

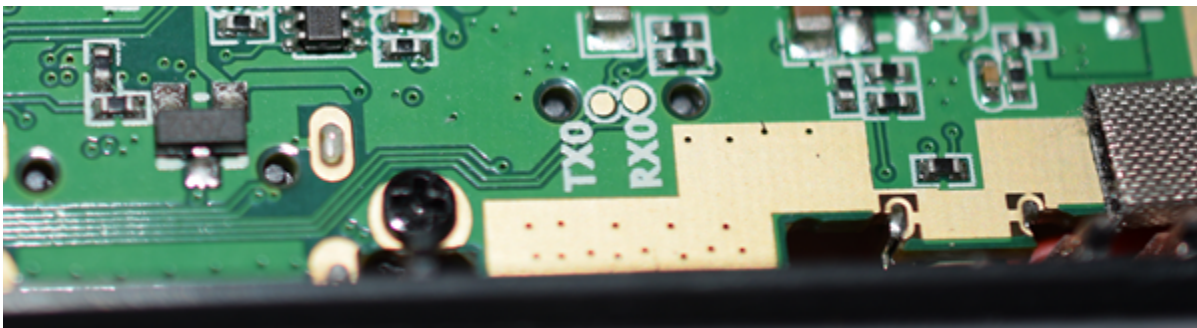
# UART Connector in miniUSB 10 pin

mini USB B 10 pin connector

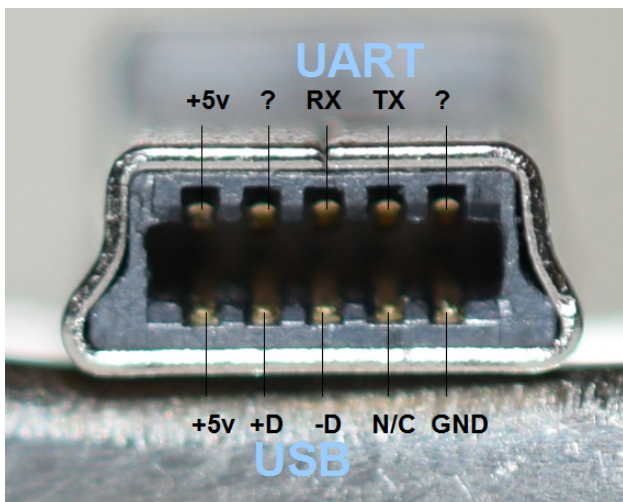


used in dashcams for differen purposes like GPS connect, detect car power and start recording (and not start recording when charge at home).

UART 3.3v (TX0 RX0) in SAMOON B03F (NOUS NF9) baseboard are both available at surface



and could be accessed without device dissasemble using 10pin USB.

