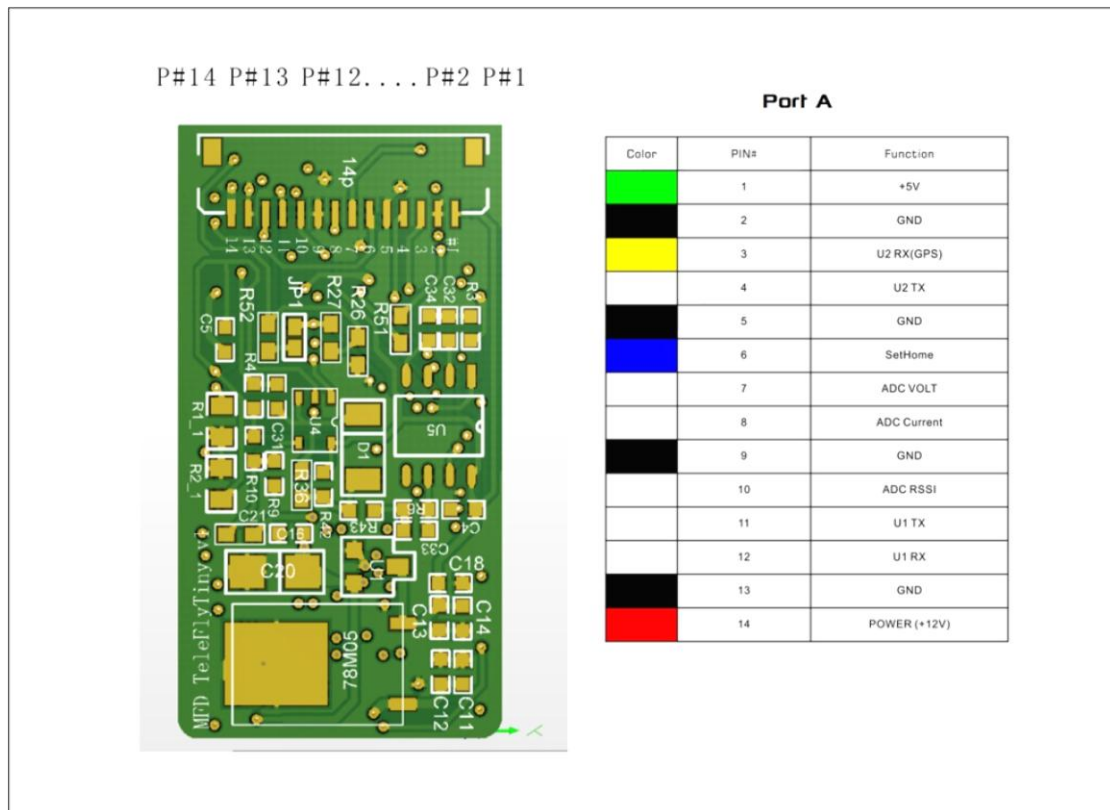


TeleFlyTiny Module Quick Reference V1.2

www.MyFlyDream.com

2020-04-03



You can use a separate GPS or share a GPS with your AutoPilot.

In case of sharing a GPS, you need to connect these wires in the above picture:

PortA P#2 GND : Connect to the GND wire of your GPS.

PortA P#3 U2 RX: Connect to the TXD wire of your GPS.

PortA P#13 GND: Connect to the Power -

PortA P#14 Power: Connect to the Power +. You can use 7~15V DC if you don't need to power a GPS by TeleFlyTiny.

To use a separate GPS, you also need to connect

PortA P#1(+5V) to your GPS. And power the TeleFlyTiny with DC 7~12V DC to avoid overheat problem.

Also you need to feed your video signal from your camera to the TeleFlyTiny module. And connect the TeleFlyTiny video output to your videoTX:

Port B P#1 Video In: Connect to your camera video out.

PortB P#2 GND: Connect to your GND of Cam&VTX

PortB P#3: Video Out: Connect to your VideoTX video-in.

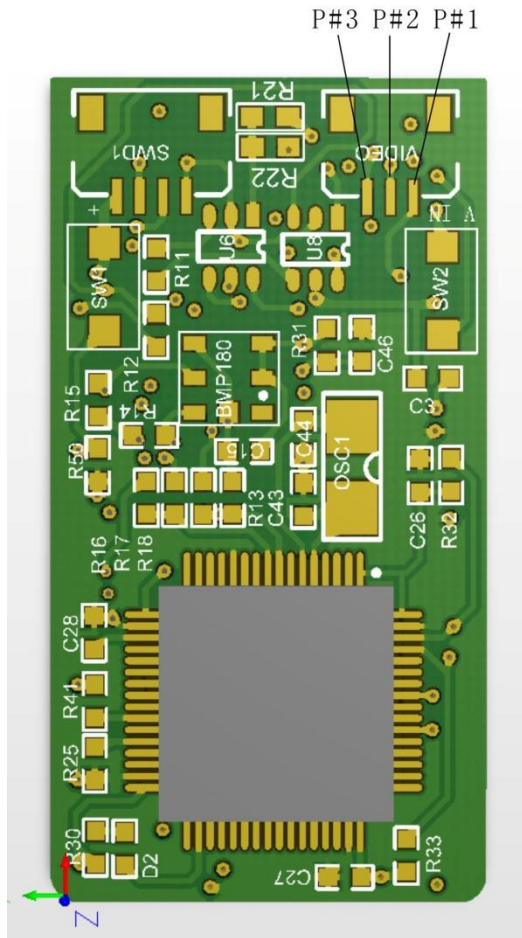
To feed MAVLink data to TeleFlyTiny:

