How to Guide:

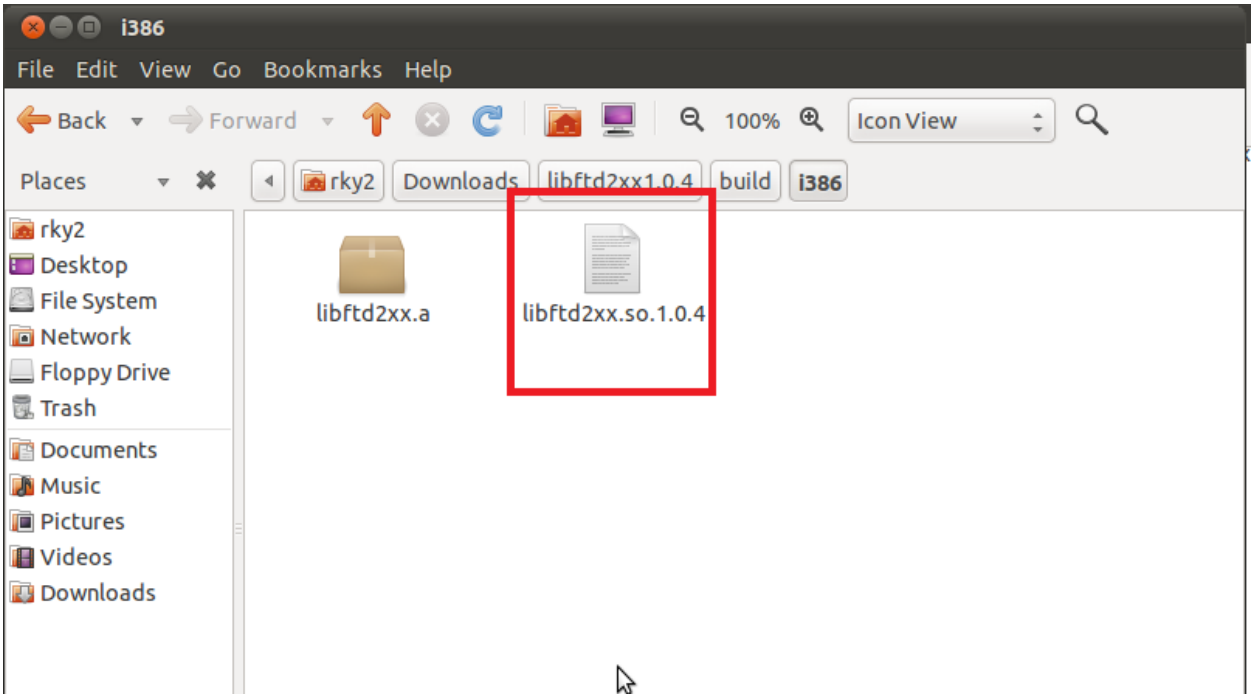
Install and use FTDI on Linux

1. Go to http://www.ftdichip.com/Drivers/D2XX.htm

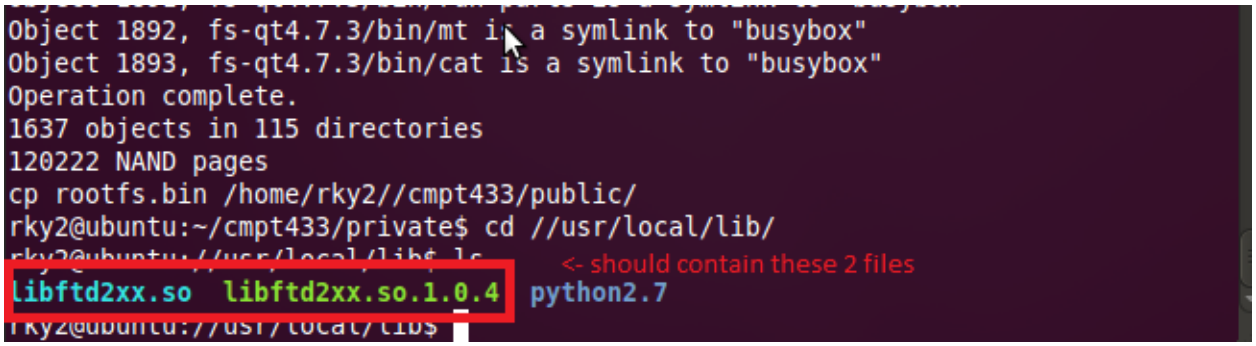
Currently Supported D2XX Drivers:

		Processor Architecture						
Operating System	Release Date	x86 (32-bit)	x64 (64-bit)	PPC	ARM	MIPSII	MIPSIV	SH4
Windows*	2011-04-12 2011-08-26	2.08.14 2.08.17(Beta)	2.08.14 2.08.17(Beta)	- -	- -	- -	- -	- -
Linux	2011-03-01	1.0.4	1.0.4	-	-	-	-	-
Mac OS X	2011-02-28	1.0.4	1.0.4	1.0.4	-	-	-	-
Windows CE 4.2-5.2**	2010-11-01	1.0.1.6	-	-	1.0.1.6	1.0.1.6	1.0.1.6	1.0.1.6
Windows CE 6.0	2010-11-01	1.0.1.6	-	-	1.0.1.6	1.0.1.6	1.0.1.6	1.0.1.6
Android	2011-09-30				Beta Driver			

2. Choose the Linux driver either 32-bit or 64-bit
3. Unzip the tar. File
4. Go to “build/” folder and choose either i386 for 32-bit or x86_64 for 64-bit
5. Copy the “ libftd2xx.so.1.0.4” to “/usr/local/lib” (cp libftd2xx.so.1.0.4 /usr/local/lib)



6. Go to “usr/local/lib/”
7. Make a symbolic link for the file we just copied (ln -s libftd2xx.so.1.0.4 libftd2xx.so)

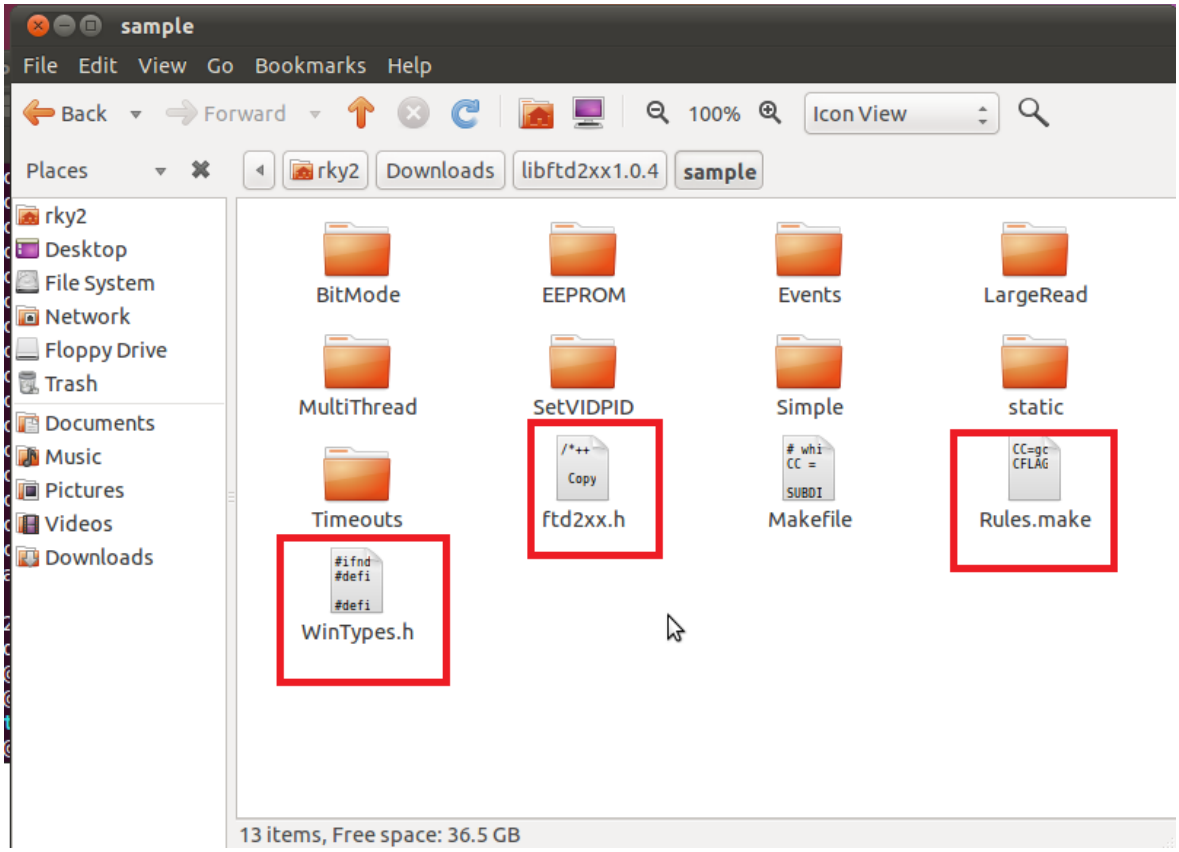


8. Go to “/usr/lib”
9. Make another symbolic link for the file (ln -s /usr/local/lib/libftd2xx.so.1.0.4 libftd2xx.so)

Note*: The installation guide is available in the ftdichip website

<u>Setup code to interact with FTDI board</u>

1. Create a project folder called “ftdicontrol” (you can change the name)
2. Go to “libftd2xx1.0.4/sample/” folder



3. Copy the ftd2xx.g , Rules.make, and WinTypes.h to “ftdicontrol” folder
4. Create a .c file called main.c
5. Include these libraries in the main file#include <stdio.h>
   - #include <sys/time.h>
   - #include <pthread.h>
   - #include "ftd2xx.h"
6. Go to “http://www.ftdichip.com/Support/Documents/ProgramGuides.htm” to download the programmer’s guide

