Make your projects rock solid with the Prototyping Shield. It makes it easy for you to design custom circuits and solder electronics directly on it.

The ProtoShield makes it easy for you to design custom circuits. You can easily solder TH or SMD ICs on the prototyping area to test them with your Arduino board. The SMD area is designed for a maximum of 24 pins SOIC integrated circuit and the TH area contains a lot of space for the needed components around your project. You can even stick a mini breadboard (not included) on the protoarea for solderless operation. The proto area includes also two power lines (IOREF and GND), two LEDs pads and SPI signals breakout pads for boards with SPI only on the ICSP header like Zero.

Key features:

- 1.0 Arduino Pinout
- 1 ICSP Connector footprint
- 2 LEDs and resistor footprint
- IOREF and GND power lines
- SPI signals pads
- 24 pin SMD footprint (50 mils pitch)
OSH: Schematics
Arduino Proto Shield is open-source hardware! You can build your own board using the following files:

**EAGLE FILES IN .ZIP** **SCHEMATICS IN .PDF**

### Power
The Proto Shield bring the power from the Arduino standard IOREF and GND pins to the two power bus rows placed between the Through Hole prototyping are, which can be used for powering correctly your project independently on the chosen board (3V3 or 5V).

### SPI Connection
On the ICSP connector only 5V and GND are wired to the respective pins on the header. MOSI and MISO are present only on the connector and on the near extra pads.

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.