SPEC® CPU2017 Integer Rate Result

sipeed
(Test Sponsor: PLCT)

Licheepi 4a

SPECrate2017_int_base = 0.00

SPECrate2017_int_peak = 0.00

CPU2017 License: 0
Test Sponsor: PLCT
Tested by: PLCT

Test Date: Nov-2023
Hardware Availability: May-2023
Software Availability: Nov-2023

Copies	
500.perlbench_r	
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	

Hardware

CPU Name: TH1520
Max MHz.: 2000MHz
Nominal: 2000MHz
Enabled: 4 cores, 1 chip
Orderable: --
Cache L1: 64 KB I + 64 Kb D on chip per core
L2: 1MB L2 Cache for all core
L3: None
Other: None
Memory: 15.370 GB fixme: If using DDR4, the format is: 'N GB (N x N GB nRxn PC4-nnnnX-X)'
Storage: 115 GB add more disk info here
Other: None

Software

OS: Debian GNU/Linux 12 (bookworm) 5.10.113+
Compiler: Debian clang version 17.0.0 (+rc4-1~exp5revyos1)
Parallel: No
Firmware: Nov-2022
File System: ext4
System State: Run level 5 (add definition here)
Base Pointers: 64-bit
Peak Pointers: 64-bit
Other: None

Errors

Complete set of valid runs for peak rate unavailable (502.gcc_r missing)
Complete set of valid runs for peak rate unavailable (531.deepsjeng_r missing)
Complete set of valid runs for peak rate unavailable (520.omnetpp_r missing)
Complete set of valid runs for peak rate unavailable (500.perlbench_r missing)
Complete set of valid runs for peak rate unavailable (523.xalancbmk_r missing)

(Continued on next page)

SPEC CPU2017 Integer Rate Result

sipeed
(Test Sponsor: PLCT)
Licheepi 4a

SPECrate2017_int_base = 0.00
SPECrate2017_int_peak = 0.00

CPU2017 License: 0
Test Sponsor: PLCT
Tested by: PLCT

Test Date: Nov-2023
Hardware Availability: May-2023
Software Availability: Nov-2023

Errors (Continued)

Complete set of valid runs for peak rate unavailable (557.xz_r missing)
Complete set of valid runs for peak rate unavailable (548.exchange2_r missing)
Complete set of valid runs for peak rate unavailable (505.mcf_r missing)
Complete set of valid runs for peak rate unavailable (525.x264_r missing)
Complete set of valid runs for peak rate unavailable (541.leela_r missing)
There is no set of valid runs with the same number of copies for base
'reportable' flag not set during run
502.gcc_r (base) did not have enough runs!
531.deepsjeng_r (base) did not have enough runs!
520.omnetpp_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!
557.xz_r (base) did not have enough runs!
548.exchange2_r (base) did not have enough runs!
505.mcf_r (base) did not have enough runs!
525.x264_r (base) did not have enough runs!
541.leela_r (base) did not have enough runs!
502.gcc_r (peak) did not have enough runs!
531.deepsjeng_r (peak) did not have enough runs!
520.omnetpp_r (peak) did not have enough runs!
500.perlbench_r (peak) did not have enough runs!
523.xalancbmk_r (peak) did not have enough runs!
557.xz_r (peak) did not have enough runs!
548.exchange2_r (peak) did not have enough runs!
505.mcf_r (peak) did not have enough runs!
525.x264_r (peak) did not have enough runs!
541.leela_r (peak) did not have enough runs!
Input set must be 'refrate' for a valid run (set to 'test' for this run)
Unknown flags were used! See
https://www.spec.org/cpu2017/Docs/runcpu.html#flagsurl
for information about how to get rid of this error.

Results Table

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
500.perlbench_r														
502.gcc_r														
505.mcf_r														

Table continues on next page. Results appear in the order in which they were run. Bold underlined text indicates a median measurement.

SPEC CPU2017 Integer Rate Result

sipeed
(Test Sponsor: PLCT)
Licheepi 4a

SPECrate2017_int_base = 0.00
SPECrate2017_int_peak = 0.00

CPU2017 License: 0
Test Sponsor: PLCT
Tested by: PLCT

Test Date: Nov-2023
Hardware Availability: May-2023
Software Availability: Nov-2023

Results Table (Continued)

Benchmark	Base							Peak						
	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio	Copies	Seconds	Ratio	Seconds	Ratio	Seconds	Ratio
520.omnetpp_r														
523.xalancbmk_r														
525.x264_r														
531.deepsjeng_r														
541.leela_r														
548.exchange2_r	4	39.0	0.00					4	34.0	0.00				
557.xz_r														

