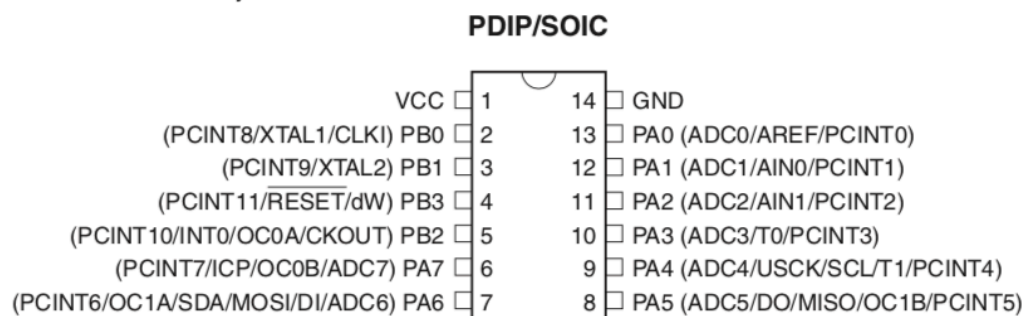


- 1) Disconnect USB/power from Arduino
- 2) Connect the Arduino Pins to the ATtiny 44 / 84 pins.
 - a. Gnd Pin GND of programmer to Pin 14 Gnd of target
 - b. SCK of programmer (pin 13 on Uno/Nano/ProMini) to pin 9 USCK of target
 - c. MISO of programmer (pin 12 on Uno/Nano/ProMini) to pin 8 MISO of target
 - d. MOSI of programmer (pin 11 on Uno/Nano/ProMini) to pin 7 MOSI of target
 - e. Pin 10 on Uno/Nano/ProMini, or pin "RST" pin on the ISP connector of a dedicated programmer, to pin 4 RST of target
 - f. Arduino RESET to 10uF cap
10uF capacitor to GND
 - g. Vcc Pin +5V of programmer to Pin 1 Vcc of target
- 3) Connect USB/power to Arduino
- 4) Upload Sketch to ATtiny.
- 5) Disconnect USB/power from Arduino
- 6) Disconnect hook-up wires between ATtiny84 and Arduino.
- 7) Hook-up ATtiny to run Sketch independently from Arduino:
- 8) Apply power to ATtiny44 / 84 by connecting +V
for 10Mhz 1.8V to 5.5V
for 20MHz 2.7V to 5.5V
(3 x AA 1.5V batteries in series 3.7V cca.
Or use 9V battery with 3.3V or 5V regulator.)
- 9) Disconnect USB/power from Arduino

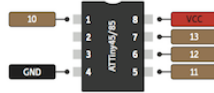
Figure 1-1. Pinout ATtiny24/44/84



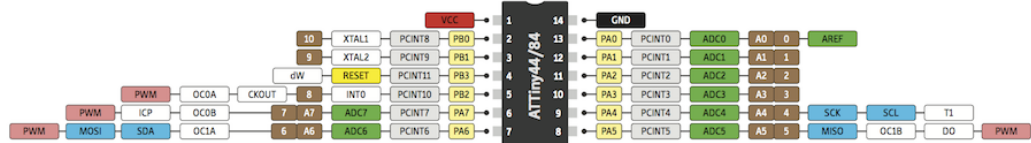
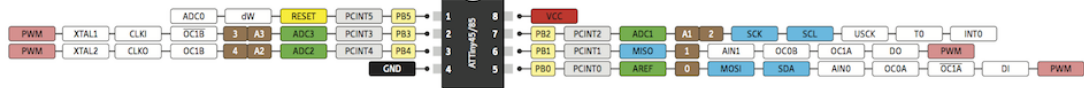
LEGEND

GND
POWER
CONTROL
PORT PIN
ATMEGA328 PIN FUNC
DIGITAL PIN
ANALOG-RELATED PIN
PWM PIN
SERIAL PIN
ARDUINO PIN

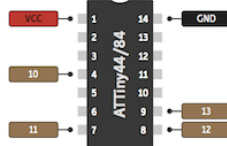
Using Arduino as ICSP Programmer for ATtiny45/85



