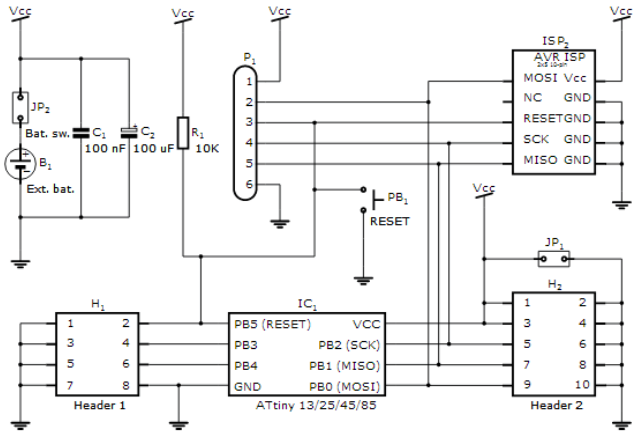
The Tinusaur Project

Briefly, the Tinusaur is a minimal micro-controller hardware configuration based on Atmel AVR ATtiny family of products and more specifically those with DIP-8 case such as ATtiny25/ATtiny45/ATtiny85, ATtiny13 as well as their variations.

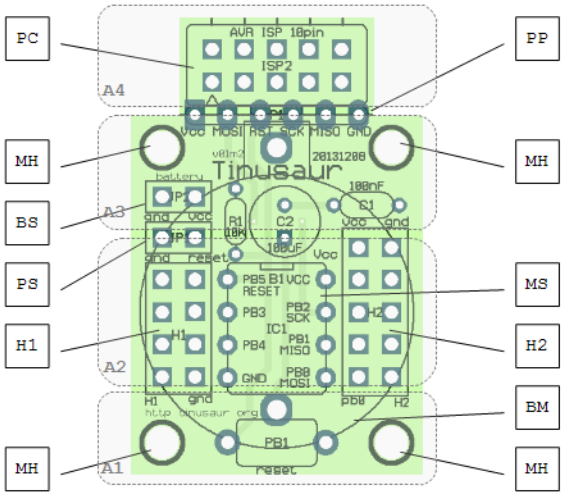
The goal of the Tinusaur project is to have a simple, cheap and accessible quick-start platform for everyone interested in learning and creating things.

Tinusaur Starter

The Tinusaur Starter is a beginners' kit that will help you start with microcontrollers and the Tinusaur particularly.



Notes



There are 4 areas that a Tinusaur board could be divided to: A1, A2, A3, A4. That is applicable for the actual Tinusaur main board as well as any shield boards one could produce.

A1, the bottom part of the board:

- this is the area where the RESET button is placed on the main board.
- for a shield board that area could be used to put some components and produce a simple circuit.

A2, the mid of the board – heads:

- there are 2 header – one 2×4 and another one 2×5, they are different for a reason.
- on the main board, between the headers, is placed the MCU.
- on a shield board, between the headers, could placed an 8-pin chip or other components.

A3, the top part of the board:

- there are the minimum required components for the MSU to work – 2 capacitors for the power source and one pull-up resistor for the RESET.
- jumper for external power – red.
- jumper to switch on/off battery – yellow.

A4, tip of the board:

- standard ISP programming connector.

Additionally ...

A5, the other side of the board:

- there is optional cell-button battery mount.

Package Contents

Name	Description
PCB	Tinusaur Board
MCU, Attiny85	Atmel AVR ATtiny85 microcontroller
Socket, DIP-8	DIP-8 socket for MCU
H1, Header	Header 2×4, Female
H2, Header	Header 2×5, Female
ISP, Header	Header 2×5, Male, for ISP
RESET, Button	Tactile push button, for RESET
Power, Header	Header 1×2, Male, red – external power
Battery, Header	Header 1×2, Male, yellow – battery power on/off
Battery, Jumper	Jumper, 2-pin, yellow – for battery power on/off
C1, Capacitor	Capacitor 100nF, Small
C2, Capacitor	Capacitor 100uF, Low profile 5×5 mm
R1, Resistor	Resistor 10K, Small, 1/8W
Battery holder	Battery holder for CR2032
Battery 3V	Battery 3V, CR2032
LED1, LED	LED, 3mm, red
LED2, LED	LED, 3mm, green
Resistor (LED1)	Resistor 330 ohm, Small, 1/8W, for LED
Resistor (LED2)	Resistor 330 ohm, Small, 1/8W, for LED
Header (LED1)	Header 1×2, Male, for LED
Header (LED2)	Header 1×2, Male, for LED
ISP Programmer	USB ASP, 10-pin connector, with cable

Official web address: http://tinusaur.org
Blog: http://tinusaur.wordpress.com
Online store: http://tinusaur.storenvy.com
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