SPECrate2017_int_base = 0.00
SPECrate2017_int_peak = 0.00

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

General 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/sipeed/spec2017/bin/sysinfo
 Rev: r5974 of 2018-05-19 9bcde8f2999c33d61f64985e45859ea9
 running on lpi4a Wed Nov 29 12:59:53 2023

 SUT (System Under Test) info as seen by some common utilities.
 For more information on this section, see
    https://www.spec.org/cpu2017/Docs/config.html#sysinfo

 From /proc/cpuinfo
 *
 * Did not identify cpu model.  If you would
 * like to write your own sysinfo program, see
 * www.spec.org/cpu2017/config.html#sysinfo
 *
 *
 * 0 "physical id" tags found.  Perhaps this is an older system,
 * or a virtualized system.  Not attempting to guess how to
 * count chips/cores for this system.
 *
       4 "processors"
    cores, siblings (Caution: counting these is hw and system dependent. The following
    excerpts from /proc/cpuinfo might not be reliable.  Use with caution.)

 From lscpu:
```

(Continued on next page)

Platform Notes (Continued)

```
      Architecture:        riscv64
      Byte Order:          Little Endian
      CPU(s):              4
      On-line CPU(s) list: 0-3

 /proc/cpuinfo cache data
    cpu-cacheline : 64Bytes
    cpu-dcache : 64KB
    cpu-icache : 64KB
    cpu-l2cache : 1MB

 From numactl --hardware  WARNING: a numactl 'node' might or might not correspond to a
 physical chip.

 From /proc/meminfo
    MemTotal:       16116952 kB
    HugePages_Total:       0
    Hugepagesize:       2048 kB

 /usr/bin/lsb_release -d
    Debian GNU/Linux 12 (bookworm)

 From /etc/*release* /etc/*version*
    debian_version: 12.0
    os-release:
       PRETTY_NAME="Debian GNU/Linux 12 (bookworm)"
       NAME="Debian GNU/Linux"
       VERSION_ID="12"
       VERSION="12 (bookworm)"
       VERSION_CODENAME=bookworm
       ID=debian
       HOME_URL="https://www.debian.org/"
       SUPPORT_URL="https://www.debian.org/support"
    revyos-release:
       BUILD_ID=20231009_134626
       BUILD_DATE=20231009
       COMMIT_ID=f9867c522485046f1965a3101bd4545520803623
       RUNNER_ID=6457521686

 uname -a:
    Linux lpi4a 5.10.113+ #4 SMP PREEMPT Fri Oct 20 06:59:14 UTC 2023 riscv64 GNU/Linux

 run-level 5 Nov 28 13:15

 SPEC is set to: /home/sipeed/spec2017
    Filesystem     Type  Size  Used Avail Use% Mounted on
    /dev/root      ext4  115G   12G   98G  11% /
```

(Continued on next page)

Platform Notes (Continued)

```
 Additional information from dmidecode 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.

 (End of data from sysinfo program)
```

Compiler Version Notes

```
==============================================================================
 FC  548.exchange2_r(base, peak)
------------------------------------------------------------------------------
Debian flang-new version 17.0.0 (+rc4-1~exp5revyos1)
Target: riscv64-unknown-linux-gnu
Thread model: posix
InstalledDir: /usr/lib/llvm-17/bin
------------------------------------------------------------------------------
```

Base Unknown Flags

548.exchange2_r: "/usr/bin/flang-new-17ARRAY(0x2af1326008)
"/usr/bin/flang-new-17ARRAY(0x2af1322e78)
"-g -O3ARRAY(0x2af131e970)

Peak Unknown Flags

548.exchange2_r: "/usr/bin/flang-new-17ARRAY(0x2af1326008)
"/usr/bin/flang-new-17ARRAY(0x2af1322e78)
"-g -O3ARRAY(0x2af131e970)

548.exchange2_r: "/usr/bin/flang-new-17ARRAY(0x2af1325980)
"/usr/bin/flang-new-17ARRAY(0x2af1301890)
"-g -OfastARRAY(0x2af1487a30)

Base Portability Flags

548.exchange2_r: -DSPEC_LP64

SPEC CPU2017 Integer Rate Result

sipeed
(Test Sponsor: PLCT)
Licheepi 4a

SPECrate2017_int_base = 0.00
SPECrate2017_int_peak = 0.00

CPU2017 License: 0
Test Sponsor: PLCT
Tested by: PLCT

Test Date: Nov-2023
Hardware Availability: May-2023
Software Availability: Nov-2023

Peak Portability Flags

Same as Base Portability Flags

For questions about this result, please contact the tester. For other inquiries, please contact info@spec.org.

Tested with SPEC CPU2017 v1.0.5 on 2023-11-29 12:59:49+0000.
Report generated on 2023-11-29 13:03:59 by CPU2017 PDF formatter v5866.