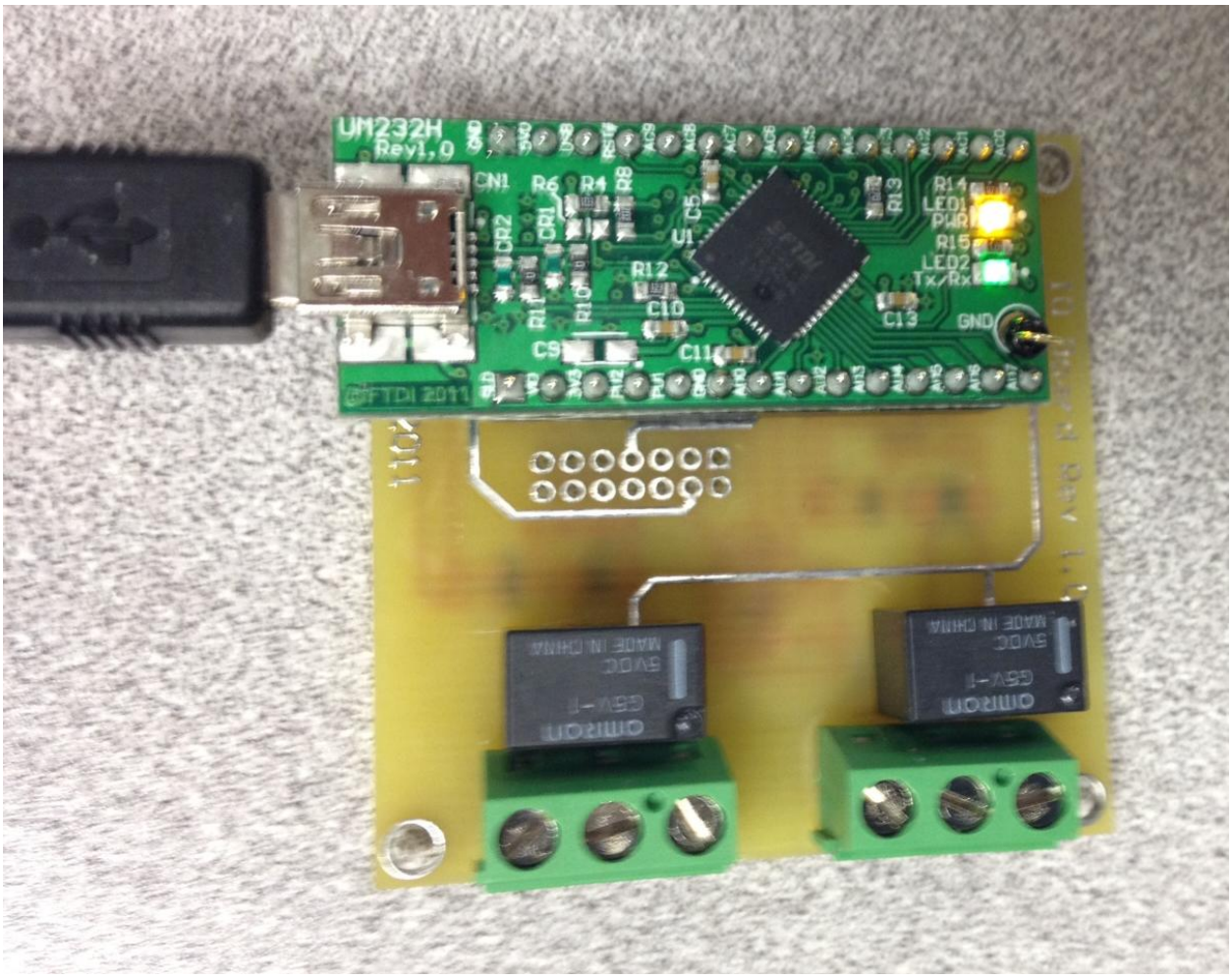
Document Title	Revision	Comments
D2XX Programmer's Guide	1.2	Lists functions available in FTD2XX.DLL
LibMPSSE-I2C User Guide	1.3	User Guide for LibMPSSE-I2C.DLL
FTCJTAG Programmer's Guide	1.1	Lists functions available in FTCJTAG.DLL
LibMPSSE-SPI User Guide	1.0	Lists functions available in FTCSPI.DLL
FTChipID Programmer's Guide	1.1	Lists functions available in FTChipID.DLL
SafeGuard-IT Programmer's Guide	1.0	Lists functions available in FTChipID.DLL
Vinculum Firmware User Manual	2.05	Vinculum (VNC1L) firmware manual
Vinculum Firmware Tools User Manual	1.0	Guide for Vinculum (VNC1L) firmware tools

7. Go to section 5.3 FT_SetBitmode
8. Copy the example code in the main() of main .c
9. Create a makefile to compile the code (called “Makefile”)
10. Copy this code: (make sure to use tab on the $(APP) and clean, not spaces)

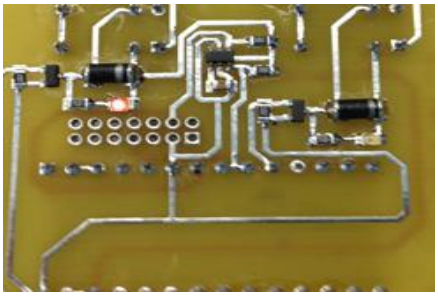
```
TOPDIR  := $(shell cd ./ ; pwd)
include $(TOPDIR)/Rules.make

APP = main
all: $(APP)
$(APP): fan.c
        $(CC) -o $(APP) $(CFLAGS) main.c
clean:
        rm -f *.o ; rm $(APP)
```

11. Save and run make on the ftdicontrol folder
12. Plug the ftdi board
13. Make sure the green and the yellow light appear



14. Run the compiled code
15. Check the bottom of the board
16. One of the LED light should turn on



17. To turn off the LED add the following codes before the FT_Close(fthandle);

    Sleep(2);

    ftStatus = FT_SetBitMode(ftHandle, 0, 0) ;

Troubleshooting

1. If the LED does not turn on after running the code, check the value of Mask and Mode is the following:
   - UCHAR Mask = 0xff;
   - UCHAR Mode = 1;
2. If the main file cannot be compiled, make sure all the .h files have been copied inside the folder and included at the top of the code.
3. If you face FT_Open() error, you should check if you have installed the .so in the correct position.