

# SparkFun LiPo Charger/Booster - 5V/1A

## PRT-14411

### Description

The SparkFun 5V/1A LiPo Charger/Booster is a no-nonsense circuit for generating one amp from a Lithium Polymer battery at 5V. This LiPo charger is a very economical choice that is equipped with a simple booster circuit utilizing the PAM2401 IC, and includes protection diodes so you can run multiple cells in series for an extra kick. While the booster circuit is in operation, this board can draw more current the lower the input voltage, making it perfect to deliver a strong charge in a small amount of time.

The circuit is constructed by feeding an MCP73831 charge controller IC to the LiPo port, and to the input of a PAM2401 boost controller. Multiple connection types are provided for the battery, charge source and switch to allow flexibility of application, and two LEDs provide feedback on system status. If you need more than 5V out of your project, the SparkFun LiPo Charger/Boosters can also be daisy-chained together to get a bigger bang for your buck.

**Note:** This is not a direct replacement for the [SparkFun Power Cell](#), as it uses a different IC. Also, this board does not possess any undervoltage or other battery protection features, so we do recommend that you use it only with batteries with a built-in protection circuit.

### Features

- Charger, microUSB, 500mA
- Booster, 5V, 1A output
- Form factor for our 1,000mAh batteries
- Battery isolation switch with optional external connections
- Enable pin broken out
- Disabled current less than 10uA
- LED indicators for power and charge
- Super-clean output signal (high-frequency switching)

