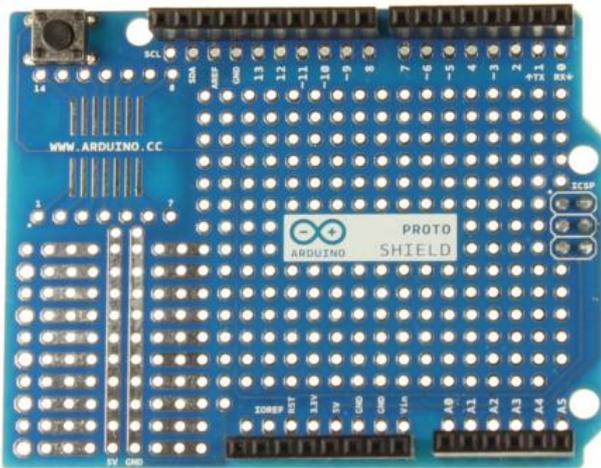
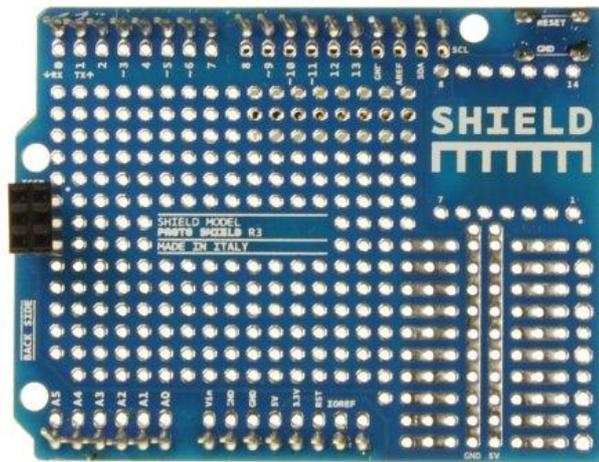


# Arduino Proto Shield



Proto Shield R3 mounted Front



Proto Shield R3 mounted Back

## Overview

The Arduino Prototyping Shield makes it easy for you to design custom circuits. You can solder parts to the prototyping area to create your project, or use it with a small solderless breadboard (not included) to quickly test circuit ideas without having to solder. It's got extra connections for all of the Arduino I/O pins, and it's got space to mount through-hole and surface mount integrated circuits. It's a convenient way to make your custom circuit and Arduino into a single module.

## Summary

A wide prototyping area with some extra features:

- 1.0 Arduino pinout
- 1 Reset button
- 1 ICSP connector
- 14 pin SMD footprint (50 mils pitch)
- 20 pin Through Hole footprint (100 mils pitch)

## Schematic & Reference Design

EAGLE files: [arduino ProtoShield Rev3.zip](#)

Schematic: [arduino ProtoShield Rev3-schematic.pdf](#)

## Power

The Proto Shield bring the power from the Arduino standard 5V and GND pins to the two power bus rows placed between the Through Hole package footprint, which can be used for powering the DIP sockets, or for power and ground rows.

## SPI connection

The ICSP connector available on the shield have his connections made directly to the SPI pins.

- 1: (the one with the small pointer sign) MISO connected to D12
- 2: +5V
- 3: SCK connected to D13
- 4: MOSI connected to D11
- 5: SS connected to D10
- 6: GND

For more information about the SPI communication see the [SPI library](#).

## **Physical Characteristics**

The maximum length and width of the Proto Shield PCB are 2.7 and 2.1 inches respectively. Three screw holes allow the shield to be attached to a surface or case. Note that the distance between digital pins 7 and 8 is 160 mil (0.16"), not an even multiple of the 100 mil spacing of the other pins.