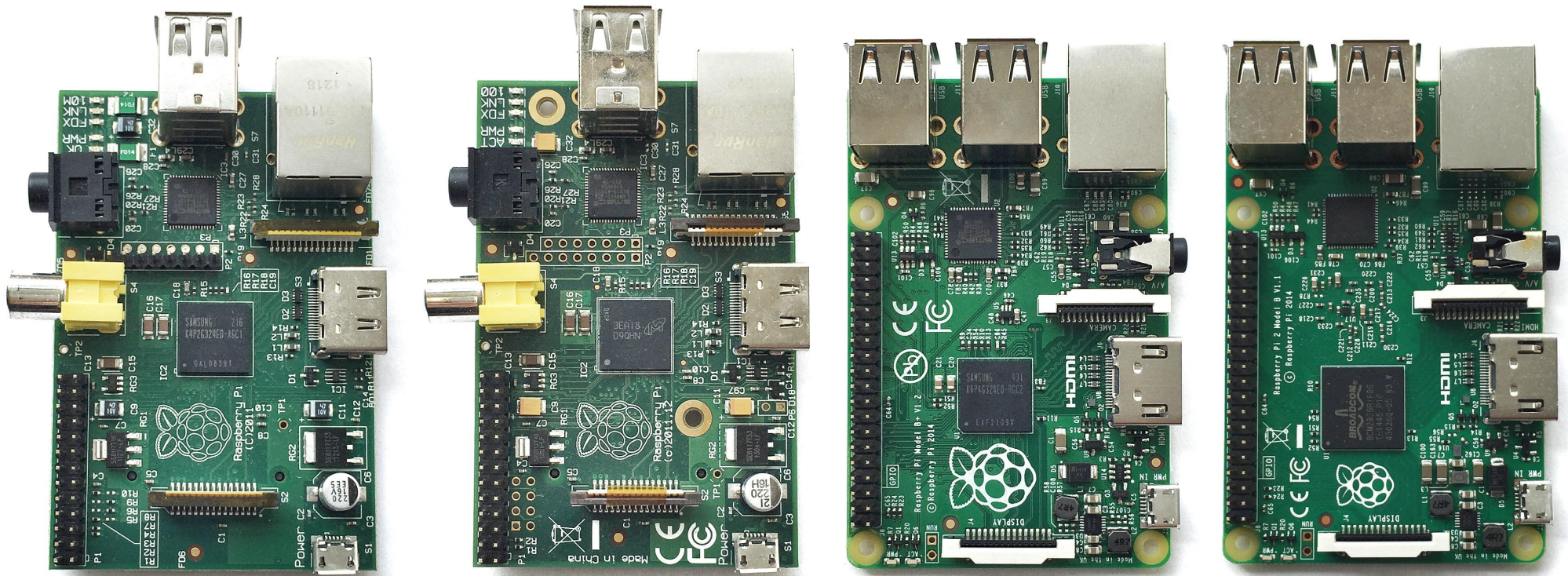


Raspberry Pi Modell B Evolution



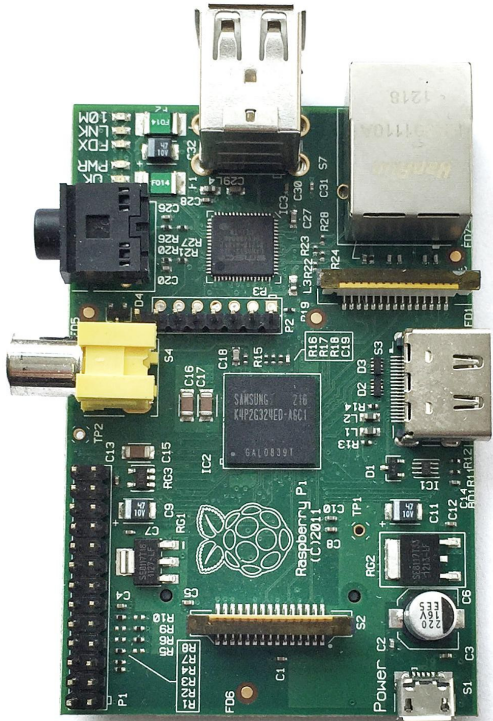
Martin Strohmayer

#glt15 – Martin Strohmayer

Grazer Linuxtage 2015

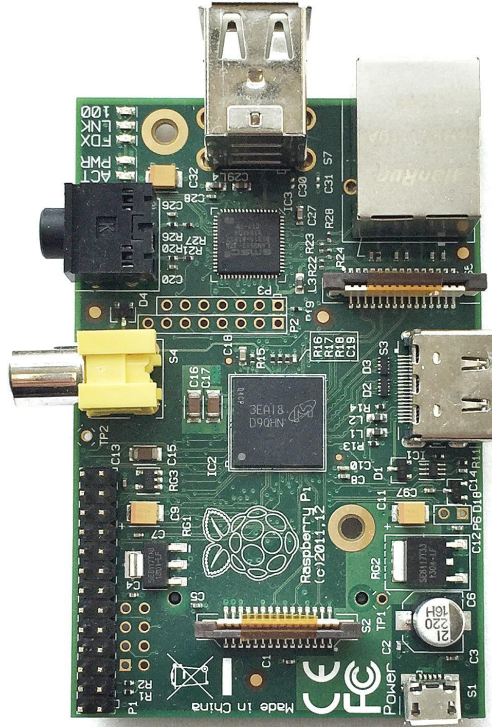
Raspberry Pi Modell B Evolution

Rev. 1



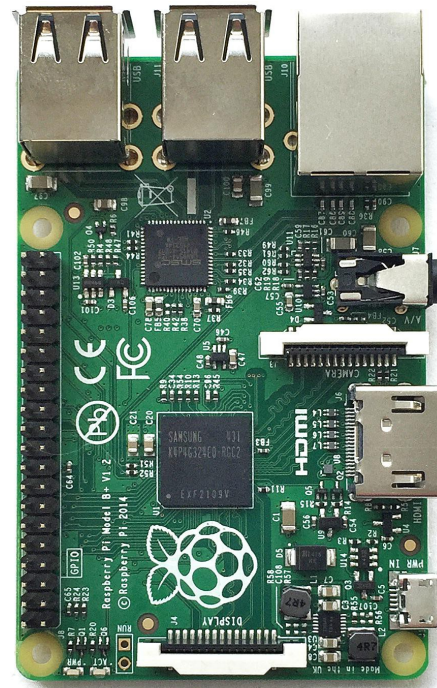
Q1 2012

Rev. 2



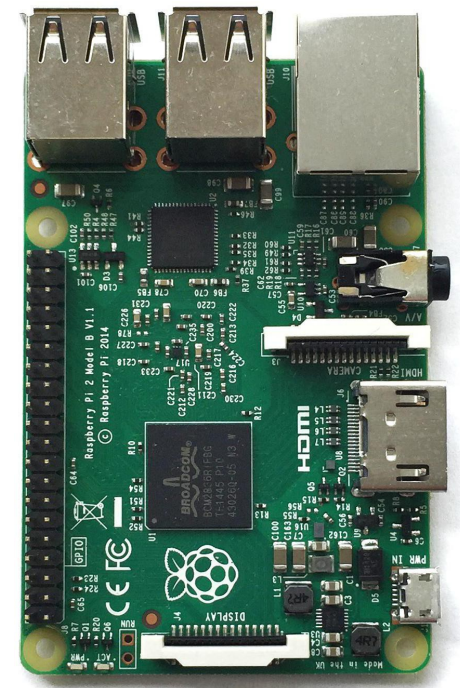
Q3 2012 (256 MB)
Q4 2012 (512 MB)