Feed MAVLink data to PIN#12 (U2 RX).

Enter Menu and choose correct "U1 Baudrate" to match your MAVLink data stream.

If your MAVLink data is correctly read by TeleFlyTiny, you will see it's OSD displays correct Speed/Altitude/Current/Voltage/Artificial_Horizon_Indicator...

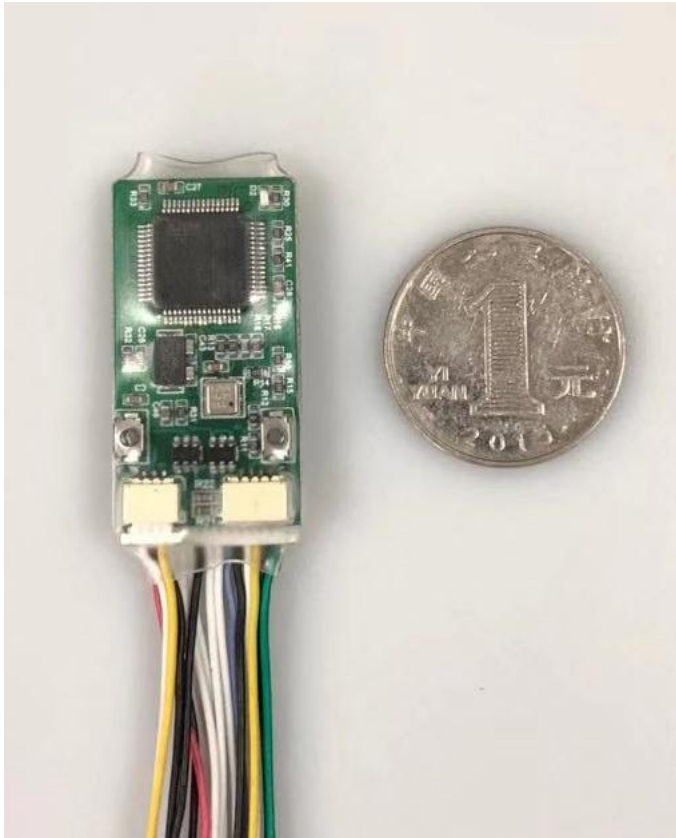
Note: You have to supply power to your Camera and VideoTX beside TeleFlyTiny.



Port B

PIN#	Function
1	Video IN
2	GND
3	Video OUT

开关SW#	Function
1 (Left)	Video Mode
2 (Right)	HOME



To select Video modes:

Use "Video-Mode" button to switch between these 3 videos:

PAL / NTSC / No OSD

To enter the menu:

Power on the TeleFlyTiny module. Hold the HOME button, then click the Video-Mode button to enter the OSD menu. Use "Video-Mode" button to browse. Use HOME button to change values or confirm. All changed settings will be saved after you use "EXIT" to quit menu.

To Discover your new GPS:

After you connect your GPS (sharing other GPS, or use a separate GPS), by default the TeleFlyTiny will try use NMEA/38400bps to communicate with it. If your GPS use other protocol (UBX?) or other baudrate, you need to discover your GPS once. Next time TeleFlyTiny will remember your settings.

To discover your new GPS, hold "HOME" button and power on the TeleFlyTiny module. The discovering procedure will display on the screen. Once it discovers your GPS it will display "DONE" and current baudrate/protocol on the OSD screen. Power off, and power on again. TeleFlyTiny will work with new settings.

Some AutoPilots send commands to their GPS after power on. In this case we need to discover the GPS only after the system is stable. Do it in this way: Don't power on your TeleFlyTiny. Power on your AutoPilot System. After about 5 seconds when the GPS is configured to a stable status, hold the "HOME" button of TeleFlyTiny and power it on to start the GPS discovering procedure

How to update the firmware of TeleFlyTiny:

You need a USB-TTL module to update the firmware of TeleFlyTiny.

Install the driver for your USB-TTL module. Note down the COM port number of the serial port.

