

SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2023 Standard Performance Evaluation Corporation

Laptop Rubens

SPECrate®2017_fp_base = 6.25

SPECrate®2017_fp_peak = Not Run

CPU2017 License: nnn (Your SPEC license number)

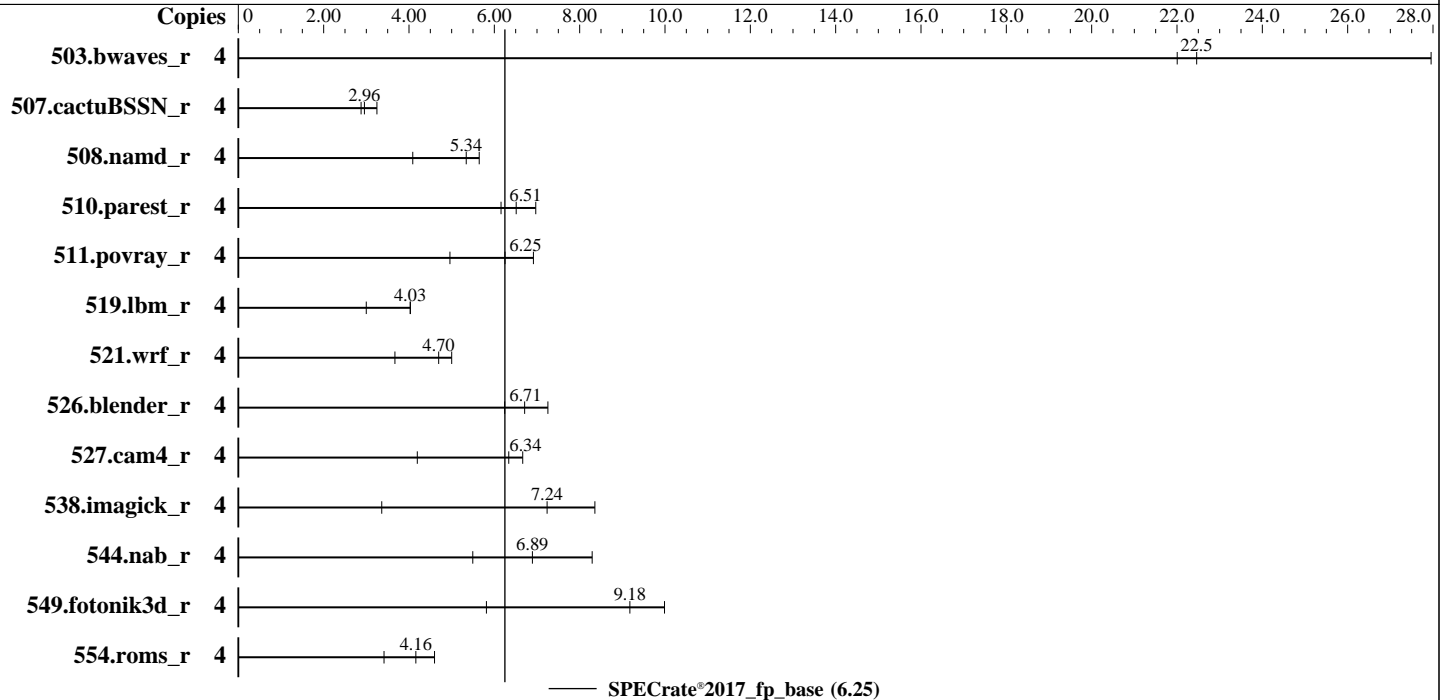
Test Date: May-2023

Test Sponsor: Laptop Rubens

Hardware Availability:

Tested by: Laptop Rubens

Software Availability:



Hardware

CPU Name: Intel Core i7-2620M
Max MHz:
Nominal:
Enabled: cores, 1 chip, threads/core
Orderable:
Cache L1:
L2:
L3:
Other:
Memory: 7.733 GB fixme: If using DDR4, the format is:
'N GB (N x N GB nRxn PC4-nnnnX-X)'
Storage: 1007 GB add more disk info here
Other:

Software

OS: Ubuntu 22.04.2 LTS
5.15.90.1-microsoft-standard-WSL2
Compiler: C/C++/Fortran: Version 7.2.1 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: --

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Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
503.bwaves_r	4	<u>1786</u>	<u>22.5</u>	1435	28.0	1823	22.0							
507.cactuBSSN_r	4	1559	3.25	<u>1714</u>	<u>2.96</u>	1760	2.88							
508.namd_r	4	929	4.09	673	5.65	<u>711</u>	<u>5.34</u>							
510.parest_r	4	1699	6.16	1501	6.97	<u>1607</u>	<u>6.51</u>							
511.povray_r	4	<u>1494</u>	<u>6.25</u>	1350	6.92	1883	4.96							
519.lbm_r	4	1045	4.03	<u>1047</u>	<u>4.03</u>	1406	3.00							
521.wrf_r	4	1792	5.00	<u>1908</u>	<u>4.70</u>	2441	3.67							
526.blender_r	4	840	7.26	<u>908</u>	<u>6.71</u>	976	6.24							
527.cam4_r	4	1050	6.67	<u>1104</u>	<u>6.34</u>	1668	4.19							
538.imagick_r	4	1190	8.36	<u>1375</u>	<u>7.24</u>	2959	3.36							
544.nab_r	4	812	8.29	<u>977</u>	<u>6.89</u>	1225	5.50							
549.fotonik3d_r	4	1561	9.99	<u>1699</u>	<u>9.18</u>	2681	5.81							
554.roms_r	4	1382	4.60	<u>1528</u>	<u>4.16</u>	1861	3.41							