B+



Q3 2014

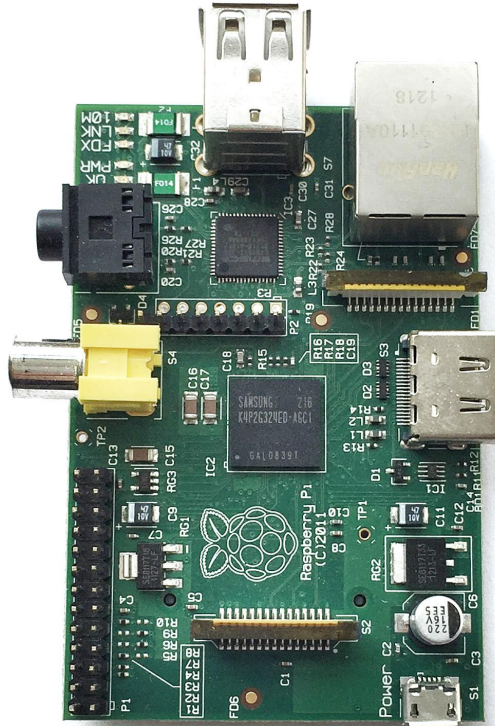
v 2



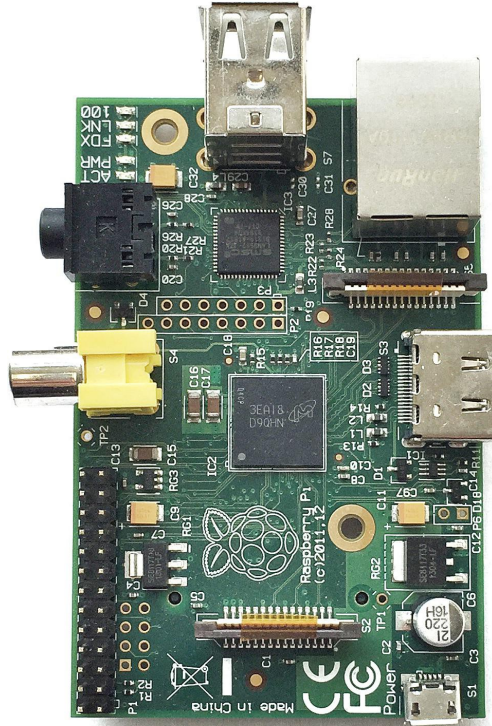
Q1 2015

Raspberry Pi Modell B Evolution

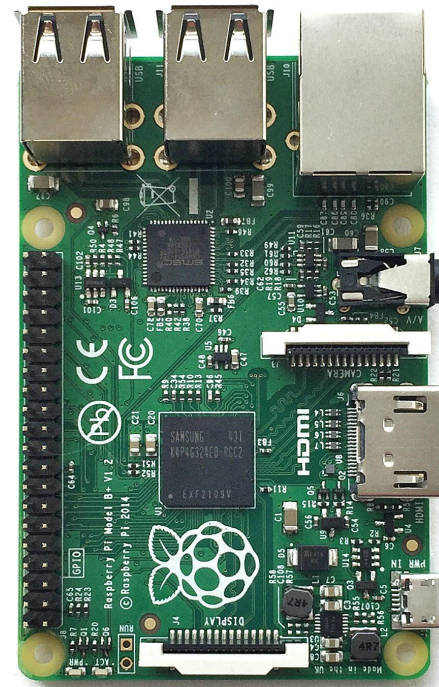
Rev. 1



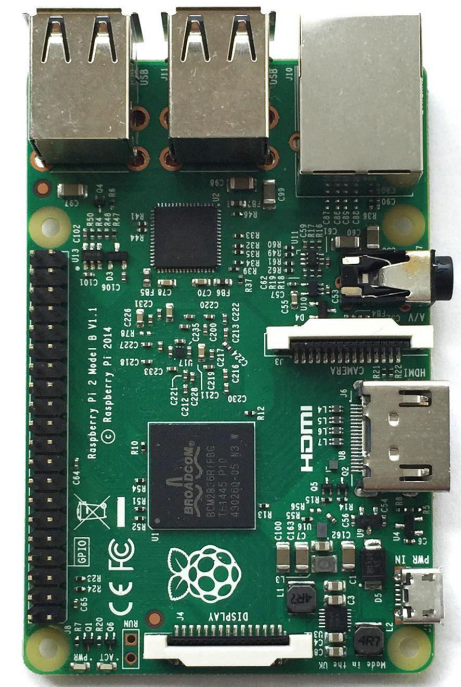
Rev. 2



B+



v 2



CPU

1 x ARM11
700-1000 MHz

4 x Cortex A7
900-1000 MHz

RAM

256 MB

512 MB

