

Firmware change/Update

The development boards are equipped with a socket for ICSP (in-circuit serial programming).

Through ICSP, it is possible to download new firmware into the micro controller.

The download feature is made for use with MPLAB ICD2 from Microchip. Connect the development board directly to the ICD2 using the cable from the ICD2 kit.

Via ICD2, it's possible to step through and debug firmware code as well. That is: Make your own program, download it, debug it and run it!

MPLAB IDE (integrated development environment) is available for free from Microchip's homepage. (C-compiler must be bought).

How to upgrade firmware ("xxx.hex", xxx=firmware name) (skip reading this if you are familiar with ICD2):

- Connect ICD2 to your PC and to power (please refer to ICD2 user manual)
- Connect ICD2 and development board via the "standard ICD2 cable"
- Start MPLAB IDE
- Select Configure → Select Device... → "PIC18F4320" → OK
- File → Import... → "xxx.hex" → Open
- Programmer → Select Programmer → MPLAB ICD2
- Programmer → Settings → Power Tab : Make sure "Power target circuit from MPLAB ICD2" is checked
- Programmer → Settings → Program Tab : Make sure all fields are checked in the "Select Memories" box. → OK
- Identify and press the "Reset and connect to ICD" button in the main menu field.
- If the "Target not found" warning pops up, repeat steps above.
- Identify and press the "Program target device" button in the main menu field
- Wait for programming to finish (refer to the "Output" window) and remove the development board from ICD2.
- Optional: Confirm firmware version via RF TestBench