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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 /usr/local/spec_cpu2017/bin/sysinfo
Rev: r6732 of 2022-11-07 fe91c89b7ed5c36ae2c92cc097bec197
running on NotebookRubens Tue May 23 01:18:59 2023

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 warning
 9. /proc/meminfo
 10. who -r
 11. Systemd service manager version: systemd 249 (249.11-0ubuntu3.9)
 12. Services, from systemctl list-unit-files
 13. Linux kernel boot-time arguments, from /proc/cmdline
 14. sysctl

(Continued on next page)

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Platform Notes (Continued)

```
15. /sys/kernel/mm/transparent_hugepage
16. /sys/kernel/mm/transparent_hugepage/khugepaged
17. OS release
18. Disk information
19. dmidecode
```

```
1. uname -a
Linux NotebookRubens 5.15.90.1-microsoft-standard-WSL2 #1 SMP Fri Jan 27 02:56:13 UTC 2023 x86_64 x86_64
x86_64 GNU/Linux
```

```
2. w
01:18:59 up 9:31, 4 users, load average: 0.08, 0.05, 0.12
USER      TTY      FROM            LOGIN@   IDLE   JCPU   PCPU   WHAT
rubens    pts/1    -                Mon10    15:15m 0.08s  0.05s  -bash
rubens    pts/2    -                Mon10    14:06m 9.76s  8.80s  sudo -i
root      pts/3    -                Mon11    6:50   5.35s  5.13s  -bash
rubens    pts/5    -                00:22    11.00s 3.63s  0.64s  sudo -i
```

```
3. Username
From environment variable $USER: root
From the command 'logname': rubens
```

```
4. ulimit -a
time(seconds)          unlimited
file(blocks)           unlimited
data(kbytes)           unlimited
stack(kbytes)          8192
coredump(blocks)       0
memory(kbytes)         unlimited
locked memory(kbytes)  1013600
process                31649
nofiles                1024
vmemory(kbytes)        unlimited
locks                 unlimited
rtprio                 0
```

```
5. sysinfo process ancestry
/sbin/init
/init
/init
/init
-bash
sudo -i
sudo -i
-bash
runcpu --config=rubens-try1 --reportable --iterations=3 fprate
runcpu --configfile rubens-try1 --reportable --iterations 3 --nopower --runmode rate --tune base --size
  refrate fprate --nopreenv --note-preenv --logfile $SPEC/tmp/CPU2017.068/temlogs/preenv.fprate.068.0.log
  --lognum 068.0 --from_runcpu 2
specperl $SPEC/bin/sysinfo
$SPEC = /usr/local/spec_cpu2017
```

```
6. /proc/cpuinfo
```

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Hardware Availability:

Software Availability:

Platform Notes (Continued)

```
model name      : Intel(R) Core(TM) i7-2620M CPU @ 2.70GHz
vendor_id       : GenuineIntel
cpu family      : 6
model           : 42
stepping        : 7
microcode       : 0xffffffff
bugs            : cpu_meltdown spectre_v1 spectre_v2 spec_store_bypass l1tf mds swapgs itlb_multihit
                  mmio_unknown
cpu cores       : 2
siblings        : 4
1 physical ids (chips)
4 processors (hardware threads)
physical id 0: core ids 0-1
physical id 0: apicids 0-3
```

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 2.37.2:

```
Architecture:          x86_64
CPU op-mode(s):        32-bit, 64-bit
Address sizes:         36 bits physical, 48 bits virtual
Byte Order:            Little Endian
CPU(s):                4
On-line CPU(s) list:   0-3
Vendor ID:             GenuineIntel
Model name:            Intel(R) Core(TM) i7-2620M CPU @ 2.70GHz
CPU family:            6
Model:                 42
Thread(s) per core:    2
Core(s) per socket:    2
Socket(s):             1
Stepping:              7
BogoMIPS:              5387.76
Flags:                 fpu vme de pse tsc msr pae mce cx8 apic sep mtrr pge mca cmov pat pse36
                      clflush mmx fxsr sse sse2 ht syscall nx rdtscp lm constant_tsc
                      arch_perfmon rep_good noopl xtopology cpuid pni pclmulqdq ssse3 cx16 pdcm
                      pcid sse4_1 sse4_2 popcnt aes xsave avx hypervisor lahf_lm pti ssbd ibrs
                      ibpb stibp xsaveopt flush_lld arch_capabilities

Hypervisor vendor:    Microsoft
Virtualization type:   full
L1d cache:            64 KiB (2 instances)
L1i cache:            64 KiB (2 instances)
L2 cache:             512 KiB (2 instances)
L3 cache:             4 MiB (1 instance)
Vulnerability Itlb multihit: KVM: Mitigation: VMX unsupported
Vulnerability L1tf:     Mitigation; PTE Inversion
Vulnerability Mds:      Vulnerable: Clear CPU buffers attempted, no microcode; SMT Host state
                        unknown
Vulnerability Meltdown: Mitigation; PTI
Vulnerability Mmio stale data: Unknown: No mitigations
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; Retpolines, IBPB conditional, IBRS_FW, STIBP conditional, RSB
                        filling, PBRSE-eIBRS Not affected
Vulnerability Srbds:    Not affected
Vulnerability Tsx async abort: Not affected
```