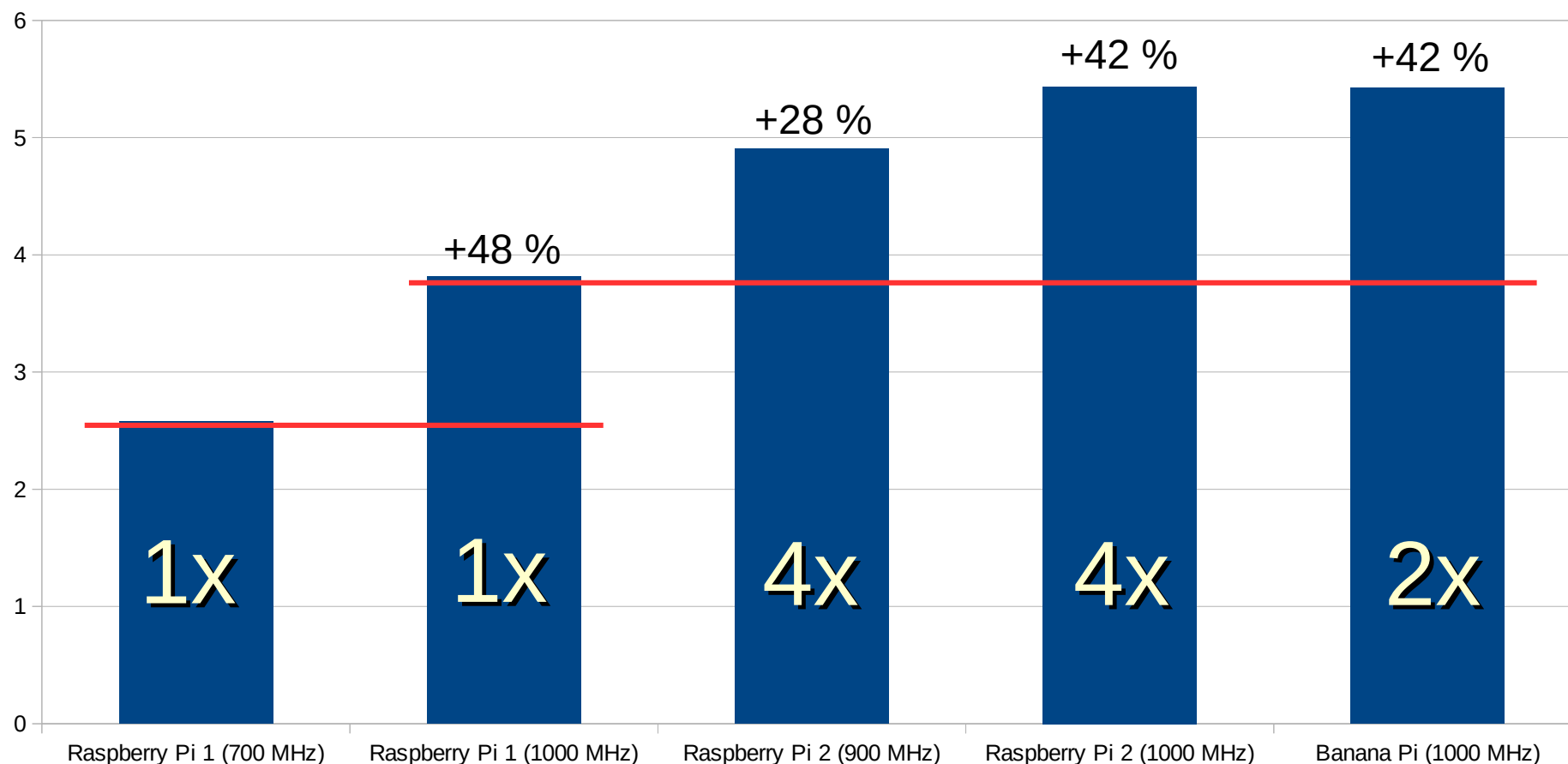
1024 MB

IO

2 x USB, 26 Pin GPIO

4 x USB, 40 Pin GPIO

CPU Leistung (Single Core)



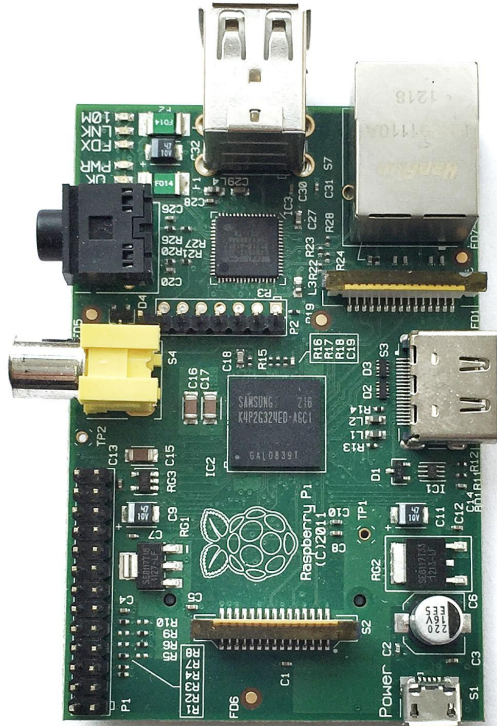
nbench – Single Core Testbench (Index Referenz zu AMD K6/233)

Weitere Benchmarks:

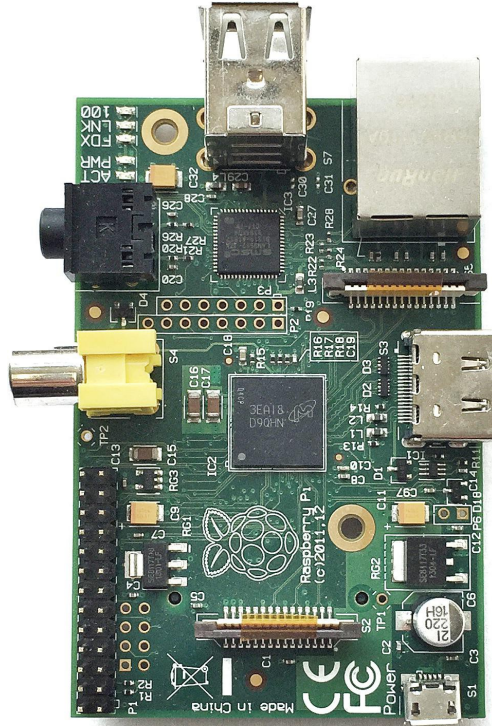
<http://jankarres.de/2015/03/raspberry-pi-2-performance-vergleich-und-benchmarks/>

