Shrinking the Arduino: Introduction to ATtiny

github.com/brendanmatkin/ATtiny_Workshop

Arduino-tiny installation

1. Download the arduino-tiny core from https://code.google.com/p/arduino-tiny/.
2. Close Arduino IDE.
3. Extract the contents to "sketchbook location\hardware\". If "hardware" folder does not exist, create it (i.e. "documents\arduino\hardware\").
4. Create file "boards.txt" at "sketchbook location\hardware\tiny\boards.txt".
5. Copy relevant board information from "Prospective Boards.txt" to "boards.txt" Start with ATtiny84 @ 8MHz (internal oscillator; BOD disabled) and any others you want (probably 1Mhz internal and some ATtiny85 options). Feel free to copy all of them.
6. In "boards.txt", verify that the line **attiny8#...upload.using=arduino:arduinoisp** is uncommented for every board (and all other upload.using=xxx are commented out).
7. Start (or restart) Arduino IDE. New boards should be available in "Tools\Board\…"

Uploading sketch to ATtiny

1. Upload File\Examples\ArduinoISP to an Arduino UNO or Duemilanove (328).
2. Place 10uF capacitor across GND & Reset.
3. Connect ATtiny Reset, MOSI, MISO, SCK to UNO pins 10, 11, 12, 13 respectively.
4. Select "Tools\Board\[your ATtiny]". Select "Tools\Programmer\Arduino as ISP". Select "Tools\Serial Port\[UNO COM port]".
5. If first time using ATtiny or changing clock, Select "Tools\Burn Bootloader"
6. Upload your code (if you get an error that starts with: "avrdude: please define PAGEL and BS2" you can ignore it - it's possible to prevent but a huge pain and not necessary)

NOTES