Your SPEC license number)

Test Sponsor: My Corporation

Tested by: My Corporation

Test Date: Oct-2024

Hardware Availability:

Software Availability:

Platform Notes (Continued)

Filesystem	Type	Size	Used	Avail	Use%	Mounted on
/dev/vda1	ext4	51G	8.6G	43G	17%	/

20. /sys/devices/virtual/dmi/id

Vendor: QEMU

Product: Standard PC (Q35 + ICH9, 2009)

21. 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:

1x QEMU Not Specified 2 GB

22. BIOS

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

BIOS Vendor: Ubuntu distribution of EDK II

BIOS Version: 2024.02-3+fdx1.0

BIOS Date: 07/03/2024

BIOS Revision: 0.0

Compiler Version Notes

=====
C | 500.perlbench_r(base)

gcc (Ubuntu 13.2.0-23ubuntu4) 13.2.0

Copyright (C) 2023 Free Software Foundation, Inc.

This is free software; see the source for copying conditions. There is NO
warranty; not even for MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

Base Runtime Environment

C benchmarks:

500.perlbench_r: No flags used

Base Compiler Invocation

C benchmarks:

500.perlbench_r: gcc

SPEC CPU®2017 Integer Rate Result

Copyright 2017-2024 Standard Performance Evaluation Corporation

My Corporation

SPECrate®2017_int_base = 8.02

SPECrate®2017_int_peak = Not Run

CPU2017 License: nnn (Your SPEC license number)

Test Sponsor: My Corporation

Tested by: My Corporation

Test Date: Oct-2024

Hardware Availability:

Software Availability:

Base Portability Flags

500.perlbench_r: -DSPEC_LINUX_X64 -DSPEC_LP64

Base Optimization Flags

C benchmarks:

500.perlbench_r: -m64 -std=c99 -g -O3 -march=native -fno-strict-aliasing
-fno-unsafe-math-optimizations -fno-finite-math-only
-fgnu89-inline

Base Other Flags

C benchmarks:

500.perlbench_r: -fcommon

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.

Tested with SPEC CPU®2017 v1.1.9 on 2024-10-23 11:09:13+0000.

Report generated on 2024-10-23 11:12:40 by CPU2017 PDF formatter v6716.