# Rechargable 5[V] power bank

The design is intended for one 3.7[V] Li-Ion 18650 battery cell

## Battery charger

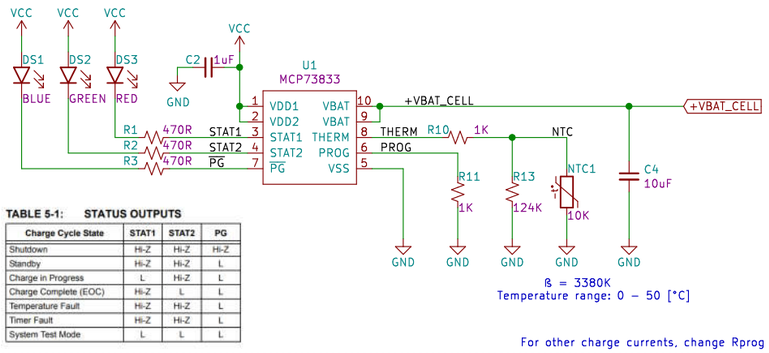
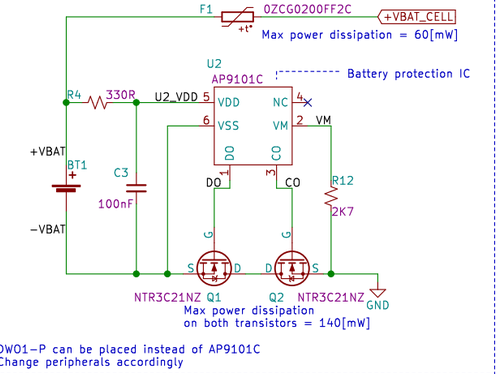


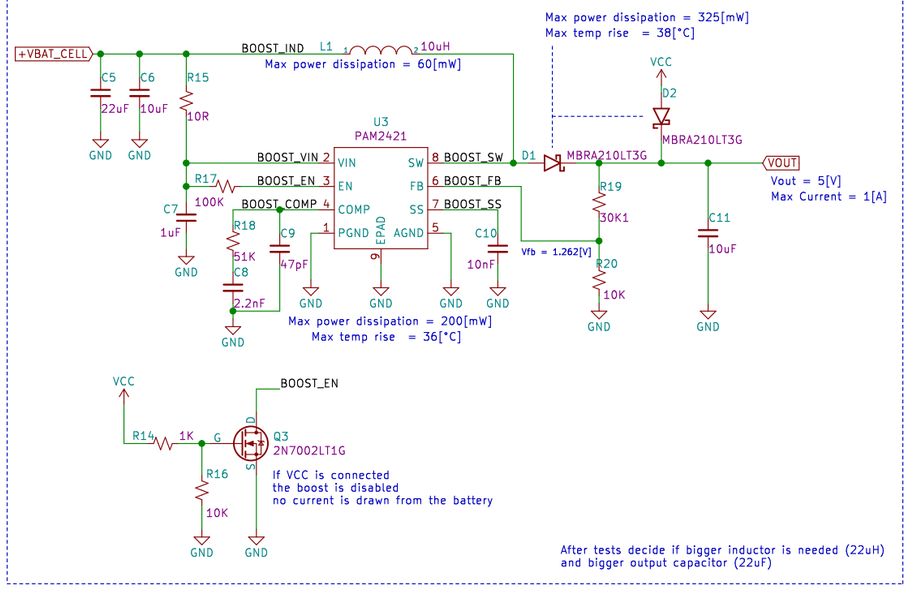

**TABLE 5-1: STATUS OUTPUTS**

| Charge Cycle State | STAT1 | STAT2 | PG |
|---|---|---|---|
| Shutdown | Hi-Z | Hi-Z | Hi-Z |
| Standby | Hi-Z | Hi-Z | L |
| Charge in Progress | L | Hi-Z | L |
| Charge Complete (EOC) | Hi-Z | L | L |
| Temperature Fault | Hi-Z | Hi-Z | L |
| Timer Fault | Hi-Z | Hi-Z | L |
| System Test Mode | L | L | L |

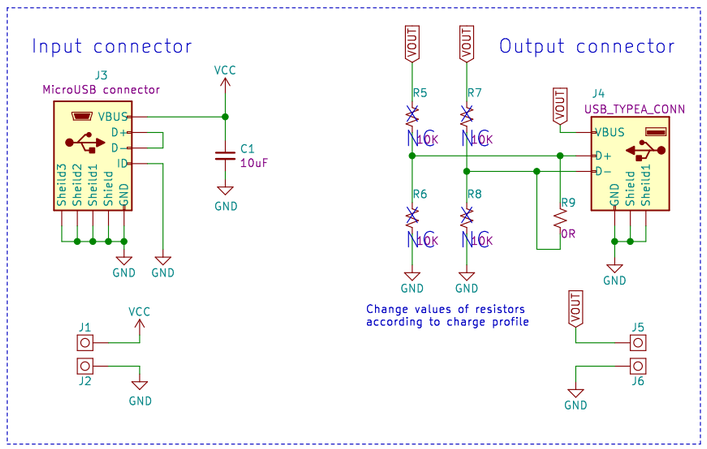
## Battery cell



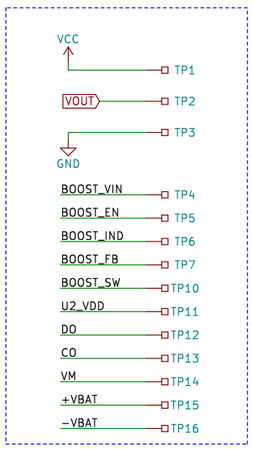

## Boost converter 3.7 [V] -> 5 [V]




## Connectors




## Test points




## Specifications:

Vin (VCC) = 5[V]
Vout = 5[V]
Max output current = 1[A]
Battery charge current = 1[A]
*For other charge currents change Rprog
** The max output current and power
are determined by the battery cell
MAKE SURE YOUR BATTERY CAN WITSTAND THE MAX RATINGS

X
NC – Marks 'not connected' components

Rechargable 5[V] power bank

Designed by Shahar S.

Sheet: /
File: Battery Charger Rev 0.2.sch

**Title:** Main

| Size: A3 | Date: 7-Jul-2020 | **Rev:** 0.11 |
|---|---|---|
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