

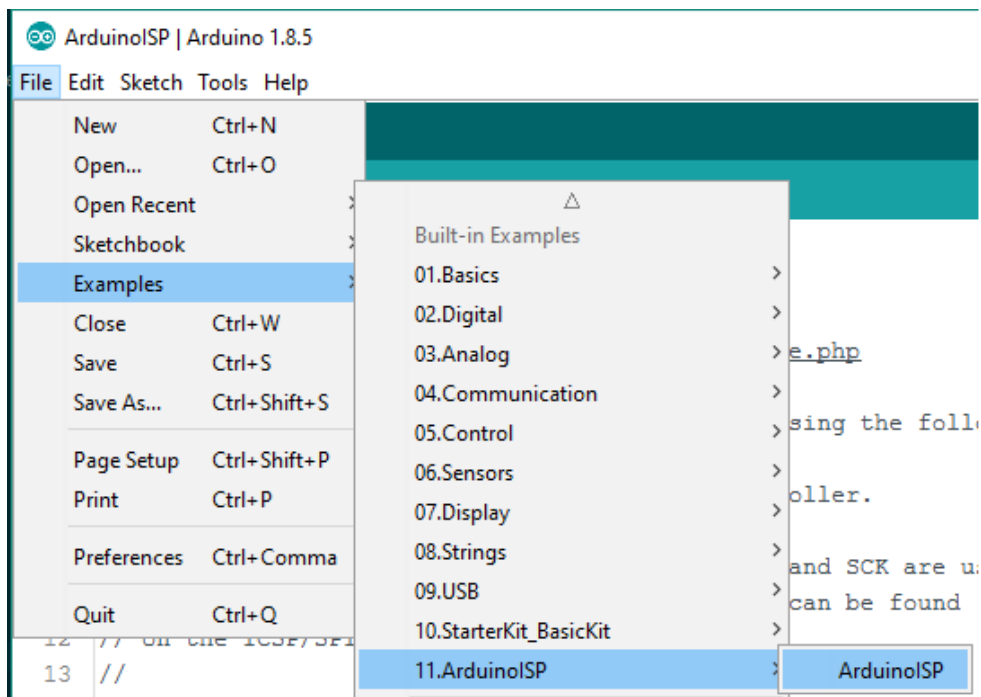
ZZ8727 Without Bootloader

You may find that your ZZ8727 does not have a bootloader pre-flashed. Burning the bootloader is a very easy process however, and only requires a few components.

Qty	Code	Description
1	XC4410	traditional Arduino UNO
1	ZZ8727	the ZZ8727 without Bootloader
1	RR2798	10K resistor
1	PB8817	Small Breadboard

