

USRP with incorrect VID/PID

Occasionally (only once so far), a USRP-1 is shipped with the incorrect VID/PID (i.e. not FFFE / 0002) stored in the motherboard EEPROM. This can be seen when the device's details are examined in the Windows device manager, or via 'lsusb' on Linux.

The symptom is that Windows fails to install USRP device drivers when guided according to the <u>instructions</u>, or that the usrp is not found under linux.

What follows are technical notes on how we fixed this problem. The fix is straightforward but currently requires access to the usrp gnuradio_bbprx source code and build system. The USRP exposing the problem had VID=0x0101 and PID=0x0001, which we use as an example here:

1. change the FX2 USB VID:PID pair in gnuradio/usrp/firmware/include/usrp_ids.h to match whatever the USRP is reporting as VID:PID:

```
#define USB_VID_CYPRESS 0x0101 // original: 0x04b4
#define USB_PID_CYPRESS_FX2 0x0001 // original: 0x8613
```

2. do:

```
cd gnuradio/usrp
make
make install
```

- 3. power cycle the USRP and plug it into the computer
- 4. do:

```
usrp/firmware/src/usrp2/burn_usrp4_eeprom
```

which will take some time. The first command, usrper -x should report "found unconfigured FX2; needs firmware".

- 5. power cycle the USRP and plug it into the computer
- 6. revert the file usrp_ids.h so it has the original FX2 VID:PID values:

7. do:

cd gnuradio/usrp
make
make install

The usrp should now function correctly.