Raspberry Pi Modell B Einsatz

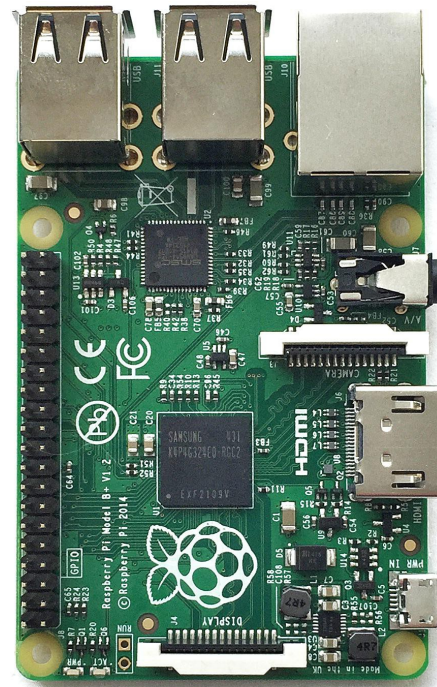
Rev. 1



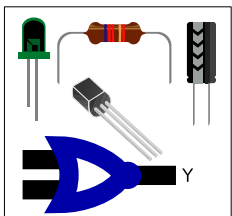
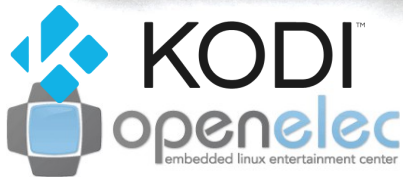
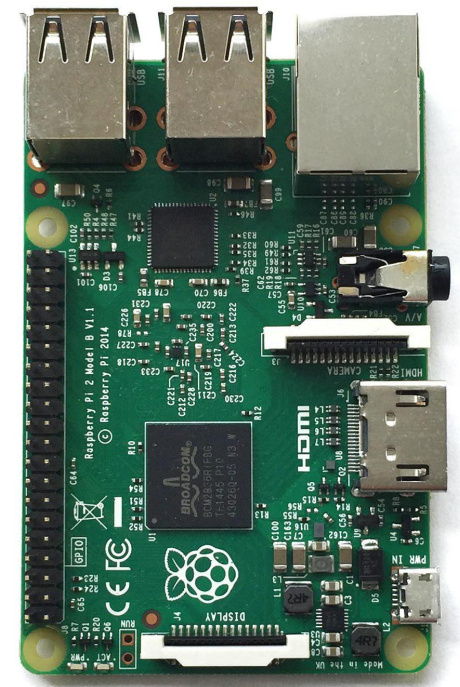
Rev. 2 (512 MB)



