**Initial Findings for Power Control:**

[Adafruit](https://www.adafruit.com/products/2465): PowerBoost 1000 Charger - Rechargeable 5V Lipo USB Boost @ 1A - 1000C

This one will charge any 3.7V [LiIon](https://www.adafruit.com/products/328?gclid=CILGqbPs4c8CFQ2KfgodEYwDHg)/LiPoly battery. It will boost and charge the battery. You can have the battery plugged in and charger plugged to charge. You can also take either of them out and you’ll still have power.

[SparkFun](https://www.sparkfun.com/products/13777): Battery Babysitter - LiPo Battery Manager

This one will charge your LiPo battery and also reports battery information such as remaining capacity and state of charge using the [BQ27441-G1A](http://www.digikey.com/product-search/en/integrated-circuits-ics/pmic-battery-management/2556336?FV=fff40027%2Cfff801b0&mnonly=0&newproducts=0&ColumnSort=0&page=1&stock=0&pbfree=0&rohs=0&k=BQ27441&quantity=0&ptm=0&fid=0&pageSize=25&pkeyword=BQ27441) chip from TI which is fuel gauge.

**Suggestion:**

I am not sure how we can buy one board and integrate the functionality of the other one. We would probably need to take the two boards and redesign the circuits to do everything. I think this would be a practicum project of its own given the timeframe we have left. I suggest using PowerBoost 1000 Charger to keep it realistic.