

FIRMWARE FLASHING STM PRO

Go to this link download the file STM USB.zip then extract it.

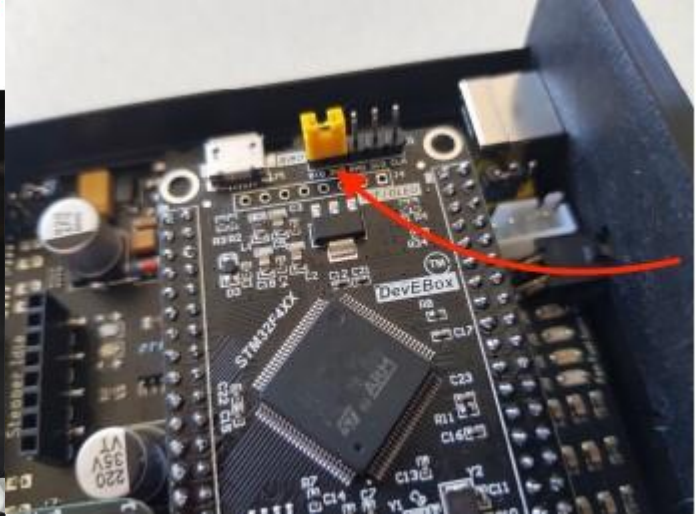
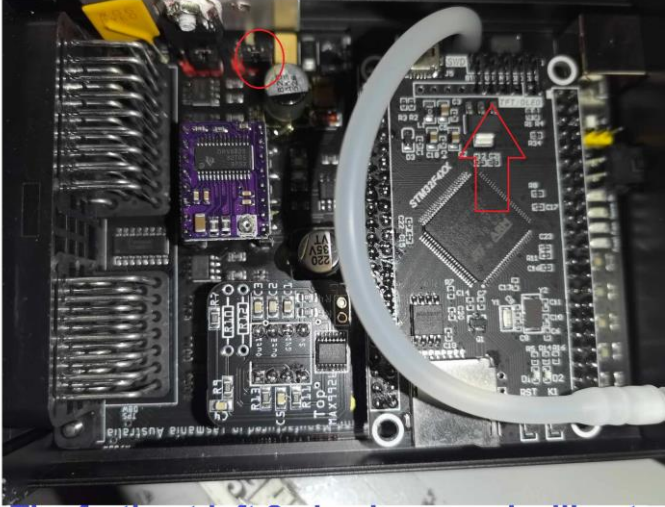
<https://drive.google.com/file/d/17PLh6aHo9VwKIAUb-JHFuD98DnOj0Dy6/view?usp=sharing>

Download ZADIG here <https://zadig.akeo.ie>

This is the driver installation tool for STM PRO in DFU MODE (mode for flashing) don't launch yet.

To upload the firmware the Controller needs to be placed into DFU mode. Open the case by removing the top 5 screws of the ECU for the top case, 2 top on each side plate and one on the side; that is a 2mm hex allen. Place a Jumper on the 2 pins shown in the picture (view image below) Temporarily remove the jumper for the IGN output circled in red and move jumper the 2 pins of the STM BOARD yellow jumper.

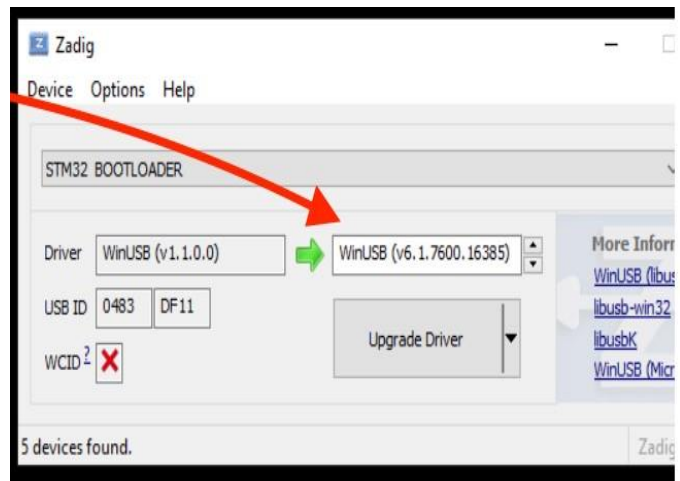
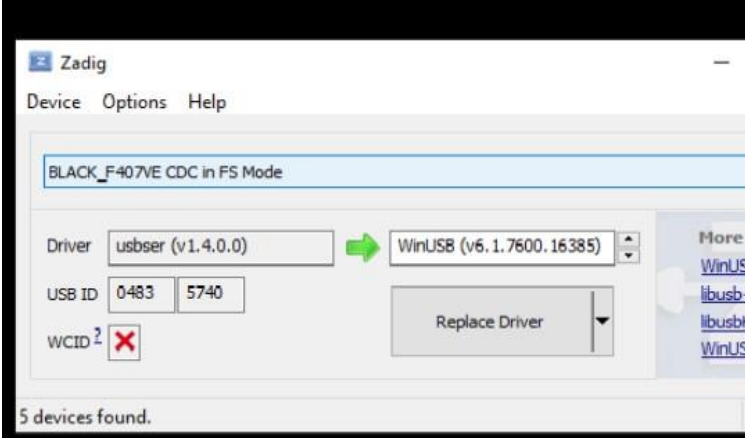
You can remove the jumper from "ignition output" circled in red and use it. After flashing firmware be sure to put it back in the same position it was.