B+

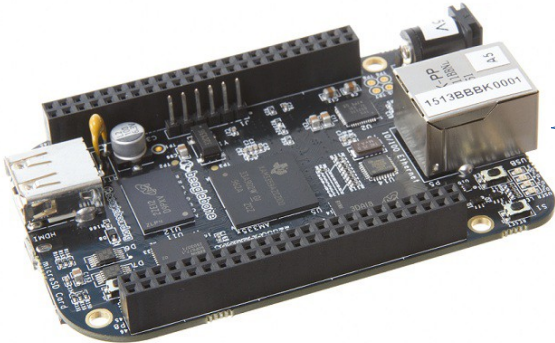


v 2



Alternativen im Preissegment

BeagleBone Black



55,4 €

<http://elinux.org/Beagleboard:BeagleBoneBlack>

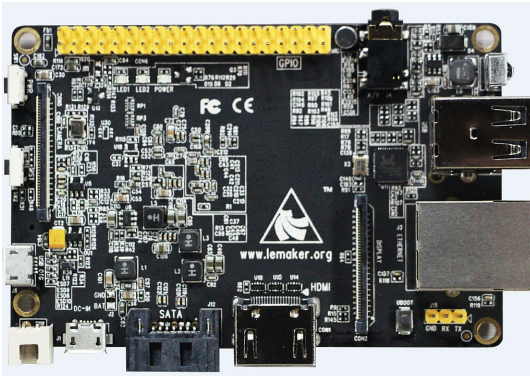
ODROID-C1



44 €

<http://goo.gl/6BkAB6>

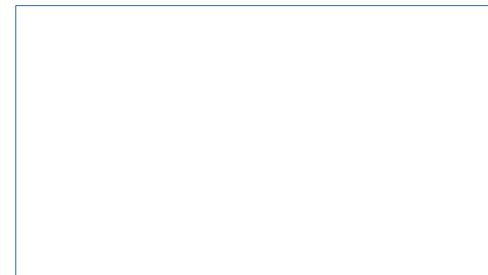
Banana Pro



44,3 €

http://en.wikipedia.org/wiki/Banana_Pi

Banana Pi M2



? €

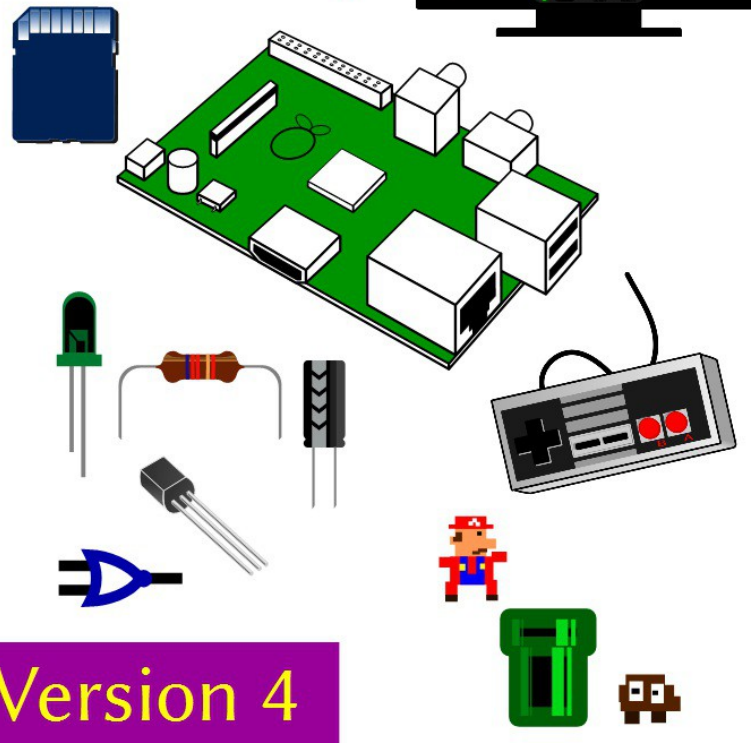
