How-To Flash bootloader to Felix 3.x / TEC mainboard:
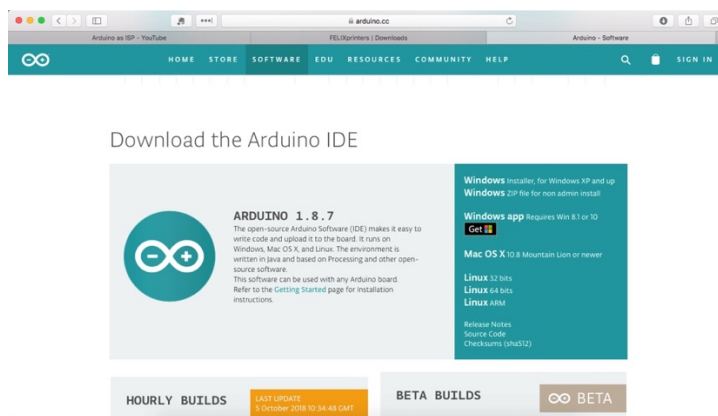
Requirements:

- [Arduino UNO / or compatible device](#) (Link for references)
- [6 jumper wire Female / Male](#) (Link for references)
- Or 5 jumper wires Female / Female and 1 Female / Male
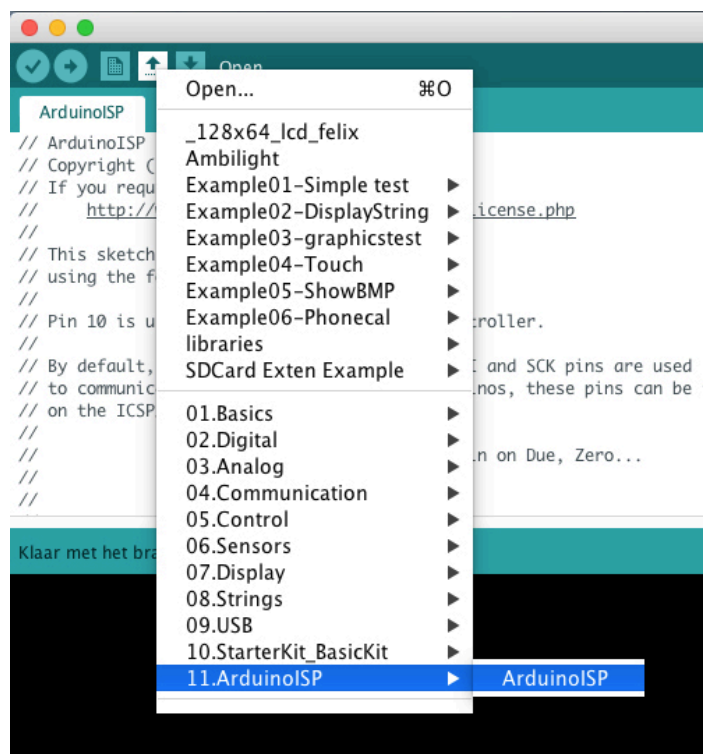- USB cable