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Software Availability:

Platform Notes (Continued)

From lscpu --cache:

NAME	ONE-SIZE	ALL-SIZE	WAYS	TYPE	LEVEL	SETS	PHY-LINE	COHERENCY-SIZE
L1d	32K	64K	8	Data	1	64	1	64
L1i	32K	64K	8	Instruction	1	64	1	64
L2	256K	512K	8	Unified	2	512	1	64
L3	4M	4M	16	Unified	3	4096	1	64

8. numactl warning

Unable to get information from 'numactl --hardware'. Please consider installing numactl.

9. /proc/meminfo

MemTotal: 8108808 kB

10. who -r

run-level 5 May 22 10:03

11. Systemd service manager version: systemd 249 (249.11-0ubuntu3.9)

Default Target	Status
graphical	running

12. Services, from systemctl list-unit-files

STATE	UNIT FILES
enabled	apparmor console-setup cron dmesg e2scrub_reap getty@ irqbalance keyboard-setup rsyslog setvtrgb snapd systemd-pstore systemd-resolved systemd-timesyncd
enabled-runtime	console-getty systemd-remount-fs
disabled	debug-shell nftables rsync serial-getty@ systemd-boot-check-no-failures systemd-network-generator systemd-networkd systemd-networkd-wait-online systemd-sysext systemd-time-wait-sync
generated	apport
indirect	uuid
masked	cryptdisks cryptdisks-early hwclock networkd-dispatcher rc rcS screen-cleanup sudo systemd-binfmt ua-reboot-cmds ubuntu-advantage ufw unattended-upgrades x11-common

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

initrd=\initrd.img
WSL_ROOT_INIT=1
panic=-1
nr_cpus=4
bonding.max_bonds=0
dummy.numdummies=0
fb_tunnels=none
swiotlb=force
console=hvc0
debug
pty.legacy_count=0

14. sysctl

kernel.randomize_va_space	2
vm.compaction_proactiveness	20
vm.dirty_background_bytes	0
vm.dirty_background_ratio	10

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Platform Notes (Continued)

```
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.nr_hugepages         0
vm.nr_overcommit_hugepages 0
vm.swappiness           60
vm.watermark_boost_factor 15000
vm.watermark_scale_factor 10
```

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

```
-----
16. /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
-----
```

```
-----
17. OS release
From /etc/*-release /etc/*-version
os-release Ubuntu 22.04.2 LTS
-----
```

```
-----
18. Disk information
SPEC is set to: /usr/local/spec_cpu2017
Filesystem      Type  Size  Used Avail Use% Mounted on
/dev/sdc        ext4  1007G   71G  885G   8% /
-----
```

```
-----
19. dmidecode
Additional information from dmidecode 3.3 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.
-----
```

BIOS: (could not find information)

Compiler Version Notes

```
=====
C | 519.lbm_r(base) 538.imagick_r(base) 544.nab_r(base)
=====
```

```
Using built-in specs.
COLLECT_GCC=/usr/bin/gcc
COLLECT_LTO_WRAPPER=/usr/lib/gcc/x86_64-linux-gnu/11/lto-wrapper
OFFLOAD_TARGET_NAMES=nvptx-none:amdgc-n-amdhsa
OFFLOAD_TARGET_DEFAULT=1
```

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Compiler Version Notes (Continued)

Target: x86_64-linux-gnu

Configured with: ../src/configure -v --with-pkgversion='Ubuntu 11.3.0-lubuntul~22.04'

```
--with-bugurl=file:///usr/share/doc/gcc-11/README.Bugs
--enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,m2 --prefix=/usr
--with-gcc-major-version-only --program-suffix=-11 --program-prefix=x86_64-linux-gnu- --enable-shared
--enable-linker-build-id --libexecdir=/usr/lib --without-included-gettext --enable-threads=posix
--libdir=/usr/lib --enable-nls --enable-bootstrap --enable-clocale=gnu --enable-libstdcxx-debug
--enable-libstdcxx-time=yes --with-default-libstdcxx-abi=new --enable-gnu-unique-object
--disable-vtable-verify --enable-plugin --enable-default-pie --with-system-zlib
--enable-libphobos-checking=release --with-target-system-zlib=auto --enable-objc-gc=auto
--enable-multiarch --disable-werror --enable-cet --with-arch=32=i686 --with-abi=m64
--with-multilib-list=m32,m64,mx32 --enable-multilib --with-tune=generic
--enable-offload-targets=nvptx-none=/build/gcc-11-xKiWfi/gcc-11-11.3.0/debian/tmp-nvptx/usr,amdgc- amdhsa=/build/gcc-11-xKiWfi/gcc-11-11.3.0/debian/tmp-gcn/usr
--without-cuda-driver --enable-checking=release --build=x86_64-linux-gnu --host=x86_64-linux-gnu
--target=x86_64-linux-gnu --with-build-config=bootstrap-lto-lean --enable-link-serialization=2
```