Step 1. Arduino ISP

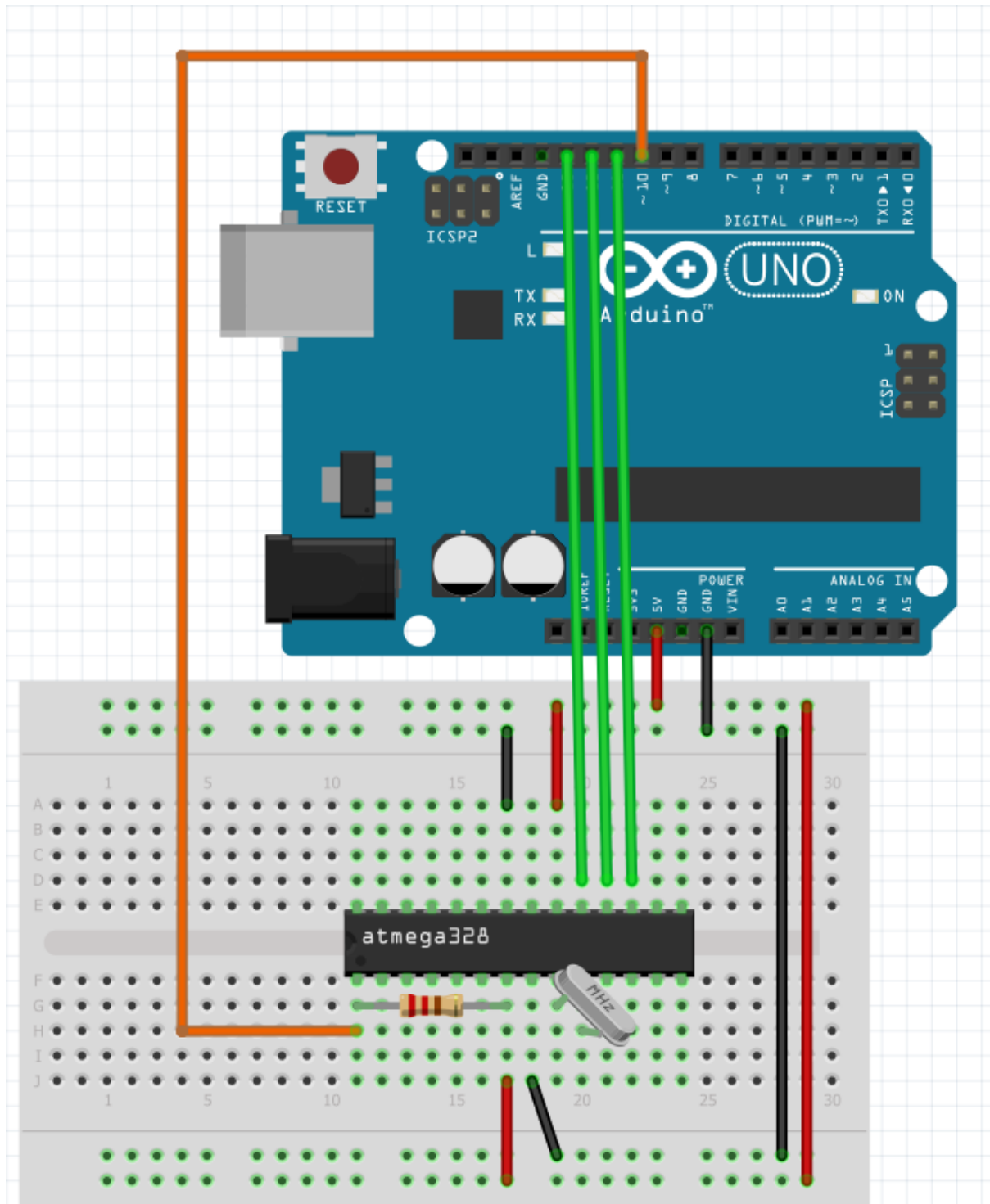
Connect your Arduino using USB cable and burn the Arduino ISP example from *File->Examples->11.ArduinoISP->ArduinoISP*



Step 2. Connect new chip

Use a small breadboard to connect the chip, as below:

- Also note that a resistor connects between pins 1 and 7 on the ZZ8727 Chip.



Connection table: Remember that chip pins are counter clockwise from the top left notch

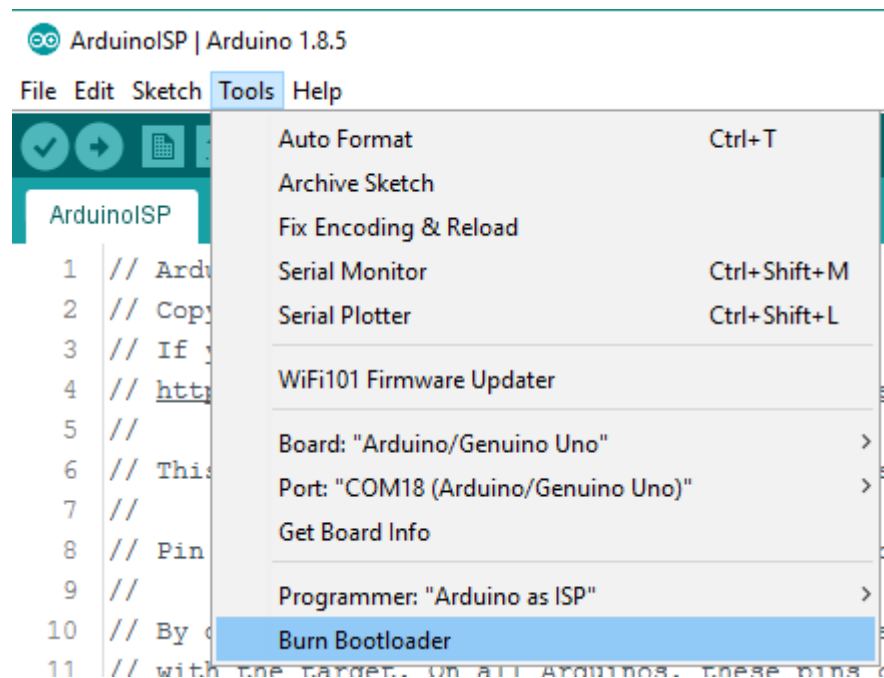
ZZ8727 Pin	Labeled	Connect to
1	RST	Arduino pin 10
7	VCC	Arduino 5V
8	GND	Arduino GND
9	X1	Crystal included in ZZ8727
10	X2	Crystal included in ZZ8727
17	D11	Arduino pin 11
18	D12	Arduino pin 12
19	D13	Arduino pin 13
20	AVCC	Arduino 5V
22	GND	Arduino GND

Step 3. Burn Bootloader

Once the Arduino has the ISP program on it (from step 1) and it is connected to the chip (step 2) you can start to burn the bootloader.