Noch nicht lieferbar

HummingBoard, CuBox-i, Cubieboard2, Cubietruck, Odroid-U3

Raspberry Pi Projekte

eBook Edition

Martin Strohmayer



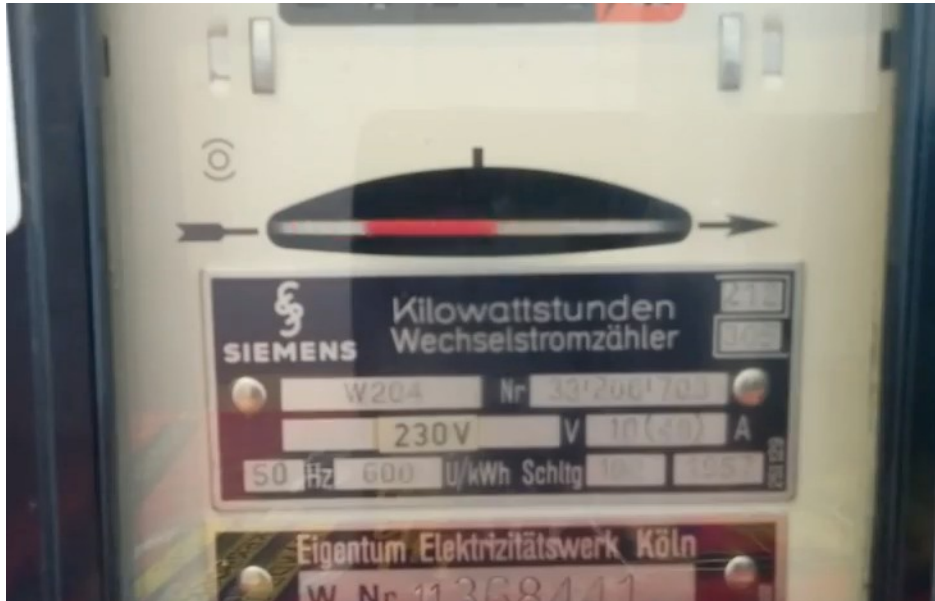
Version 4

<http://www.amazon.de/kindle/dp/B00JGEEZOS>

<https://play.google.com/store/books/details?id=d6KAAwAAQBAJ>

Projekt Stromzähler

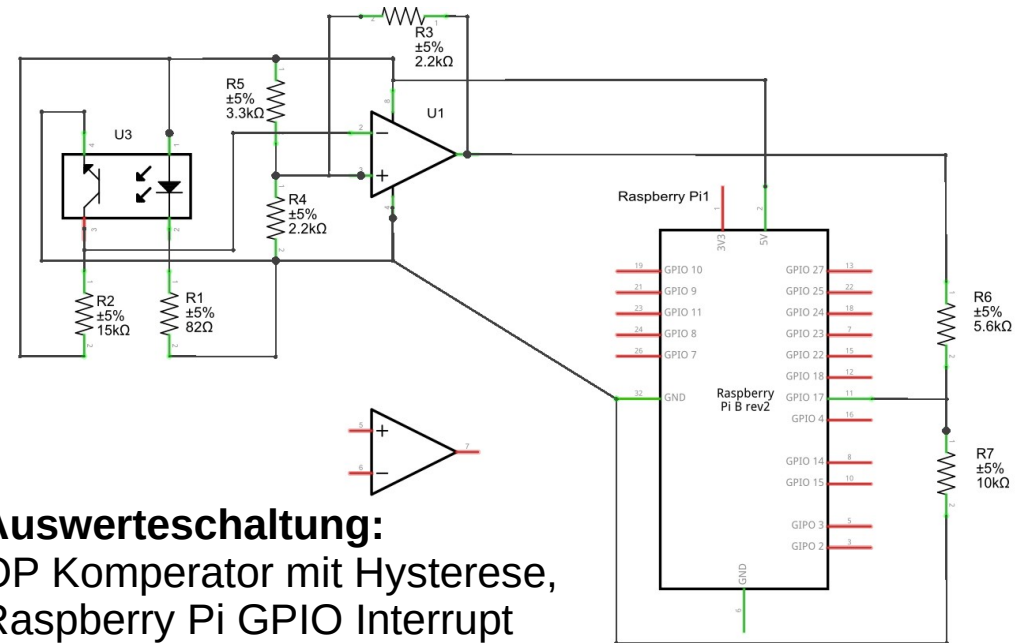
Stromzähler mit Drehscheibe mit Markierung



