

# ~~Is RPi the right computer for ConT<sub>E</sub>Xt?~~ Which RPi is the right one for ConT<sub>E</sub>Xt?

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ConT<sub>E</sub>Xt 2019

Bassenge

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## cat /proc/cpuinfo

```
processor      : 3
model name    : ARMv7 Processor rev 3 (v7l)
BogoMIPS     : 270.00
Features      : half thumb fastmult vfp edsp neon vfpv3 tls vfpv4 idiva idivt vfpd32 lpae evtstrm crc32
CPU implementer : 0x41
CPU architecture: 7
CPU variant   : 0x0
CPU part      : 0xd08
CPU revision  : 3

Hardware      : BCM2835
Revision     : c03111
Serial       : 100000007cde01ca
```

```
cat /proc/cpuinfo
```

	Pi 0	Pi 2	Pi 3	Pi 4
ARM CPU	BCM2835	BCM2835	BCM2835	BCM2835

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cat /proc/cpuinfo
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	Pi 0	Pi 2	Pi 3	Pi 4
ARM CPU	v6l rev7	v7l rev 5	v7l rev 4	v7l rev 3
Cores	1	4	4	4

# free

	total	used	free	shared	buff/cache	available
Mem:	3999784	105476	3620836	8684	273472	3753688
Swap:	102396	0	102396			

free

	Pi 0	Pi 2	Pi 3	Pi 4
ARM CPU	v6l rev7	v7l rev 5	v7l rev 4	v7l rev 3
Cores	1	4	4	4
Mem (free)	443080	948308	948304	3999784

## grep Bogomips /proc/cpuinfo

	Pi 0	Pi 2	Pi 3	Pi 4
ARM CPU	v6l rev7	v7l rev 5	v7l rev 4	v7l rev 3
Cores	1	4	4	4
Mem (free)	443080	948308	948304	3999784
BogoMips	997.08	38.40	38.40	108.00



## grep BogoMips /proc/cpuinfo

	Pi 0	Pi 2	Pi 3	Pi 4
ARM CPU	v6l rev7	v7l rev 5	v7l rev 4	v7l rev 3
Cores	1	4	4	4
Mem (free)	443080	948308	948304	3999784
BogoMips idle	997.08	38.40	38.40	108.00
BogoMips	997.08	57.60	76.80	270.00

```
dd if=/dev/mmcblk0p1 of=/dev/null bs=1M
```

	Pi 0	Pi 2	Pi 3	Pi 4
ARM CPU	v6l rev7	v7l rev 5	v7l rev 4	v7l rev 3
Cores	1	4	4	4
Mem (free)	443080	948308	948304	3999784
BogoMips idle	997.08	38.40	38.40	108.00
BogoMips	997.08	57.60	76.80	270.00
read SD	23.0 MB/s	23.2 MB/s	23.2 MB/s	45.1 MB/s

```
dd if=/dev/sda1 of=/dev/null bs=1M
```

	Pi 0	Pi 2	Pi 3	Pi 4
ARM CPU	v6l rev7	v7l rev 5	v7l rev 4	v7l rev 3
Cores	1	4	4	4
Mem (free)	443080	948308	948304	3999784
BogoMips idle	997.08	38.40	38.40	108.00
BogoMips	997.08	57.60	76.80	270.00
read SD	23.0 MB/s	23.2 MB/s	23.2 MB/s	45.1 MB/s
read USB	-	30.0 MB/s	30.0 MB/s	320.0 MB/s

## time tex textbook

	Pi 0	Pi 2	Pi 3	Pi 4
ARM CPU	v6l rev7	v7l rev 5	v7l rev 4	v7l rev 3
Cores	1	4	4	4
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BogoMips idle	997.08	38.40	38.40	108.00
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read SD	23.0 MB/s	23.2 MB/s	23.2 MB/s	45.1 MB/s
read USB	-	30.0 MB/s	30.0 MB/s	320.0 MB/s
tex textbook	13.649 s	7.023 s	4.553 s	1.694 s

## time context --make en

	Pi 0	Pi 2	Pi 3	Pi 4
ARM CPU	v6l rev7	v7l rev 5	v7l rev 4	v7l rev 3
Cores	1	4	4	4
Mem (free)	443080	948308	948304	3999784
BogoMips idle	997.08	38.40	38.40	108.00
BogoMips	997.08	57.60	76.80	270.00
read SD	23.0 MB/s	23.2 MB/s	23.2 MB/s	45.1 MB/s
read USB	-	30.0 MB/s	30.0 MB/s	320.0 MB/s
tex texbook	13.649 s	7.023 s	4.553 s	1.694 s
ct --make en		19.949 s	11.796 s	6.034 s

## time context --make en

## # TeXLive-2019

	Pi 0	Pi 2	Pi 3	Pi 4
ARM CPU	v6l rev7	v7l rev 5	v7l rev 4	v7l rev 3
Cores	1	4	4	4
Mem (free)	443080	948308	948304	3999784
BogoMips idle	997.08	38.40	38.40	108.00
BogoMips	997.08	57.60	76.80	270.00
read SD	23.0 MB/s	23.2 MB/s	23.2 MB/s	45.1 MB/s
read USB	-	30.0 MB/s	30.0 MB/s	320.0 MB/s
tex texbook	13.649 s	7.023 s	4.553 s	1.694 s
ct --make en		19.949 s	11.796 s	6.034 s
ct --make en TL	89.454 s	46.578 s	29.256 s	14.146 s

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# The End?

[To be continued...]

## Epilog: luatex s\*cks? ;—)

```
$ time /usr/bin/luatex \&plain texbook.tex | wc  
real    8.236s
```

```
$ time luatex \&plain texbook.tex | wc  
real    5.953s
```

```
pi@raspberrypi:~$ time tex texbook.tex | wc  
real    1.772s
```

```
pi@raspberrypi:~$ time pdftex texbook.tex | wc  
real    3.554s
```

```
$ /usr/bin/luatex --ini  \input /usr/share/texlive/texmf-dist/tex/generic/config/luatexiniconfig.tex \\  
                        \input /usr/share/texmf/tex/generic/context/luatex/luatex-pdf.tex      \\  
                        \luatexoutputmode=1 \pdfpkresolution=600 \input plain \dump  
$ time /usr/bin/luatex \&luatexiniconfig texbook.tex | wc  
real    10.019s
```

```
$ luatex --ini  \input /usr/share/texlive/texmf-dist/tex/generic/config/luatexiniconfig.tex      \\  
                \input /usr/share/texmf/tex/generic/context/luatex/luatex-pdf.tex              \\  
                \luatexoutputmode=1 \pdfpkresolution=600 \input plain \dump  
$ time luatex \&luatexiniconfig texbook.tex | wc  
real    7.452s
```