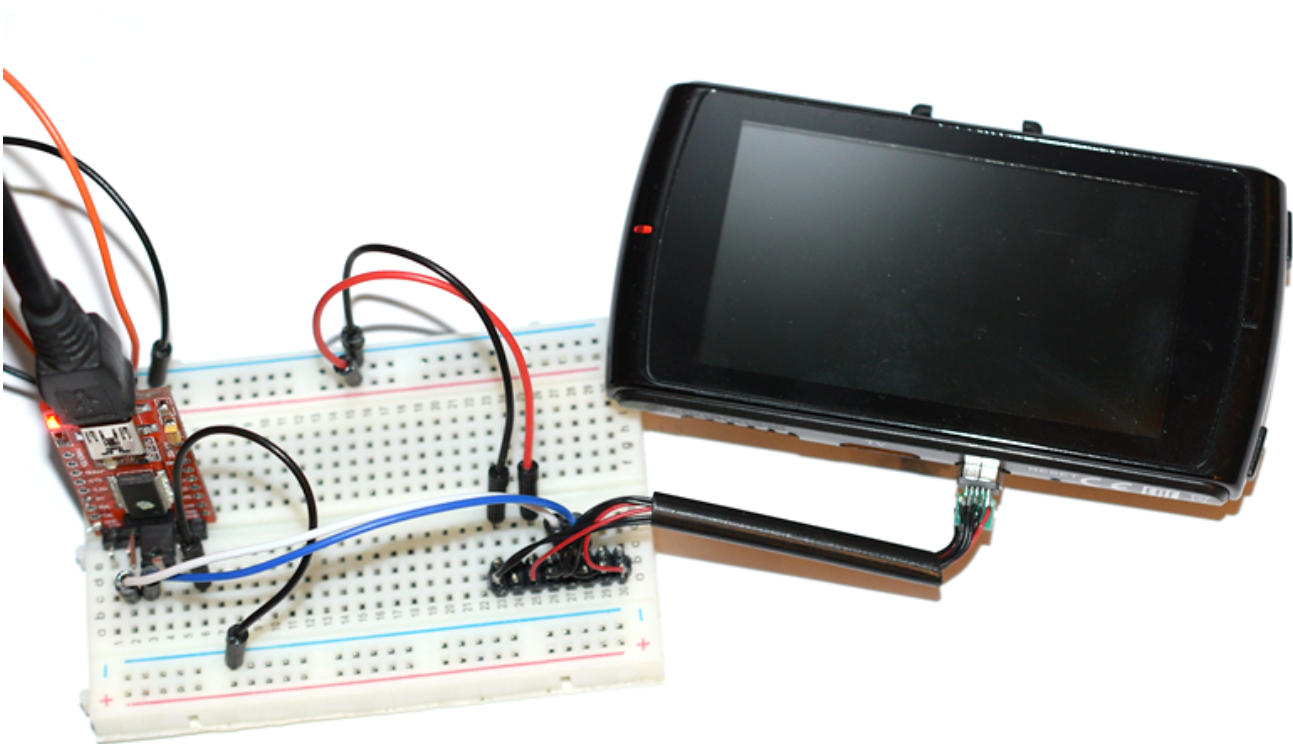




## USB to 3.3v UART convertors

CH340 or FTDI232RL.

Both work at Windows 10 and support 3.3v



## Firmware upload with UART using XMODEM

26 MB firmware will upload in 75 minutes on 115200 baud

```
amboot> show ptb
bst: 0xd4708565 1.3      (2014/9/4)      0x00000000 0x00000001 (2048)
bld: 0x75cee77e 1.3      (2014/9/4)      0xc0000000 0x00000000 (133284)
hal: 0xaecab8f1 5.1      (2014/9/4)      0xc00a0000 0x00000000 (62556)
pri: 0x9547a369 0.1      (2014/9/4)      0xc0100000 0x00000000 (7024644)
rom: 0xfca6faf5 2.0      (2014/9/4)      0x00000000 0x00000001 (8828928)
dsp: 0x9db73a14 0.1      (2014/9/4)      0xc82fffb0 0x00000000 (4177920)
```

S/N:

usbd1\_mode: 0

auto\_boot: 1

cmdline: "osd=8bit record\_fmt=mov\_aac emergency\_type=prec\_non\_overlapped"

amboot> help

The following commands are supported:

help bios boot diag

dump erase nand\_erase exec

hal hotboot r8 r16

r32 reboot reset setenv

setmem show usbd1 w8

w16 w32 xmdl

Use 'help' to get help on a specific command

amboot> help xmdl

Help for 'xmdl':

Usage: xmdl [address] [exec]

xmdl firmware

Download binary image to target memory address o  
using the XMODEM protocol

amboot> xmdl firmware

download to 0xc0100000

start sending using the XMODEM protocol...

press ^X to quit

CCCCCCCCCCCCC\_

#### Xmodem file send for New Connection

Sending: C:\Files\Soft\DVR\SRC.firmware\NOUS.NF9\_2015-08-12\nous\_nf9\_201!

Packet: 343

Error checking: CRC

Retries: 0

Total retries: 0

Last error:

File:

42K of 25978K

Elapsed: 00:00:06

Remaining: 01:02:41

Throughput: 7061 cps

Cancel

cps/bps

Connected 0:48:49

Auto detect

115200 8-N-1

SCROLL

CAPS

NUM

Capture

Print echo

```

amboot> help
The following commands are supported:
help      bios      boot      diag
dump      erase      nand_erase      exec
hal        hotboot  r8        r16
r32        reboot   reset      setenv
setmem     show      usbd1     w8
w16        w32       xmdl
Use 'help' to get help on a specific command

amboot> help show
Help for 'show':
Usage:
show logo      - boot loader logo
show flash     - flash info and allocation scheme
show ptb       - flash partition table
show meta      - flash meta table
show bb        - show NAND bad blocks
show wifi      - show wifi informations
show usb_eth   - show usb ethernet informations
show netboot   - netboot parameters
show prog_log  - show the last firmware upgrade log
Display various system properties

amboot> show bb
----- Initial bad blocks -----
216      300      357      375      966
1762     1788     1925
Total bad blocks: 8
amboot> show ptb
bst: 0xd4708565 1.3      (2014/9/4)      0x00000000 0x00000001 (2048)
bld: 0x75cee77e 1.3      (2014/9/4)      0xc0000000 0x00000000 (133284)
hal: 0xaecab8f1 5.1      (2014/9/4)      0xc00a0000 0x00000000 (62556)
pri: 0x9547a369 0.1      (2014/9/4)      0xc0100000 0x00000000 (7024644)
rom: 0xfca6faf5 2.0      (2014/9/4)      0x00000000 0x00000001 (8828928)
dsp: 0x9db73a14 0.1      (2014/9/4)      0xc82fffb0 0x00000000 (4177920)
S/N:
usbd1_mode: 0
auto_boot: 1
cmdline: "osd=8bit record_fmt=mov_aac emergency_type=prec_non_overlapped"

amboot> help xmdl
Help for 'xmdl':
Usage: xmdl [address] [exec]
xmdl firmware
Download binary image to target memory address over UART
using the XMODEM protocol

amboot> xmdl firmware
download to 0xc0100000
start sending using the XMODEM protocol...
press ^X to quit

```