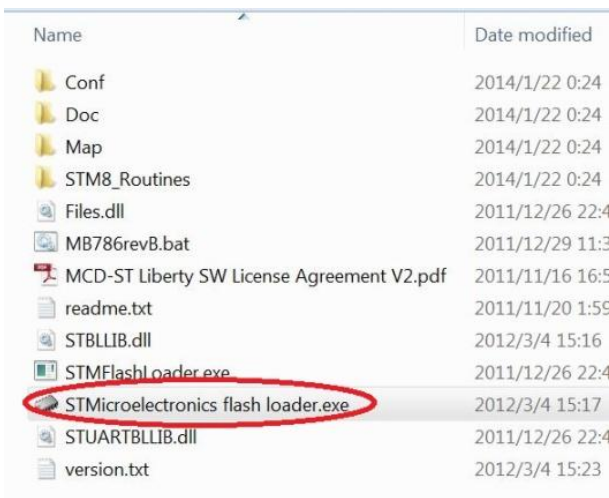
Connect TeleFlyTiny to your USB-TTL module as below:

TeleFlyTiny_PIN#1 (+5V) ----- USB-TTL +5V
TeleFlyTiny_PIN#2(GND) ----- USB-TTL GND
TeleFlyTiny_PIN#11(U1 TX) ----- USB-TTL RX
TeleFlyTiny_PIN#12(U1 RX) ----- USB-TTL TX

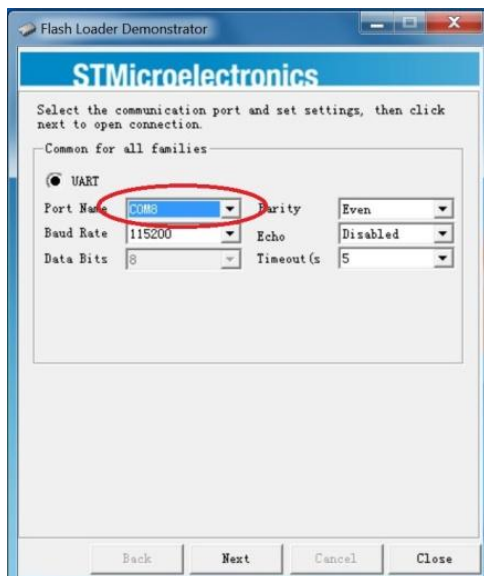
Hold the button1(VideoMode button) and plug the USB-TTL module to your computer.

Then release the button2:

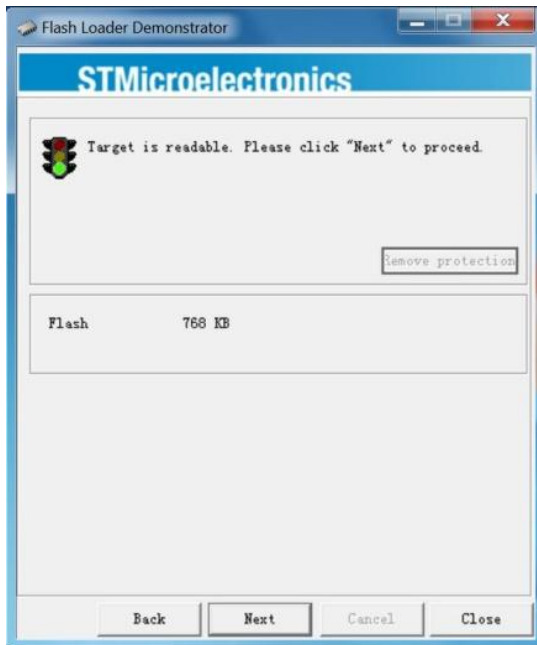
Run this program "STMicroelectronic flash load.exe":



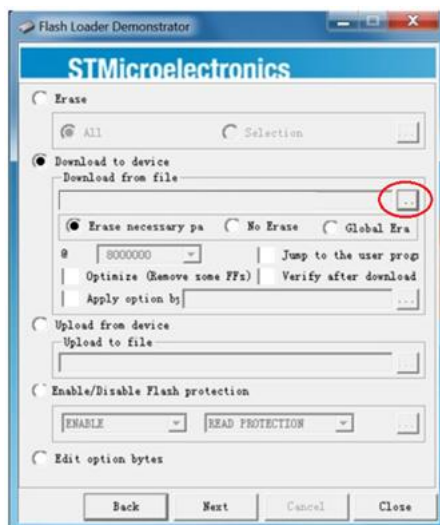
Select the correct COM port, then click NEXT:



If things go well you will see a green light. Click the next button: Wait for a few seconds you will the software should recognize the chip successfully. Then click next.



Click the "... " button which is shown in the red circle and browse for the MFD AP firmware file. The firmware file is usually in a form like "TeleFlyTiny_Vxx.Hex". Then click next.



DO NOT SELECT "Global Erase" on this PAGE!!

Wait until the progress bar turns green. The firmware update is done.

