

Protoshield Kit for Arduino

From Wiki

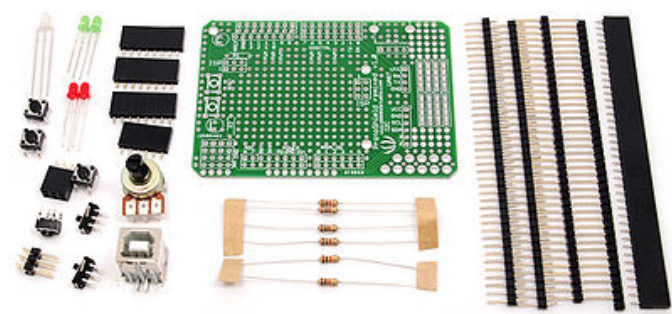
Contents

- 1 Introduction
- 2 Features
- 3 Components included in the kit
- 4 Board trace schematic
- 5 Assembly
- 6 Version Tracker
- 7 Resources

Introduction

Build your own Arduino shield using the compact and flexible Proto Shield kit. Solder together a limitless range of circuits and reuse it in all your Arduino projects. A standard 0.1" prototyping grid accepts commonly used through-hole parts and chips. Basic components (resistors, potentiometer, LEDs, switches) are included to help you get started with your custom shield.

Model:STR104B2P (http://www.seeedstudio.com/depot/arduino-protoshield-kit-remixed-v10-p-318.html?cPath=132_134)



Features

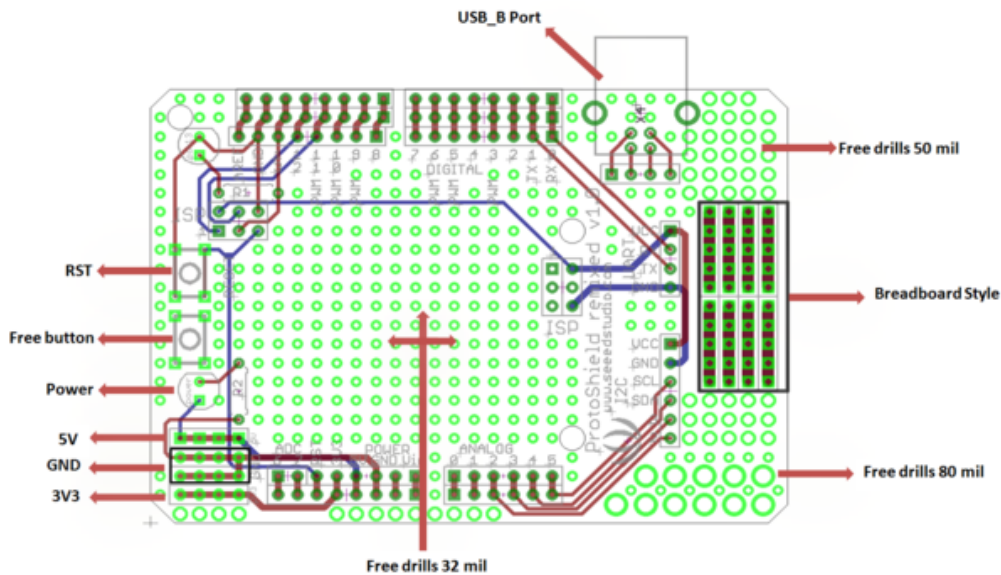
- Arduino compatible
- Large 0.1 inch pitch prototyping area
- A variety of through-hole sizes to fit most parts
- Arduino UART and I2C port pin breakouts for easy external communication interfacing
- Dual ISP breakouts for easy programming and stacking
- 3.3 volt, 5 volt, and ground power rails are easily available anywhere on the board
- Breadboard style prototyping area
- USB type B connector
- Basic components included (buttons, switches, LEDs, resistors, USB jack)

Components included in the kit

- 1 Arduino compatible Proto Board
- 1 B type USB connector
- 1 40-pin 2.54mm male long header

