

BananaPi R2 - Debug-UART

- USB2Serial-Adapter (e.g. CP2102 or FTDI, known problems with Proflic- and ch340g-Chipsets)
- using Uart-Pins (not 40-pin-connector)
- each TX \Rightarrow RX (r2 tx to rx of usb2serial, tx of usb2serial to r2 rx)
- application for PC:
 - Linux: minicom
 - Windows: putty
- settings: 115200 8N1 FlowControl: off



micro-usb-cp2102-adapter:

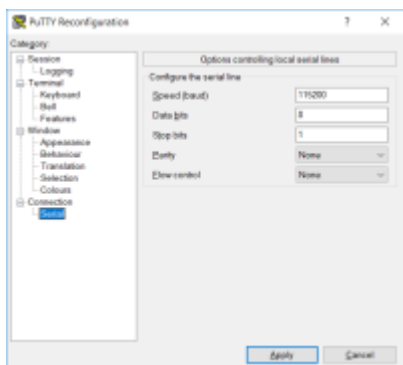
<https://www.ebay.de/itm/CP2102-MICRO-USB-to-UART-TTL-Module-6-Pin-Serial-Converter-STC-Replace-FT232/401269171476>

configuring Putty

Windows-driver for CP2102:

<https://www.silabs.com/products/development-tools/software/usb-to-uart-bridge-vcp-drivers>

cp210x universal windows driver.zip



reg-file Putty-session (com-port must be changed):

bpi-r2-serial-putty-req.zip

configuring minicom

first get name of device:

```
grep ttyUSB /var/log/syslog
Oct 15 12:44:59 Frank-Laptop kernel: [ 5113.456306] usb 3-1: cp210x
converter now attached to ttyUSB0
```

```
ls -l /dev/ttyUSB0
crw-rw---- 1 root dialout 188, 0 Mai 10 15:12 /dev/ttyUSB0
#add current user to group dialout (for access to tty-device)
sudo adduser $USER dialout
#login/logout needed to join the group
#show groups of the user
groups
frank adm dialout cdrom sudo dip plugdev lpadmin sambashare
```

Install minicom & setup

```
sudo apt-get install minicom
sudo minicom -s
```

```
+-----[configuration]-----+  
| Filenames and paths          |  
| File transfer protocols      |  
| Serial port setup           | <<<<<<<<<<  
| Modem and dialing           |  
| Screen and keyboard         |  
| Save setup as dfl            |  
| Save setup as..             |  
| Exit                        |  
| Exit from Minicom           |  
+-----+
```

```
+-----+
| A -   Serial Device       : /dev/ttyUSB0      |
| B - Lockfile Location    : /var/lock          |
| C -   Callin Program      :                   |
| D -   Callout Program     :                   |
| E -   Bps/Par/Bits        : 115200 8N1        |
| F - Hardware Flow Control : No                |
| G - Software Flow Control : No                |
|                                     |
|   Change which setting?              |
+-----+
```

- „save as .dfi“
- „Exit from Minicom“

now start minicom as user (without sudo)

exit with Ctrl+a,q or Ctrl+a,x

From:

<https://www.fw-web.de/dokuwiki/> - **FW-WEB Wiki**

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