



FEES

PROJECT

FEES MAIN BOARD PROGRAMMING

The main board has several ways to be programmed :

- Via Jtag-SWD through the St-Link programmer of any ST- Discovery Board.
- Via USB through the ST D-fuse - using the Bootloader of any STMicroelectronics produced MCU.
- Via Serial, using TX and RX pins.

In this document only the first way will be explained, since I used the second for a while and was very uneasy and required a pin connector to be inserted or removed to switch between programming or program mode. I also never tried the third and it is time expensive and also pointless to look for it since its redundancy and the handiness of the first method.

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1st Method - The JTAG - SWD programming.

You have to use the ST-Link programmer built-in on every ST - Discovery Board.

The connections required to program the FEES system through the SWD are described in the following picture:

Once all the connections with the Fees System are correctly configured

You can proceed with the following procedure:

STM32 XX - Discovery Board

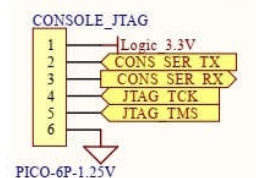
ST-Link Programmer

SWD Connector



FEES - Main Board

JTAG Connector



Unplug both of the 2 pin connectors from the ST-link side of the board (Otherwise you'll be programming the MCU directly connected to it on the same board)



Connect the Discovery board to the Pc using the USB dongle and a memory device will appear in the “My Computer” window, it should be something just like this:



Open it and a folder similar to this will appear



Now just – Drag and Drop the AP_Bootloader.bin file to that folder (or any other .bin file) and the ST-Link part of the board will program the MCU you connected in Jtag. A Red-Green led will flash showing you that the Flashing procedure is working properly.

That's it!

Now just reboot it and the new code will start executing on your board.

This file is part of the FEES project documentation,

This particular one is intended for instruction purpose only, in the eventuality of the TVTC test and following firmware updating/debugging by the GPAdvancedProject company and/or Associates.

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