Step 1: Make the Arduino ready

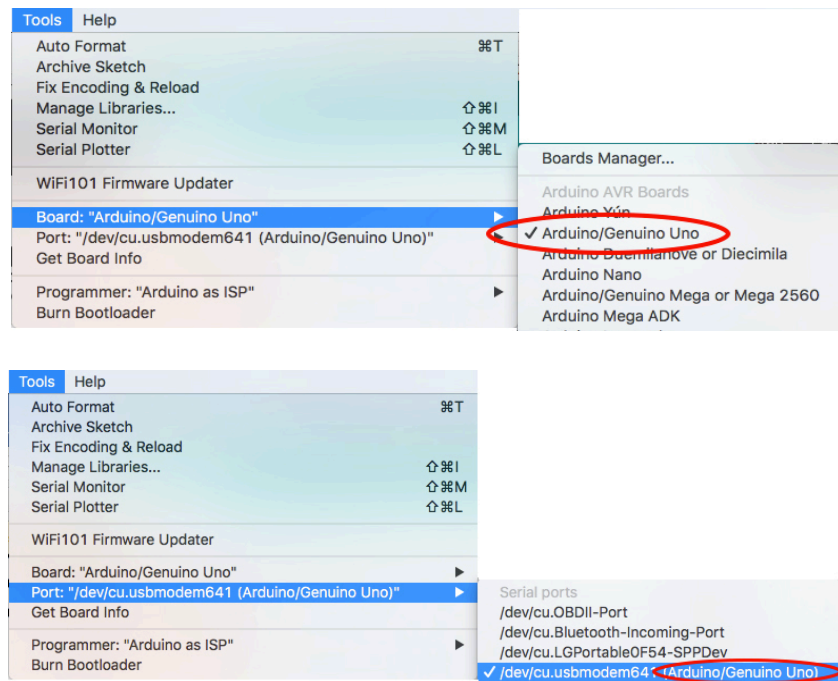Download and install the Arduino IDE software on your computer.
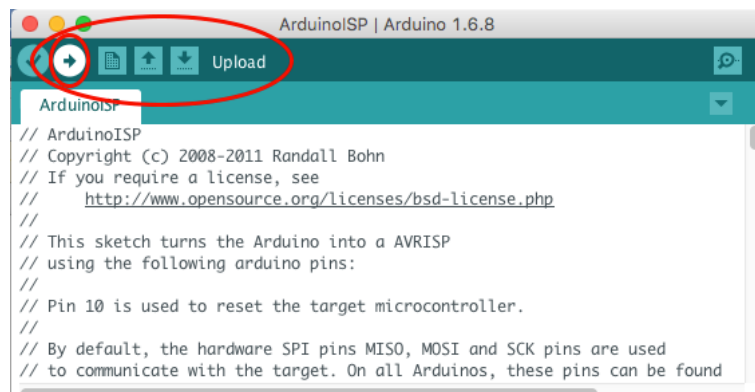
- [Arduino IDE Software](#)

- Install and open the software, connect the Arduino UNO to your computer and load the "ArduinoISP" sketch.
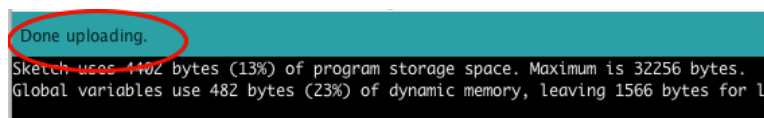
- From the Tools menu select the correct Arduino UNO board and port:

- Upload the ArduinoISP sketch to the Arduino:

- Wait until the sketch is compiled and uploaded, this normally take less then 30 sec.

Now the Arduino Uno is programmed as an in-circuit programmer.

Step 2: Connect Arduino-programmer to Felix mainboard:

- Disconnect the Arduino from your computer and connect the Felix mainboard ISP port to the corresponding pins on the Arduino.
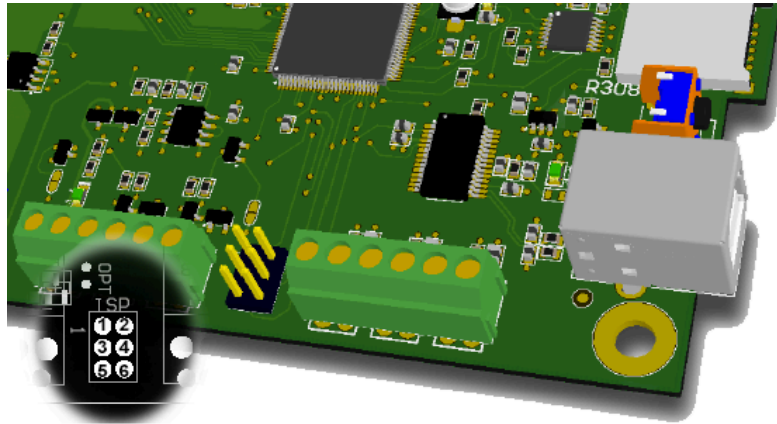
ISP connection:
Pin 1: Miso to Arduino Miso
Pin 2: +5 volt
Pin 3: SCK to Arduino SCK
Pin 4: MOSI to Arduino MOSI
Pin5: Reset to Arduino pin 10 (ss)
Pin 6: GND to Arduino GND