Thread model: posix

Supported LTO compression algorithms: zlib zstd

gcc version 11.3.0 (Ubuntu 11.3.0-lubuntul~22.04)

=====
C++ | 508.namd_r(base) 510.parest_r(base)
=====

Using built-in specs.

COLLECT_GCC=/usr/bin/g++

COLLECT_LTO_WRAPPER=/usr/lib/gcc/x86_64-linux-gnu/11/lto-wrapper

OFFLOAD_TARGET_NAMES=nvptx-none:amdgc- amdhsa

OFFLOAD_TARGET_DEFAULT=1

Target: x86_64-linux-gnu

Configured with: ../src/configure -v --with-pkgversion='Ubuntu 11.3.0-lubuntul~22.04'

```
--with-bugurl=file:///usr/share/doc/gcc-11/README.Bugs
--enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,m2 --prefix=/usr
--with-gcc-major-version-only --program-suffix=-11 --program-prefix=x86_64-linux-gnu- --enable-shared
--enable-linker-build-id --libexecdir=/usr/lib --without-included-gettext --enable-threads=posix
--libdir=/usr/lib --enable-nls --enable-bootstrap --enable-clocale=gnu --enable-libstdcxx-debug
--enable-libstdcxx-time=yes --with-default-libstdcxx-abi=new --enable-gnu-unique-object
--disable-vtable-verify --enable-plugin --enable-default-pie --with-system-zlib
--enable-libphobos-checking=release --with-target-system-zlib=auto --enable-objc-gc=auto
--enable-multiarch --disable-werror --enable-cet --with-arch=32=i686 --with-abi=m64
--with-multilib-list=m32,m64,mx32 --enable-multilib --with-tune=generic
--enable-offload-targets=nvptx-none=/build/gcc-11-xKiWfi/gcc-11-11.3.0/debian/tmp-nvptx/usr,amdgc- amdhsa=/build/gcc-11-xKiWfi/gcc-11-11.3.0/debian/tmp-gcn/usr
--without-cuda-driver --enable-checking=release --build=x86_64-linux-gnu --host=x86_64-linux-gnu
--target=x86_64-linux-gnu --with-build-config=bootstrap-lto-lean --enable-link-serialization=2
```

Thread model: posix

Supported LTO compression algorithms: zlib zstd

gcc version 11.3.0 (Ubuntu 11.3.0-lubuntul~22.04)

=====
C++, C | 511.povray_r(base) 526.blender_r(base)
=====

Using built-in specs.

COLLECT_GCC=/usr/bin/g++

COLLECT_LTO_WRAPPER=/usr/lib/gcc/x86_64-linux-gnu/11/lto-wrapper

OFFLOAD_TARGET_NAMES=nvptx-none:amdgc- amdhsa

OFFLOAD_TARGET_DEFAULT=1

Target: x86_64-linux-gnu

Configured with: ../src/configure -v --with-pkgversion='Ubuntu 11.3.0-lubuntul~22.04'

```
--with-bugurl=file:///usr/share/doc/gcc-11/README.Bugs
--enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,m2 --prefix=/usr
```

(Continued on next page)

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Compiler Version Notes (Continued)

```
--with-gcc-major-version-only --program-suffix=-11 --program-prefix=x86_64-linux-gnu- --enable-shared
--enable-linker-build-id --libexecdir=/usr/lib --without-included-gettext --enable-threads=posix
--libdir=/usr/lib --enable-nls --enable-bootstrap --enable-clocale=gnu --enable-libstdcxx-debug
--enable-libstdcxx-time=yes --with-default-libstdcxx-abi=new --enable-gnu-unique-object
--disable-vtable-verify --enable-plugin --enable-default-pie --with-system-zlib
--enable-libphobos-checking=release --with-target-system-zlib=auto --enable-objc-gc=auto
--enable-multiarch --disable-werror --enable-cet --with-arch-32=i686 --with-abi=m64
--with-multilib-list=m32,m64,mx32 --enable-multilib --with-tune=generic
--enable-offload-targets=nvptx-none=/build/gcc-11-xKiWfi/gcc-11-11.3.0/debian/tmp-nvptx/usr,amdgc-ndhsa=/build/gcc-11-xKiWfi/gcc-11-11.3.0/debian/tmp-gcn/usr
--without-cuda-driver --enable-checking=release --build=x86_64-linux-gnu --host=x86_64-linux-gnu
--target=x86_64-linux-gnu --with-build-config=bootstrap-lto-lean --enable-link-serialization=2
```

Thread model: posix

Supported LTO compression algorithms: zlib zstd

gcc version 11.3.0 (Ubuntu 11.3.0-1ubuntu1~22.04)

Using built-in specs.

