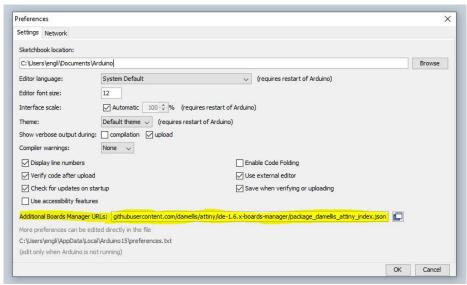
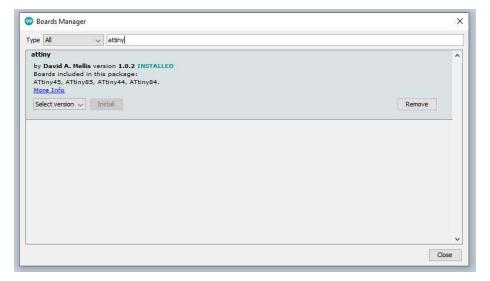
## Using the ATtiny85 with the Arduino IDE

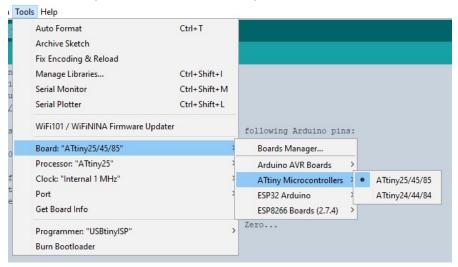
- 1. Prepare your Arduino Uno
  - a. Your Uno will be plugged into your PC for the duration of these instructions.
  - b. Load the example sketch ArduinoISP onto your Uno
    - i. (File->Examples->11.ArduinoISP->ArduinoISP)
    - ii. Upload to your Uno
- 2. Prepare the Arduino IDE
  - a. Add the board manager URL
    - i. File->Preferences
    - ii. Add the following line to the "Additional Boards Manager URLs:"



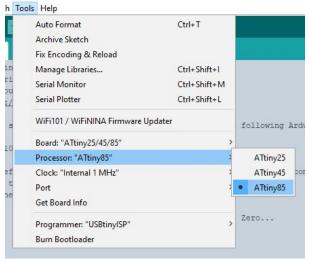
- iii. https://raw.githubusercontent.com/damellis/attiny/ide-1.6.x-boards-manager/package\_damellis\_attiny\_index.json
- b. Restart the Arduino IDE (close it out every open sketch and open it up again)
- c. Add support for the ATtiny85 in the board manager
  - i. Tools->Board->Board Manager
  - ii. Search for "attiny" and install that board manager



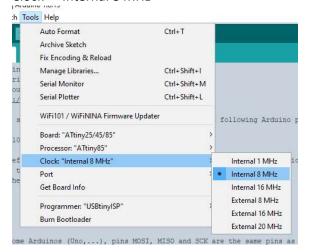
- d. Restart the IDE again.
- 3. Change target board to ATtiny85
  - a. Board -> ATtiny Microcontrollers -> ATtiny25/45/85



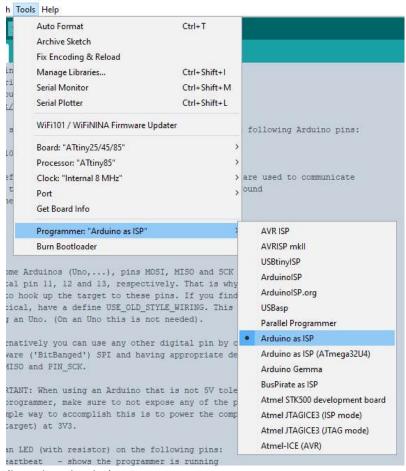
b. Processor -> ATtiny85



c. Clock -> Internal 8 MHz



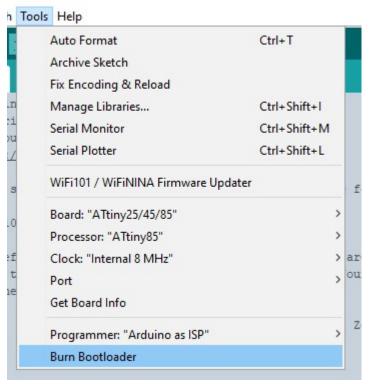
## d. Programmer -> Arduino as ISP



## e. (burn bootloader)

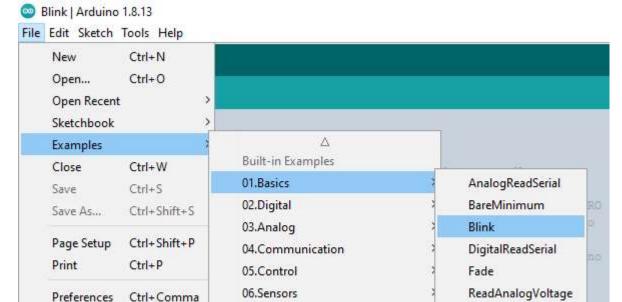
Once you have double checked all the settings above, select "Burn Bootloader".

This sets the clock source on the ATtiny85 and prepares it to receive a program from the Arduino IDE.



4. Test with Blink – Now we need to actually test that it works!

a. Open blink



07.Display

08.Strings

09.USB

b. LED Pin should be 4

Quit

Ctrl+Q

15 modified 2 Sep 2016

```
Blink | Arduino 1.8.13
File Edit Sketch Tools Help
    Blink§
     Blink
     Turns an LED on for one second, then off for one second, repeatedly.
 6 Most Arduinos have an on-board LED you can control. On the UNO, MEGA and ZERO
     it is attached to digital pin 13, on MKR1000 on pin 6. LED_BUILTIN is set to
     the correct LED pin independent of which board is used.
 9 If you want to know what pin the on-board LED is connected to on your Arduino
10 model, check the Technical Specs of your board at:
11 https://www.arduino.cc/en/Main/Products
13 modified 8 May 2014
14 by Scott Fitzgerald
15 modified 2 Sep 2016
16 by Arturo Guadalupi
17 modified 8 Sep 2016
18 by Colby Newman
19
20 This example code is in the public domain.
21
22 http://www.arduino.cc/en/Tutorial/Blink
23 4/
24
25 // the setup function runs once when you press reset or power the board
26 void setup() {
27 // inicialize digital pin LED_BUILTIN as an output.
28 pinMode (4, OUTPUT);
29 ]
31 // the loop function runs over and over again forever
32 void loop() {/
33 digitalWrife(4, HIGH); // turn the LED on (HIGH is the voltage level)
34 delay(1000);
                                       // wait for a second
35 digitalWrite(4, LOW);
                           // turn the LED off by making the voltage LOW \,
36 delay (1000)
                                       // wait for a second
37 ]
```

- c. Upload and see if it works!
- d. If frequency is off, make sure you set the clock parameter in the tools dropdown correctly and that you performed the "Burn Bootloader" operation.