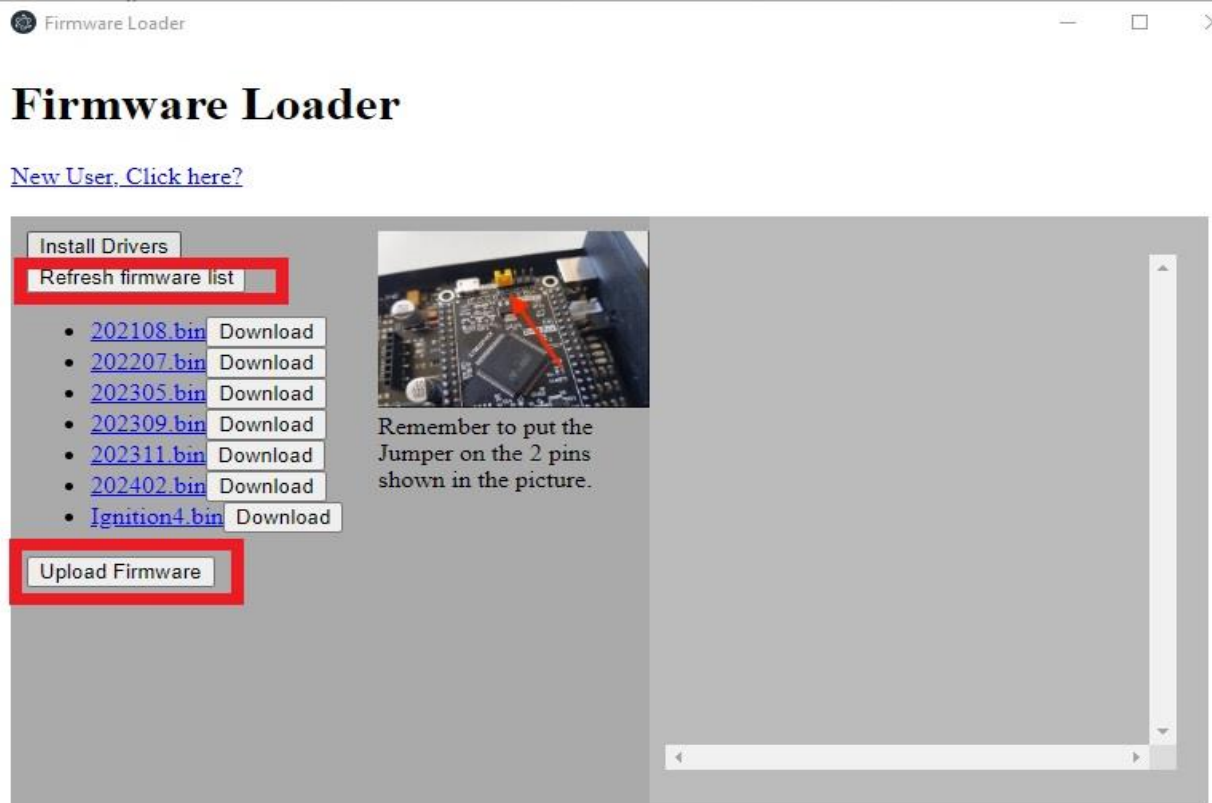
The furthest left 2 pins jumpered will put the ECU IN DFU .

Connect the ECU to your computer via USB and harness whilst giving it power . Windows should say something about a stm32 Bootloader or APM32 ISP DFU mode when this happens, you need to run Zadig. View the image in the download to see the settings needed. Run Zadig Go to options on the top and select list all devices. then from the dropdown menu select "STM32Bootloader". Note: This can also be listed as "APM32 ISP DFU mode" If you see "Black_f407VE in CDC" it's not in DFU mode. there are 2 boxes with an arrow in between on the right hand side box scroll through until you see "Winusb(v6.x.xxxx)" click reinstall driver

We don't want this



It should now be ready to program. Run Uploadfirmware.exe program which was downloaded earlier. It will be in the FIRMWARE folder. Give it time to load and then hit "refresh firmware list" button. A list of firmware's will now show Click download on the firmware you want to flash (regardless if you have downloaded the firmware prior this will also select the Firmware to flash) After saving both BIN and INI files click upload firmware.



Once programmed unplug ecu, terminate power, remove the jumper and put it back to Ignition position it was in. Reconnect to TunderStudio , Start a new TS Project. Load the new ini file that we downloaded earlier do not let TS get it from online,When you get the Project Settings select "Controller in use" as STM32 (Example is in New Project settings image).