!! - For the +5v, GND, MISO, MOSI & SCK there are 2 option Male or Female - !!
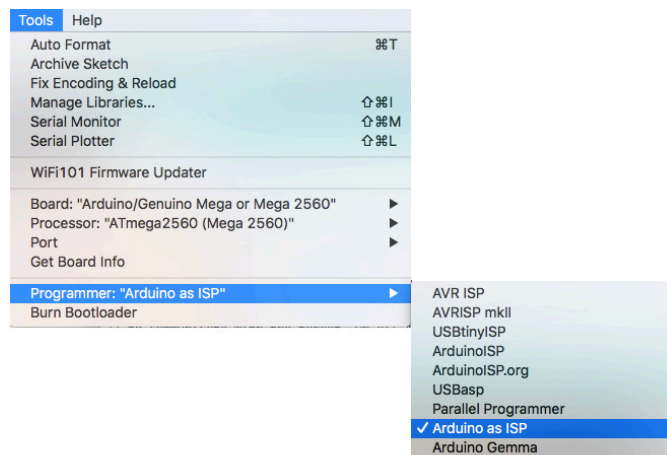Reset pin must be connected to Pin 10!
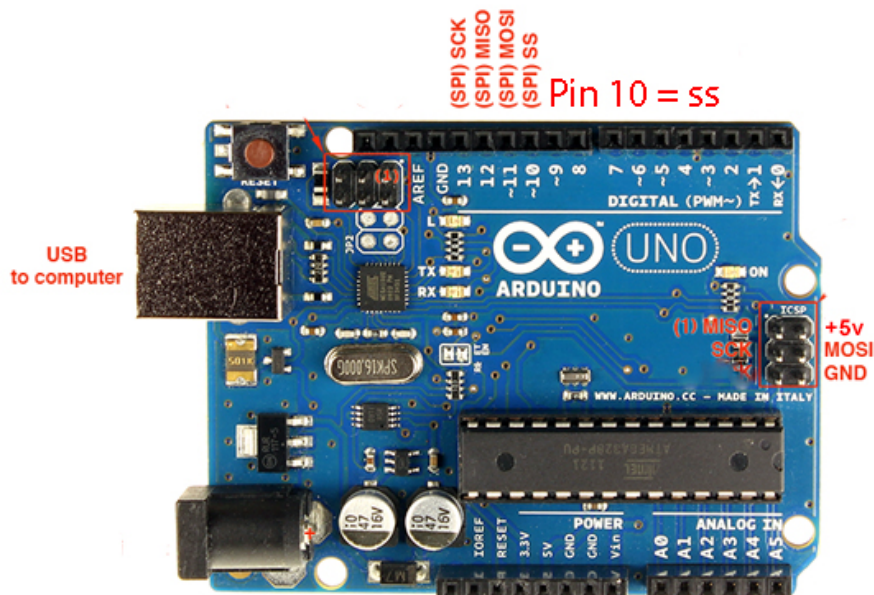
- Now turn on the power of the printer, if everything is connected correctly the power led on the Arduino will turn on and you can connect the usb cable from the Arduino to your computer

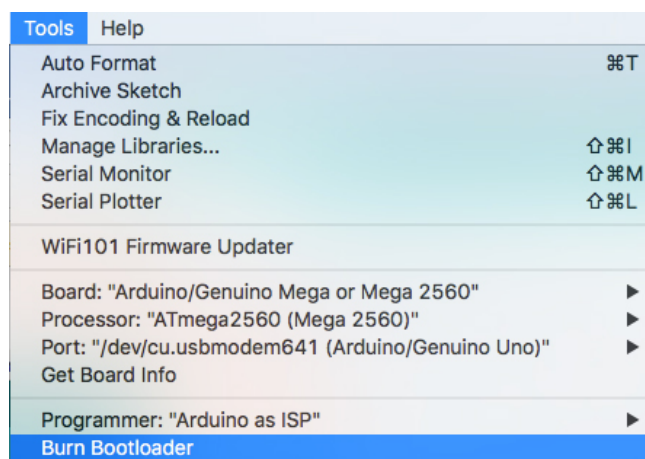## Step 3: Burn Bootloader to Felix mainboard:

- Select from the Tools menu the Arduino Mega 2560 board and processor.
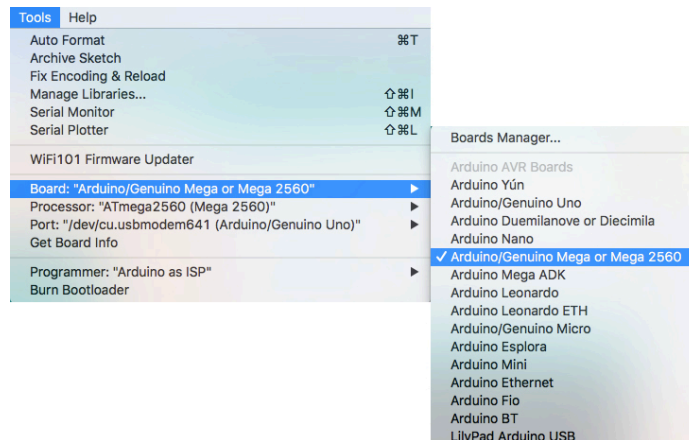
- Select programmer "Arduino as ISP"

- Burn the bootloader to the Felix mainboard.

- Check the RX and TX led's on the Arduino and wait for more info in the debug window or the message "Done burning bootloader". If everything went well you can connect the USB cable to the printer and upload the correct firmware the normal way.

Troubleshoot
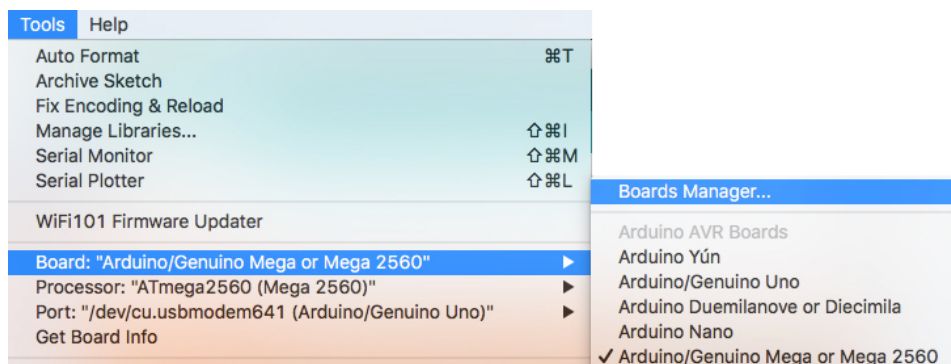
- If you get an error similar like:

Try to change board driver version in the board manager

This is tested with version 1.6.10 so select it and press install
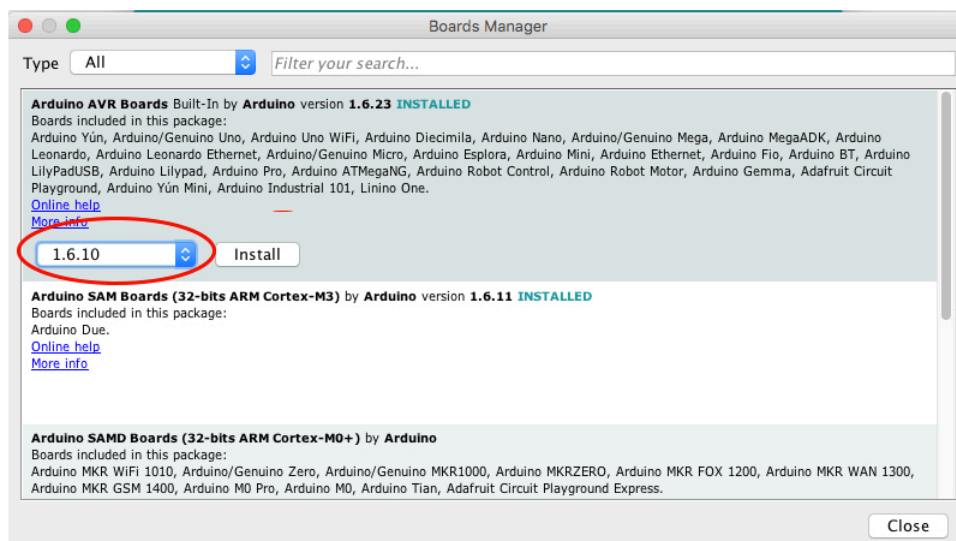
After the older version is installed try to burn the bootloader again.