SparkFun LiPower Shield
DEV-13158 ROHS

Is there anything an Arduino can't do? Well, for one, most of them can't be powered directly from a 3.7V LiPo battery; much less charge and monitor that battery. The SparkFun LiPower Shield takes care of this by combining the functionality of two of our favorite battery power boards: the Power Cell and the Fuel Gauge.
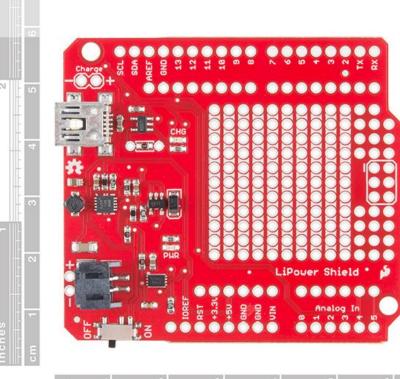
The LiPower Shield allows you to connect a 3.7V single cell Lithium polymer battery which it will boost up to 5V and connect to the Arduino board's 5V pin. The on-board MAX17043G+U IC is connected to the I²C lines (A4 and A5) so that your project can monitor it's own power supply. The configurable alert interrupt pin on the MAX17043G+U IC is broken out to D2 which will activate when the LiPo gets to 32% or lower.

The charging circuit is configured to charge the LiPo at 100mA but by adding a resistor to the supplied through-holes you can boost this to 500mA. There is a mini-USB port on the shield which allows you to charge the battery from a USB power source or you can supply a separate regulated 5V source on the "charge" header.
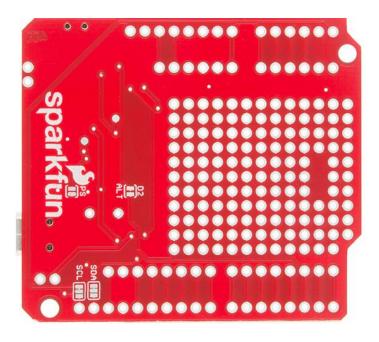
*__**Power Warning!**__*

last updated about a year ago

A word of warning - If you're trying to connect the shield to an Arduino, make sure that the shield is not powered as you connect them. Connecting the device while powered seems to blow out the boost regulator on the board, causing an irreparable failure.

https://www.sparkfun.com/products/13158 7-25-18