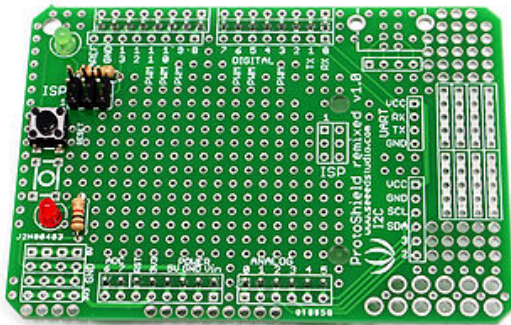
- 1 40-pin 2.54mm female header
- 2 40-pin 2.54mm male headers
- 1 40-pin 2.54mm spacer
- 3 8-pin 2.54mm female headers
- 1 6-pin 2.54mm female header
- 1 ISP female pin header
- 1 ISP male pin header
- 1 10k ohm potentiometer
- 4 1k ohm resistors
- 2 10k ohm resistors
- 2 3mm red LEDs
- 2 3mm green LEDs
- 1 3mm dual color LED
- 4 Mini push button switches
- 2 DPDT switches

Board trace schematic

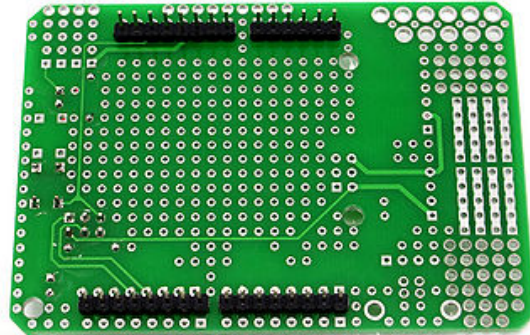
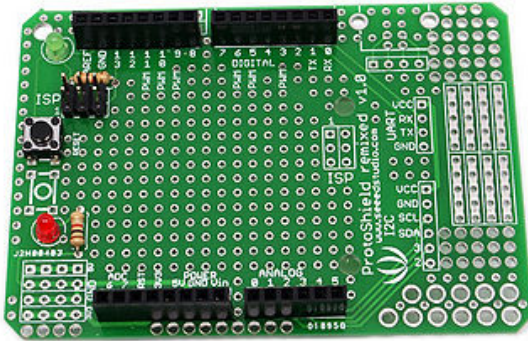


Assembly

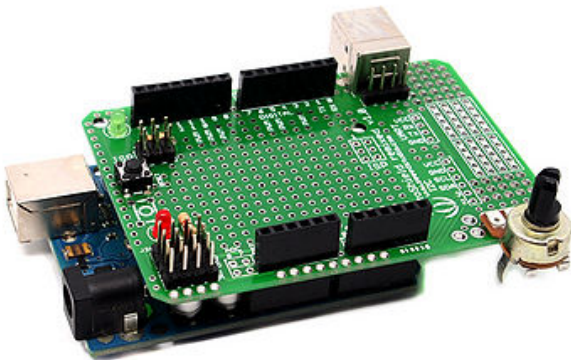
Step 1: Solder the Red LED to the holes in the Power Socket outline. Be sure to match the flat side of the LED with the outline on the board. Solder the green LED to the holes in the pin13 outline on the board, again, matching the flat side of the LED to the board outline. Solder two 1K resistors to R1 and R2. Solder Reset button and ISP header per the picture below. Note: The reset button is easier to install if you insert it before inserting the ISP header.



Step 2: Solder the female and male connectors. Note: solder ADC6 and ADC7 **ONLY** if your are using a Seeeduino (http://www.seedstudio.com/depot/index.php?main_page=advanced_search_result&search_in_description=0&zenid=15c0e10e2d81d5481f863ae4eaf7ca1&keyword=seeduino&x=0&y=0). When using an Arduino, do **NOT** solder ADC6 and ADC7.



Step 3: Solder the USB connector to the USB port, and the potentiometer in the 80 mil holes. Solder the bottom left Power pins to suit your project.



Your finished kit should look similar to the picture above.

Version Tracker

Revision	Descriptions	Release
v1.0	V1.0 Release	2012/3/29

Resources

- Sources file (<http://www.seeedstudio.com/depot/images/product/ProtoShield.brd>)

Retrieved from "http://www.seeedstudio.com/wiki/index.php?title=Protoshield_Kit_for_Arduino&oldid=37343"

Category: Arduino

- This page was last modified on 1 September 2013, at 22:04.
- This page has been accessed 23,992 times.