COLLECT_GCC=/usr/bin/gcc

COLLECT_LTO_WRAPPER=/usr/lib/gcc/x86_64-linux-gnu/11/lto-wrapper

OFFLOAD_TARGET_NAMES=nvptx-none:amdgc-ndhsa

OFFLOAD_TARGET_DEFAULT=1

Target: x86_64-linux-gnu

Configured with: ../src/configure -v --with-pkgversion='Ubuntu 11.3.0-1ubuntu1~22.04'

--with-bugurl=file:///usr/share/doc/gcc-11/README.Bugs

--enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,m2 --prefix=/usr

--with-gcc-major-version-only --program-suffix=-11 --program-prefix=x86_64-linux-gnu- --enable-shared

--enable-linker-build-id --libexecdir=/usr/lib --without-included-gettext --enable-threads=posix

--libdir=/usr/lib --enable-nls --enable-bootstrap --enable-clocale=gnu --enable-libstdcxx-debug

--enable-libstdcxx-time=yes --with-default-libstdcxx-abi=new --enable-gnu-unique-object

--disable-vtable-verify --enable-plugin --enable-default-pie --with-system-zlib

--enable-libphobos-checking=release --with-target-system-zlib=auto --enable-objc-gc=auto

--enable-multiarch --disable-werror --enable-cet --with-arch-32=i686 --with-abi=m64

--with-multilib-list=m32,m64,mx32 --enable-multilib --with-tune=generic

--enable-offload-targets=nvptx-none=/build/gcc-11-xKiWfi/gcc-11-11.3.0/debian/tmp-nvptx/usr,amdgc-ndhsa=/build/gcc-11-xKiWfi/gcc-11-11.3.0/debian/tmp-gcn/usr

--without-cuda-driver --enable-checking=release --build=x86_64-linux-gnu --host=x86_64-linux-gnu

--target=x86_64-linux-gnu --with-build-config=bootstrap-lto-lean --enable-link-serialization=2

Thread model: posix

Supported LTO compression algorithms: zlib zstd

gcc version 11.3.0 (Ubuntu 11.3.0-1ubuntu1~22.04)

=====
C++, C, Fortran | 507.cactuBSSN_r(base)

Using built-in specs.

COLLECT_GCC=/usr/bin/g++

COLLECT_LTO_WRAPPER=/usr/lib/gcc/x86_64-linux-gnu/11/lto-wrapper

OFFLOAD_TARGET_NAMES=nvptx-none:amdgc-ndhsa

OFFLOAD_TARGET_DEFAULT=1

Target: x86_64-linux-gnu

Configured with: ../src/configure -v --with-pkgversion='Ubuntu 11.3.0-1ubuntu1~22.04'

--with-bugurl=file:///usr/share/doc/gcc-11/README.Bugs

--enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,m2 --prefix=/usr

--with-gcc-major-version-only --program-suffix=-11 --program-prefix=x86_64-linux-gnu- --enable-shared

--enable-linker-build-id --libexecdir=/usr/lib --without-included-gettext --enable-threads=posix

--libdir=/usr/lib --enable-nls --enable-bootstrap --enable-clocale=gnu --enable-libstdcxx-debug

--enable-libstdcxx-time=yes --with-default-libstdcxx-abi=new --enable-gnu-unique-object

--disable-vtable-verify --enable-plugin --enable-default-pie --with-system-zlib

--enable-libphobos-checking=release --with-target-system-zlib=auto --enable-objc-gc=auto

--enable-multiarch --disable-werror --enable-cet --with-arch-32=i686 --with-abi=m64

--with-multilib-list=m32,m64,mx32 --enable-multilib --with-tune=generic

--enable-offload-targets=nvptx-none=/build/gcc-11-xKiWfi/gcc-11-11.3.0/debian/tmp-nvptx/usr,amdgc-ndhsa=/build/gcc-11-xKiWfi/gcc-11-11.3.0/debian/tmp-gcn/usr

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SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2023 Standard Performance Evaluation Corporation

Laptop Rubens

SPECrate®2017_fp_base = 6.25

SPECrate®2017_fp_peak = Not Run

CPU2017 License: nnn (Your SPEC license number)

Test Sponsor: Laptop Rubens

Tested by: Laptop Rubens

Test Date: May-2023

Hardware Availability:

Software Availability:

Compiler Version Notes (Continued)

```
--without-cuda-driver --enable-checking=release --build=x86_64-linux-gnu --host=x86_64-linux-gnu
--target=x86_64-linux-gnu --with-build-config=bootstrap-lto-lean --enable-link-serialization=2
Thread model: posix
Supported LTO compression algorithms: zlib zstd
gcc version 11.3.0 (Ubuntu 11.3.0-1ubuntu1~22.04)
Using built-in specs.
COLLECT_GCC=/usr/bin/gcc
COLLECT_LTO_WRAPPER=/usr/lib/gcc/x86_64-linux-gnu/11/lto-wrapper
OFFLOAD_TARGET_NAMES=nvptx-none:amdgc-n-amdhsa
OFFLOAD_TARGET_DEFAULT=1
Target: x86_64-linux-gnu
Configured with: ../src/configure -v --with-pkgversion='Ubuntu 11.3.0-1ubuntu1~22.04'
--with-bugurl=file:///usr/share/doc/gcc-11/README.Bugs
--enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,m2 --prefix=/usr
--with-gcc-major-version-only --program-suffix=-11 --program-prefix=x86_64-linux-gnu- --enable-shared
--enable-linker-build-id --libexecdir=/usr/lib --without-included-gettext --enable-threads=posix
--libdir=/usr/lib --enable-nls --enable-bootstrap --enable-clocale=gnu --enable-libstdcxx-debug
--enable-libstdcxx-time=yes --with-default-libstdcxx-abi=new --enable-gnu-unique-object
--disable-vtable-verify --enable-plugin --enable-default-pie --with-system-zlib
--enable-libphobos-checking=release --with-target-system-zlib=auto --enable-objc-gc=auto
--enable-multiarch --disable-werror --enable-cet --with-arch=32=i686 --with-abi=m64
--with-multilib-list=m32,m64,mx32 --enable-multilib --with-tune=generic
--enable-offload-targets=nvptx-none=/build/gcc-11-xKiWfi/gcc-11-11.3.0/debian/tmp-nvptx/usr,amdgc-n-amdhsa=/build/gcc-11-xKiWfi/gcc-11-11.3.0/debian/tmp-gcn/usr
--without-cuda-driver --enable-checking=release --build=x86_64-linux-gnu --host=x86_64-linux-gnu
--target=x86_64-linux-gnu --with-build-config=bootstrap-lto-lean --enable-link-serialization=2
Thread model: posix
Supported LTO compression algorithms: zlib zstd
gcc version 11.3.0 (Ubuntu 11.3.0-1ubuntu1~22.04)
Using built-in specs.
COLLECT_GCC=/usr/bin/gfortran
COLLECT_LTO_WRAPPER=/usr/lib/gcc/x86_64-linux-gnu/11/lto-wrapper
OFFLOAD_TARGET_NAMES=nvptx-none:amdgc-n-amdhsa
OFFLOAD_TARGET_DEFAULT=1
Target: x86_64-linux-gnu
Configured with: ../src/configure -v --with-pkgversion='Ubuntu 11.3.0-1ubuntu1~22.04'
--with-bugurl=file:///usr/share/doc/gcc-11/README.Bugs
--enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,m2 --prefix=/usr
--with-gcc-major-version-only --program-suffix=-11 --program-prefix=x86_64-linux-gnu- --enable-shared
--enable-linker-build-id --libexecdir=/usr/lib --without-included-gettext --enable-threads=posix
--libdir=/usr/lib --enable-nls --enable-bootstrap --enable-clocale=gnu --enable-libstdcxx-debug
--enable-libstdcxx-time=yes --with-default-libstdcxx-abi=new --enable-gnu-unique-object
--disable-vtable-verify --enable-plugin --enable-default-pie --with-system-zlib
--enable-libphobos-checking=release --with-target-system-zlib=auto --enable-objc-gc=auto
--enable-multiarch --disable-werror --enable-cet --with-arch=32=i686 --with-abi=m64
--with-multilib-list=m32,m64,mx32 --enable-multilib --with-tune=generic
--enable-offload-targets=nvptx-none=/build/gcc-11-xKiWfi/gcc-11-11.3.0/debian/tmp-nvptx/usr,amdgc-n-amdhsa=/build/gcc-11-xKiWfi/gcc-11-11.3.0/debian/tmp-gcn/usr
--without-cuda-driver --enable-checking=release --build=x86_64-linux-gnu --host=x86_64-linux-gnu
--target=x86_64-linux-gnu --with-build-config=bootstrap-lto-lean --enable-link-serialization=2
Thread model: posix
Supported LTO compression algorithms: zlib zstd
gcc version 11.3.0 (Ubuntu 11.3.0-1ubuntu1~22.04)
-----
Fortran          | 503.bwaves_r(base) 549.fotonik3d_r(base) 554.roms_r(base)
-----
Using built-in specs.
COLLECT_GCC=/usr/bin/gfortran
COLLECT_LTO_WRAPPER=/usr/lib/gcc/x86_64-linux-gnu/11/lto-wrapper
OFFLOAD_TARGET_NAMES=nvptx-none:amdgc-n-amdhsa
```

(Continued on next page)

SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2023 Standard Performance Evaluation Corporation

Laptop Rubens

SPECrate®2017_fp_base = 6.25

SPECrate®2017_fp_peak = Not Run

CPU2017 License: nnn (Your SPEC license number)

Test Sponsor: Laptop Rubens

Tested by: Laptop Rubens

Test Date: May-2023

Hardware Availability:

Software Availability:

Compiler Version Notes (Continued)

```
OFFLOAD_TARGET_DEFAULT=1
Target: x86_64-linux-gnu
Configured with: ../src/configure -v --with-pkgversion='Ubuntu 11.3.0-1ubuntu1~22.04'
--with-bugurl=file:///usr/share/doc/gcc-11/README.Bugs
--enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,m2 --prefix=/usr
--with-gcc-major-version-only --program-suffix=-11 --program-prefix=x86_64-linux-gnu- --enable-shared
--enable-linker-build-id --libexecdir=/usr/lib --without-included-gettext --enable-threads=posix
--libdir=/usr/lib --enable-nls --enable-bootstrap --enable-clocale=gnu --enable-libstdcxx-debug
--enable-libstdcxx-time=yes --with-default-libstdcxx-abi=new --enable-gnu-unique-object
--disable-vtable-verify --enable-plugin --enable-default-pie --with-system-zlib
--enable-libphobos-checking=release --with-target-system-zlib=auto --enable-objc-gc=auto
--enable-multiarch --disable-werror --enable-cet --with-arch-32=i686 --with-abi=m64
--with-multilib-list=m32,m64,mx32 --enable-multilib --with-tune=generic
--enable-offload-targets=nvptx-none=/build/gcc-11-xKiWfi/gcc-11-11.3.0/debian/tmp-nvptx/usr,amdgc-ndhsa=/build/gcc-11-xKiWfi/gcc-11-11.3.0/debian/tmp-gcn/usr
--without-cuda-driver --enable-checking=release --build=x86_64-linux-gnu --host=x86_64-linux-gnu
--target=x86_64-linux-gnu --with-build-config=bootstrap-lto-lean --enable-link-serialization=2
Thread model: posix
Supported LTO compression algorithms: zlib zstd
gcc version 11.3.0 (Ubuntu 11.3.0-1ubuntu1~22.04)
```

```
-----
Fortran, C      | 521.wrf_r(base) 527.cam4_r(base)
-----
```

```
Using built-in specs.
COLLECT_GCC=/usr/bin/gfortran
COLLECT_LTO_WRAPPER=/usr/lib/gcc/x86_64-linux-gnu/11/lto-wrapper
OFFLOAD_TARGET_NAMES=nvptx-none:amdgc-ndhsa
OFFLOAD_TARGET_DEFAULT=1
Target: x86_64-linux-gnu
Configured with: ../src/configure -v --with-pkgversion='Ubuntu 11.3.0-1ubuntu1~22.04'
--with-bugurl=file:///usr/share/doc/gcc-11/README.Bugs
--enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,m2 --prefix=/usr
--with-gcc-major-version-only --program-suffix=-11 --program-prefix=x86_64-linux-gnu- --enable-shared
--enable-linker-build-id --libexecdir=/usr/lib --without-included-gettext --enable-threads=posix
--libdir=/usr/lib --enable-nls --enable-bootstrap --enable-clocale=gnu --enable-libstdcxx-debug
--enable-libstdcxx-time=yes --with-default-libstdcxx-abi=new --enable-gnu-unique-object
--disable-vtable-verify --enable-plugin --enable-default-pie --with-system-zlib
--enable-libphobos-checking=release --with-target-system-zlib=auto --enable-objc-gc=auto
--enable-multiarch --disable-werror --enable-cet --with-arch-32=i686 --with-abi=m64
--with-multilib-list=m32,m64,mx32 --enable-multilib --with-tune=generic
--enable-offload-targets=nvptx-none=/build/gcc-11-xKiWfi/gcc-11-11.3.0/debian/tmp-nvptx/usr,amdgc-ndhsa=/build/gcc-11-xKiWfi/gcc-11-11.3.0/debian/tmp-gcn/usr
--without-cuda-driver --enable-checking=release --build=x86_64-linux-gnu --host=x86_64-linux-gnu
--target=x86_64-linux-gnu --with-build-config=bootstrap-lto-lean --enable-link-serialization=2
Thread model: posix
Supported LTO compression algorithms: zlib zstd
gcc version 11.3.0 (Ubuntu 11.3.0-1ubuntu1~22.04)
Using built-in specs.
COLLECT_GCC=/usr/bin/gcc
COLLECT_LTO_WRAPPER=/usr/lib/gcc/x86_64-linux-gnu/11/lto-wrapper
OFFLOAD_TARGET_NAMES=nvptx-none:amdgc-ndhsa
OFFLOAD_TARGET_DEFAULT=1
Target: x86_64-linux-gnu
Configured with: ../src/configure -v --with-pkgversion='Ubuntu 11.3.0-1ubuntu1~22.04'
--with-bugurl=file:///usr/share/doc/gcc-11/README.Bugs
--enable-languages=c,ada,c++,go,brig,d,fortran,objc,obj-c++,m2 --prefix=/usr
--with-gcc-major-version-only --program-suffix=-11 --program-prefix=x86_64-linux-gnu- --enable-shared
--enable-linker-build-id --libexecdir=/usr/lib --without-included-gettext --enable-threads=posix
--libdir=/usr/lib --enable-nls --enable-bootstrap --enable-clocale=gnu --enable-libstdcxx-debug
--enable-libstdcxx-time=yes --with-default-libstdcxx-abi=new --enable-gnu-unique-object
```