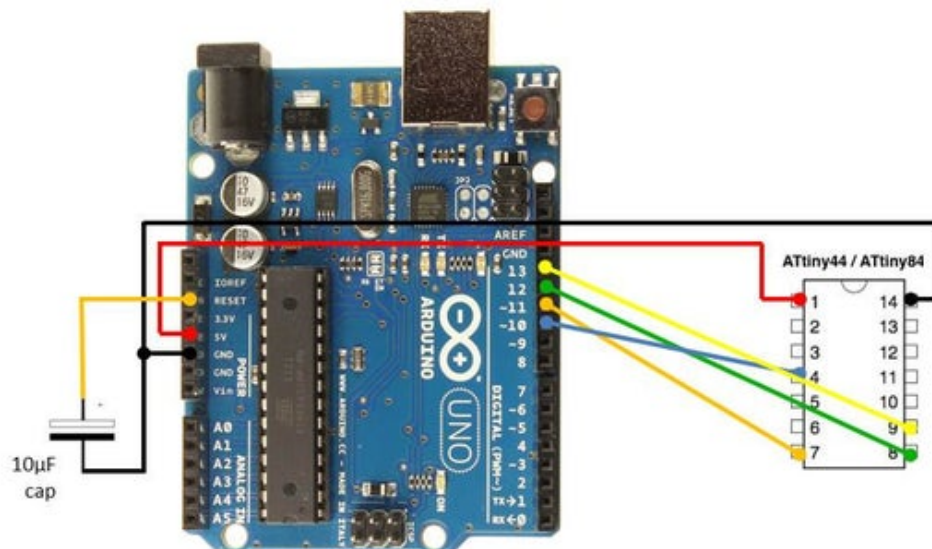
THE
UNOFFICIAL
ARDUINO
&
ATTiny
PINOUT DIAGRAM

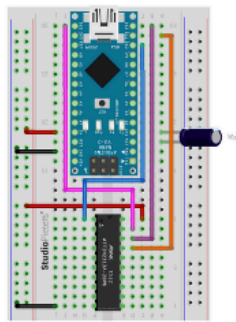


Using Arduino as ICSP Programmer for ATtiny44/84

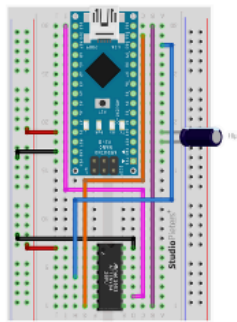
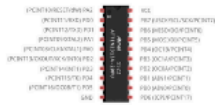


www.pighxxx.com
CC BY-NC-SA
29 JAN 2013

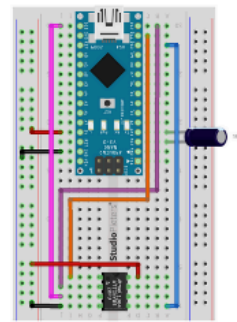
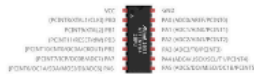




ATTiny 2313 / 4313



ATTiny 24 / 44 / 84



ATTiny 25 / 45 / 85



fritzing

	Arduino Nano	ATTINY 25 / 45 / 85	ATTINY 24 / 44 / 84	ATTINY 2313 / 4313
MOSI	Digital Pin 11	PB0 (Chip Pin 5)	PA6 (Chip Pin 7)	PB 5 (Chip Pin 17)
MISO	Digital Pin 12	PB1 (Chip Pin 6)	PA5 (Chip Pin 8)	PB 6 (Chip Pin 18)
SCL	Digital Pin 13	PB2 (Chip Pin 7)	PA4 (Chip Pin 9)	PB 7 (Chip Pin 19)
RESET	Digital Pin 10	PB5 (Chip Pin 1)	PB3 (Chip Pin 4)	PA 2 (Chip Pin 1)
VCC	VCC (5V)	VCC (Chip Pin 8)	VCC (Chip Pin 1)	VCC (Chip Pin 20)
GND	GND	GND (GND pin 4)	GND (GND pin 14)	GND (GND pin10)

1. Vcc **pin +5V** of programmer to **pin 1** Vcc of target
2. Gnd **pin GND** of programmer to **pin 14** Gnd of target
3. SCK of programmer (**pin 13** on Uno/Nano/ProMini) to **pin 9** USCK of target
4. MISO **pin 12** of programmer (on Uno/Nano/ProMini) to **pin 8** MISO of target
5. MOSI of programmer (**pin 11** on Uno/Nano/ProMini) to **pin 7** MOSI of target
6. **pin 10** on Uno/Nano/ProMini, or pin "**RST**" pin on the ISP connector of a dedicated programmer, to **pin 4** RST of target