TR9904 Reflexlichtschranke



Schwarzer Schaumstoff



Auswerteschaltung:
OP Komperator mit Hysterese,
Raspberry Pi GPIO Interrupt

LC-Display zur Anzeige des Summen-
und Momentanverbrauchs (I2C Interface)



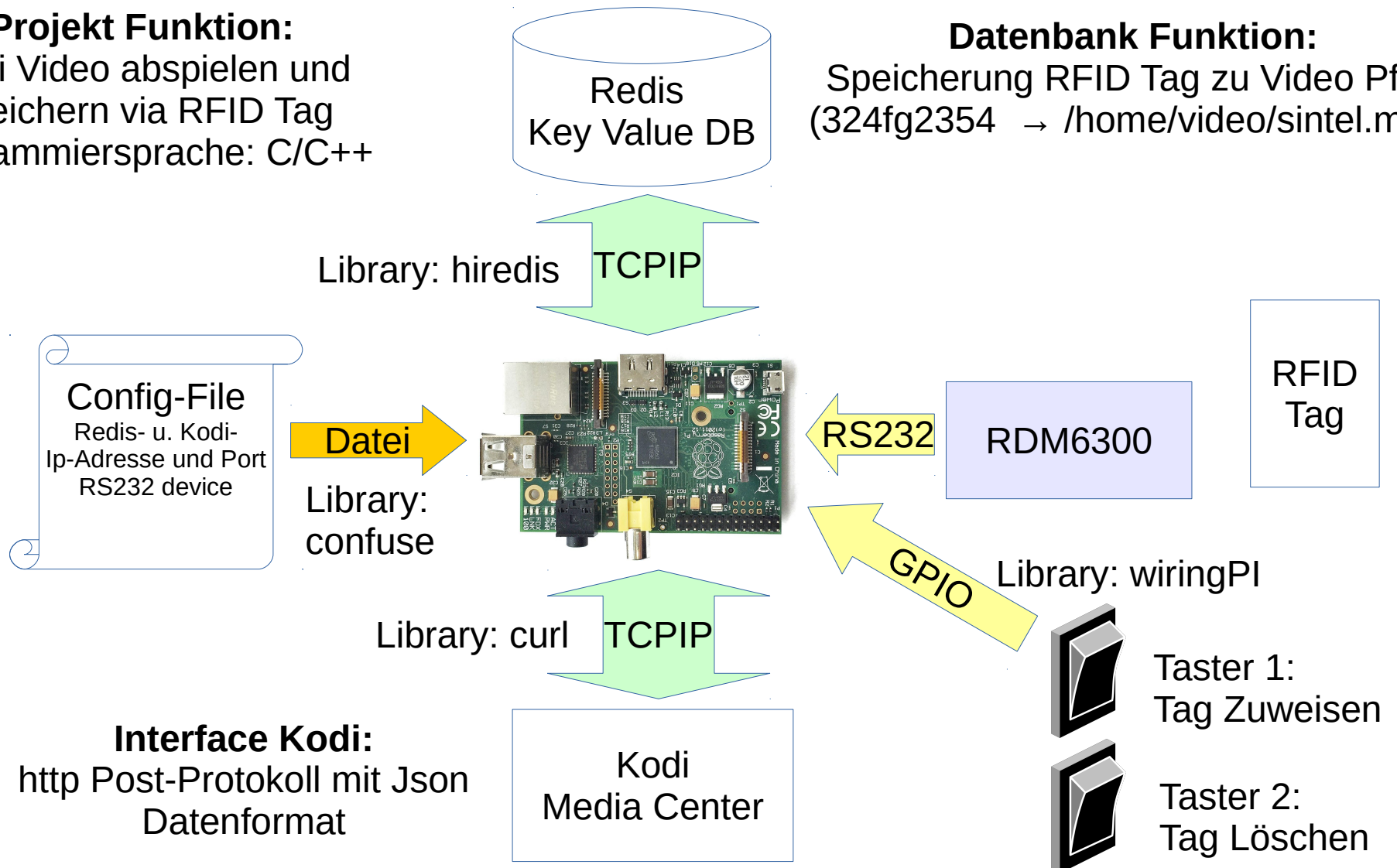
Projekt RFID

Projekt Funktion:

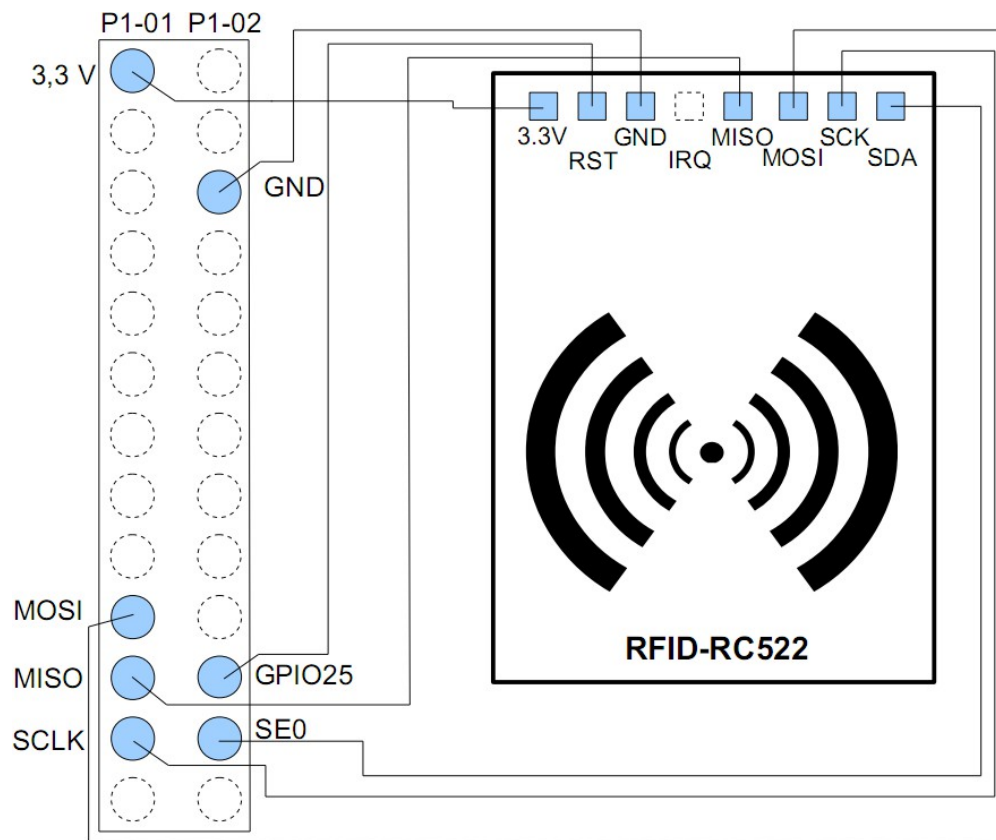
Kodi Video abspielen und
speichern via RFID Tag
Programmiersprache: C/C++

Datenbank Funktion:

Speicherung RFID Tag zu Video Pfad
(324fg2354 → /home/video/sintel.mp4)



Projekt RFID - NFC Mifare (NXP)

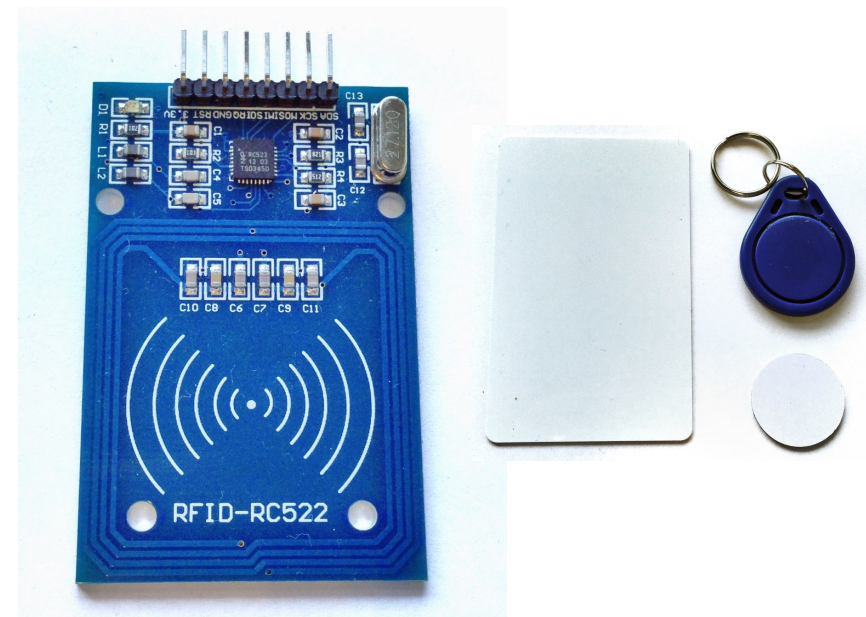


Hardware: MFRC522 / Mifare

Interface: SPI

Projektseite:

<https://code.google.com/p/rpi-rc522/>



/etc/RC522.conf

```
[a3cfe2c7] date >> /home/pi/tagUser.txt; whoami >> /home/pi/tagUser.txt
[dd2dc8fc] aplay /usr/lib/python2.6/dist-packages/pygame/examples/data/whiff.wav
[33f00eab] shutdown -h 1
```

- Beim Projektstand vorbeischaun!