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SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2023 Standard Performance Evaluation Corporation

Laptop Rubens

SPECrate®2017_fp_base = 6.25

SPECrate®2017_fp_peak = Not Run

CPU2017 License: nnn (Your SPEC license number)

Test Sponsor: Laptop Rubens

Tested by: Laptop Rubens

Test Date: May-2023

Hardware Availability:

Software Availability:

Compiler Version Notes (Continued)

```
--disable-vtable-verify --enable-plugin --enable-default-pie --with-system-zlib
--enable-libphobos-checking=release --with-target-system-zlib=auto --enable-objc-gc=auto
--enable-multiarch --disable-werror --enable-cet --with-arch-32=i686 --with-abi=m64
--with-multilib-list=m32,m64,mx32 --enable-multilib --with-tune=generic
--enable-offload-targets=nvptx-none=/build/gcc-11-xKiWfi/gcc-11-11.3.0/debian/tmp-nvptx/usr,amdgc-ndhsa=/build/gcc-11-xKiWfi/gcc-11-11.3.0/debian/tmp-gcn/usr
--without-cuda-driver --enable-checking=release --build=x86_64-linux-gnu --host=x86_64-linux-gnu
--target=x86_64-linux-gnu --with-build-config=bootstrap-lto-lean --enable-link-serialization=2
Thread model: posix
Supported LTO compression algorithms: zlib zstd
gcc version 11.3.0 (Ubuntu 11.3.0-1ubuntu1~22.04)
```

Base Compiler Invocation

C benchmarks:

gcc

C++ benchmarks:

g++

Fortran benchmarks:

gfortran

Benchmarks using both Fortran and C:

gfortran gcc

Benchmarks using both C and C++:

g++ gcc

Benchmarks using Fortran, C, and C++:

g++ gcc gfortran

Base Portability Flags

```
503.bwaves_r: -DSPEC_LP64
507.cactuBSSN_r: -DSPEC_LP64
508.namd_r: -DSPEC_LP64
510.parest_r: -DSPEC_LP64
511.povray_r: -DSPEC_LP64
519.lbm_r: -DSPEC_LP64
521.wrf_r: -DSPEC_CASE_FLAG -fconvert=big-endian -DSPEC_LP64
526.blender_r: -funsigned-char -DSPEC_LINUX -DSPEC_LP64
527.cam4_r: -DSPEC_CASE_FLAG -DSPEC_LP64
538.imagick_r: -DSPEC_LP64
544.nab_r: -DSPEC_LP64
```

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SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2023 Standard Performance Evaluation Corporation

Laptop Rubens

SPECrate®2017_fp_base = 6.25

SPECrate®2017_fp_peak = Not Run

CPU2017 License: nnn (Your SPEC license number)

Test Sponsor: Laptop Rubens

Tested by: Laptop Rubens

Test Date: May-2023

Hardware Availability:

Software Availability:

Base Portability Flags (Continued)

549.fotonik3d_r: -DSPEC_LP64

554.roms_r: -DSPEC_LP64

Base Optimization Flags

C benchmarks:

-m64 -std=c99 -g -O3 -march=native -fno-unsafe-math-optimizations
-fno-tree-loop-vectorize

C++ benchmarks:

-m64 -std=c++03 -g -O3 -march=native -fno-unsafe-math-optimizations
-fno-tree-loop-vectorize

Fortran benchmarks:

-m64 -g -O3 -march=native -fno-unsafe-math-optimizations
-fno-tree-loop-vectorize

Benchmarks using both Fortran and C:

-m64 -std=c99 -g -O3 -march=native -fno-unsafe-math-optimizations
-fno-tree-loop-vectorize

Benchmarks using both C and C++:

-m64 -std=c++03 -std=c99 -g -O3 -march=native
-fno-unsafe-math-optimizations -fno-tree-loop-vectorize

Benchmarks using Fortran, C, and C++:

-m64 -std=c++03 -std=c99 -g -O3 -march=native
-fno-unsafe-math-optimizations -fno-tree-loop-vectorize

Base Other Flags

C benchmarks:

-fallow-argument-mismatch

C++ benchmarks:

-fallow-argument-mismatch

Fortran benchmarks:

-fallow-argument-mismatch

Benchmarks using both Fortran and C:

-fallow-argument-mismatch

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SPEC CPU®2017 Floating Point Rate Result

Copyright 2017-2023 Standard Performance Evaluation Corporation

Laptop Rubens

SPECrate®2017_fp_base = 6.25

SPECrate®2017_fp_peak = Not Run

CPU2017 License: nnn (Your SPEC license number)

Test Sponsor: Laptop Rubens

Tested by: Laptop Rubens

Test Date: May-2023

Hardware Availability:

Software Availability:

Base Other Flags (Continued)

Benchmarks using both C and C++:

-fallow-argument-mismatch

Benchmarks using Fortran, C, and C++:

-fallow-argument-mismatch

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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 2023-05-23 01:18:57-0300.

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