In the *tools* menu:

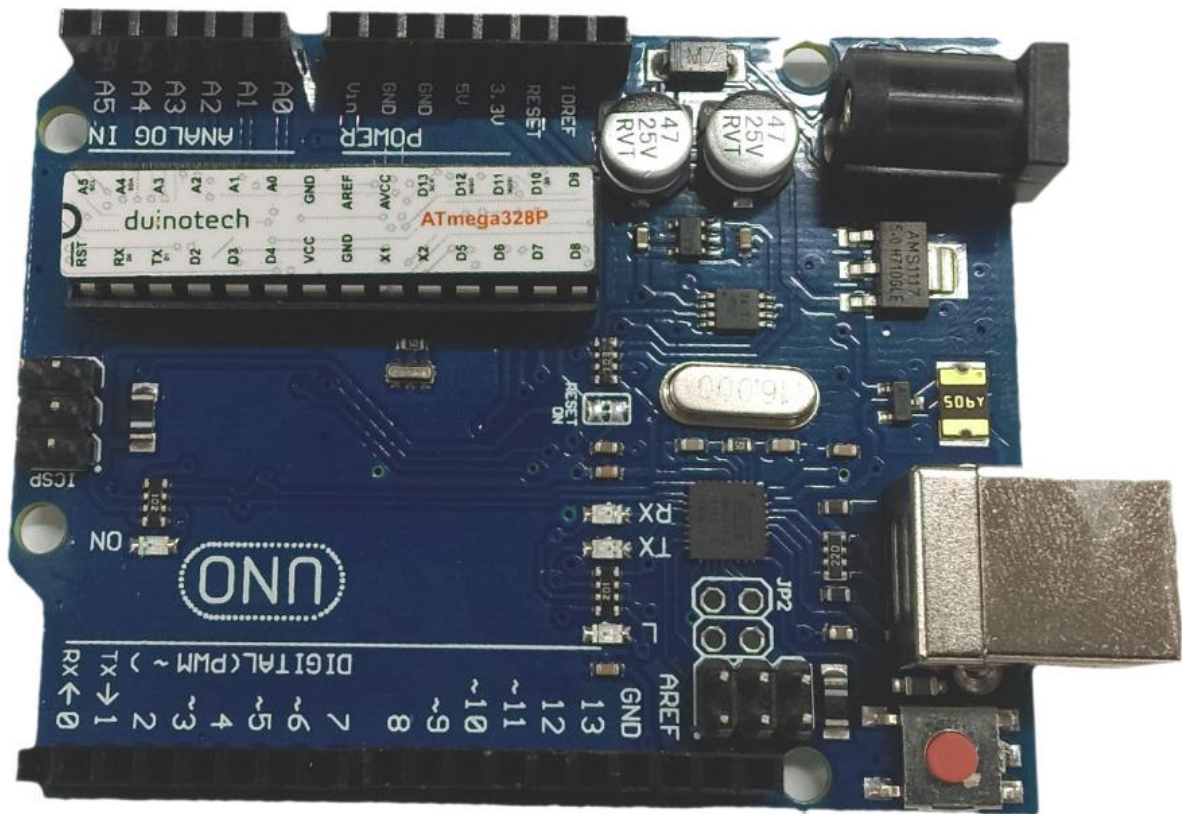
1. Select Arduino as ISP as your Programmer
2. Confirm correct port is selected
3. Then click Burn Bootloader



Wait a few seconds for it to work and you should get a confirmation. If there are any errors, make sure your wires are connected up properly, a common fault is swapping the D11/12/13 pins.

Step 4. Swap and check

Once the bootloader is on there, it should work just like the regular Arduino. You can check this by carefully prying off the old ATMEGA chip from your Arduino board and mounting the new ZZ8727 chip, with the duinotech label closer to the edge of the board.



Open up the Blink example (from *File->Examples->01.Basics->Blink*) and select ArduinoISP as your program, upload to the new board and you should see your L light blinking.