



## LiPo Charger

MAX 1555 Li+ Charger Breakout  
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### 1 Overview

This polymer lithium ion battery charger is ideal for charging a single small size cell. The maximum charge current is around 280 mA, which will charge a 1 amp hour battery in several hours. It allows for 2 charge sources: power from usb or external charger. The circuit is based on the MAX1555 charger IC from Maxim. Readers are encouraged to check out the data sheet for this device: [http://www.maxim-ic.com/quick\\_view2.cfm/qv\\_pk/4002](http://www.maxim-ic.com/quick_view2.cfm/qv_pk/4002)

### 2 Hardware description

The charger may be connected to USB or an external charger. A USB port will source a minimum of 100mA, so charge current when connected to USB is limited at 100mA. For faster charging at 280 mA, an external 5-7 Vdc power adapter may be attached. There is also a 2 pin header labeled GND and +5v where the external charge source may be attached. Please note that an unregulated 9 volt adapter is too high and will likely damage the charger. Even an unregulated adapter rated at 7 volts may be too much. We recommend a regulated 5 volt adapter be used.

There are 2 output headers where the battery and load system may be attached. A nice thing about this charger is that the battery may remain connected to the load system during charging. This enables the charger to be built into a device and eliminates battery removal.

The status LED displays current charge status. ON indicates charging, OFF indicates a full charger.