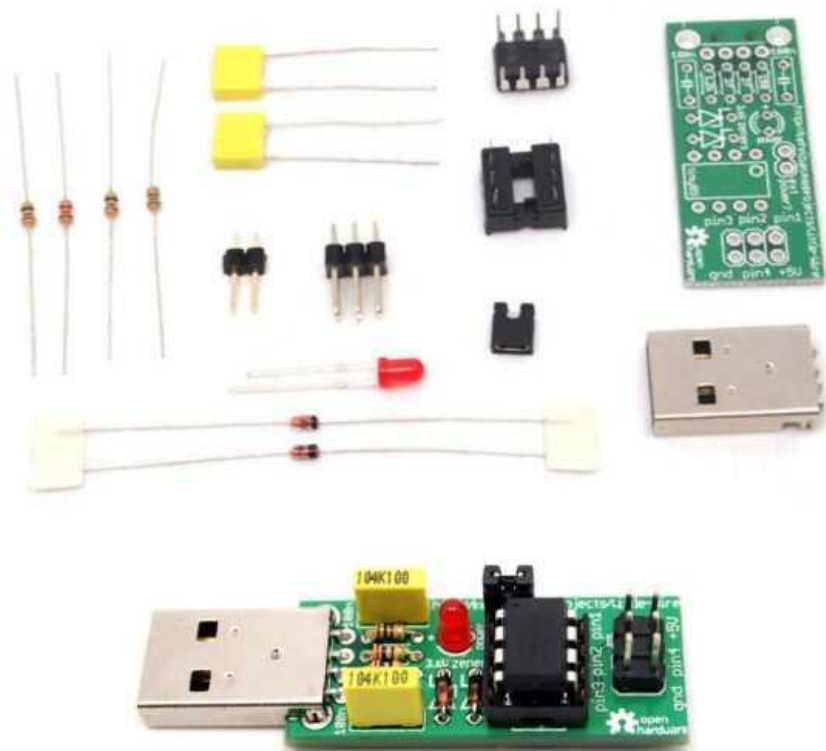


# SEED-AVR06071P



## PRODUCT DETAILS

Little Wire is multi-featured USB controlled open source hardware tool packed in a minimal form factor designed by ihsan Kehribar. Even though it has minimal form factor, and packed with full of features; there aren't any SMT components involved, therefore it is very suitable for beginners to assemble.

This tool has to take instructions at run-time over USB. It can't work in a computer-less environment.

## Features

- USB controlled multi-tool with:
  - 4-channel digital input / output
  - ADC (10 bit resolution)
  - 2 parallel hardware PWM outputs
  - SPI interface
  - I2C interface
- USBtiny compatible AVR programmer
- [Printf style debugging over AVR-ISP pins](#)
- USB to UART converter (alternative firmware -- CDC-232 port)

- Onboard serial bootloader for firmware upgrades
- Minimal form factor and all through-hole components
- Open Source Hardware design

### Applications

- AVR programming /summon captainObvious
- LED dimming, color mixing
- General servo driving
- Pan and tilt servo control of a webcam for face tracking
- With additional motor driver IC, 2 wheel robot driving
- Analog voltage recording and plotting
- Controlling LED matrix displays by using SPI module to drive shift registers
- USB to SPI bridge
- USB to I2C bridge
- USB to UART bridge
- General purpose V-USB development board

### Packing list

- 1 x Little Wire PCB
- 1 x Pre-programmed Attiny85 chip.
- 1 x 8pin IC socket
- 1 x USB Male Type A connector
- 2 x 3.6v zener diode
- 2 x 100 nF capacitor
- 2 x 27 Ohm resistor
- 1 x 1.2 kOhm resistor
- 1 x 150 ohm resistor
- 1 x LED ( for power indication)
- 1 x 2pin male header
- 1 x 2pin jumper
- 1 x (2x3)pin male header

### Pinout

Silkscreen	AVR-ISP	PWM/Servo	ADC	I2C	SPI	CDC-232	Bootloader
pin1	MISO	Channel_B	-	-	DO	TX	TX
pin2	SCK	-	Channel_1	SCL	SCK	RX	
pin3	RESET	-	Channel_0*	-	CS	-	
pin4	MOSI	Channel_A	-	SDA	DI	-	RX