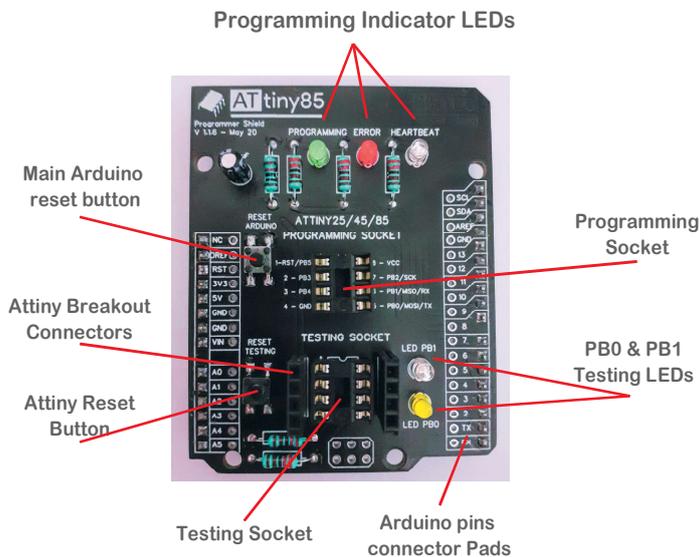


Product Description

This Arduino compatible shield helps you extend any old Arduino board to a nice clean ATtiny programmer. The shield has two 8 pin sockets - The upper one is for programming and the lower one is for testing. The board has three leds indicators for the programming procedure, and two more for testing. Also features two on board buttons that can reset the the Arduino board and the Attiny chip. This shield is following the ArduinoISP tutorial and you should follow the steps to load the firmware needed to the arduino board before attaching the shield -> <https://www.arduino.cc/en/Tutorial/ArduinoISP>

Detailed View



Demo Code:

```

/*
  Blink 2 Leds
  Blink LEDs PB0, PB1 on for a defined delay.
  This simple sketch was made to showcase and test the
  testing socket on an ATtiny shield.
*/
#define del 50
// the setup function runs once when you press reset or power the board
void setup() {
  // initialize digital pins 0 and 1 as an output.
  pinMode(0, OUTPUT);
  pinMode(1, OUTPUT);
}
// the loop function runs over and over again forever
void loop() {
  digitalWrite(0, HIGH); // turn the LED on (HIGH is the voltage level)
  delay(del); // wait for a second
  digitalWrite(1, HIGH); // turn the LED off by making the voltage LOW
  delay(del); // wait for a second
  digitalWrite(0, LOW); // turn the LED on (HIGH is the voltage level)
  delay(del); // wait for a second
  digitalWrite(1, LOW); // turn the LED off by making the voltage LOW
  delay(del);
}

```

Try programming this code with the shields -> then when connecting to the Testing Socket, should blink the two attached LEDs.

Prepare your Arduino UNO board:

STEP 1 -> LOADING THE ATTINY BOARDS ON YOUR ARDUINO IDE

Open the Arduino IDE Software then go to Arduino > Preferences. You will see Additional Boards Manager URLs. Add this link there, by pressing the rightmost icon. and add this link:
https://raw.githubusercontent.com/damellis/attiny/ide-1.6.x-boards-manager/package_damellis_attiny_index.json
 Press OK (then another OK to exit from Preferences).

STEP 2 -> INSTALLING THE ATTINY BOARD

go to Tools > Board > Boards Manager. Type attiny in the search field, and you should see attiny by David A. Mellis. Click it (attiny by David A. Mellis) and install the board. Now, you should see attiny boards from the list when you go to Tool > Boards. Scroll down to verify that the board is indeed installed.

STEP 3 -> ARDUINO AS ISP

Attach the Arduino UNO to your computer. Go to File > Examples > ArduinoISP, and click on Arduino ISP. Then go to Tools > Boards and select Arduino UNO. Go to Tools > Port and select the port where your board is connected to. Upload the ArduinoISP sketch to your Arduino UNO by going to Sketch > Upload. At this stage, your Arduino UNO is ready to be used as a programmer.

Note: In some cases you need to select Processor : "ATMega328P (Old Bootloader)"

STEP 4 -> UPLOADING SKETCH TO ATTINY85 DEVELOPMENT BOARD

Make sure that the connections are as stated as described here above. Open the program / sketch you want uploaded to your ATtiny85. Go to Tool and setup the following.

- Board: "ATtiny25/45/85"
- Processor: "ATtiny85"
- Clock: "Internal 8 MHz"
- Port: Select the port where your board is connected to.

Then make sure Arduino as ISP is selected under Tools -> Programmer. By default the ATtiny85 runs at 1MHz. To make it to run at 8MHz select Tools -> Burn Bootloader. Now Type the "Blink 2 LEDs" example from this sheet and change upload the sketch.

For More information visit the original ArduinoISP page:

<https://www.arduino.cc/en/Tutorial/ArduinoISP>