Rechargable 5[V] power bank

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

Battery charger

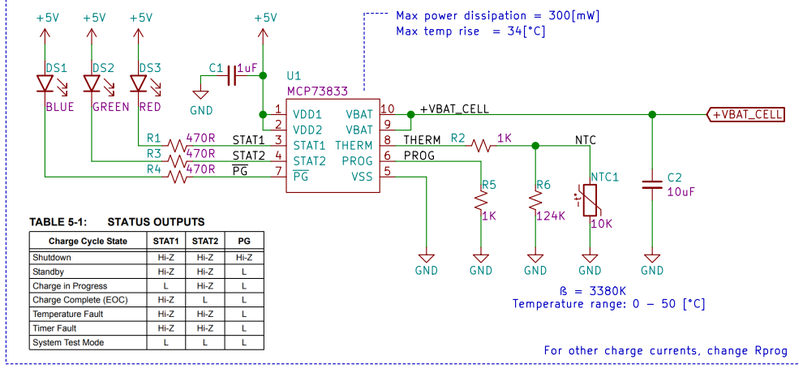
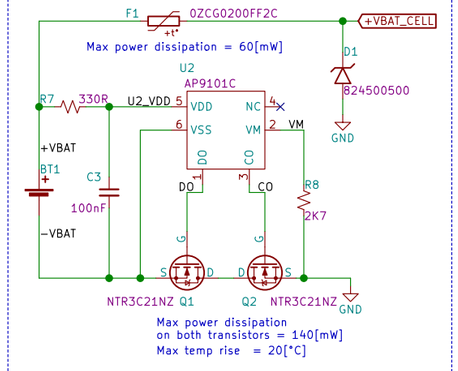


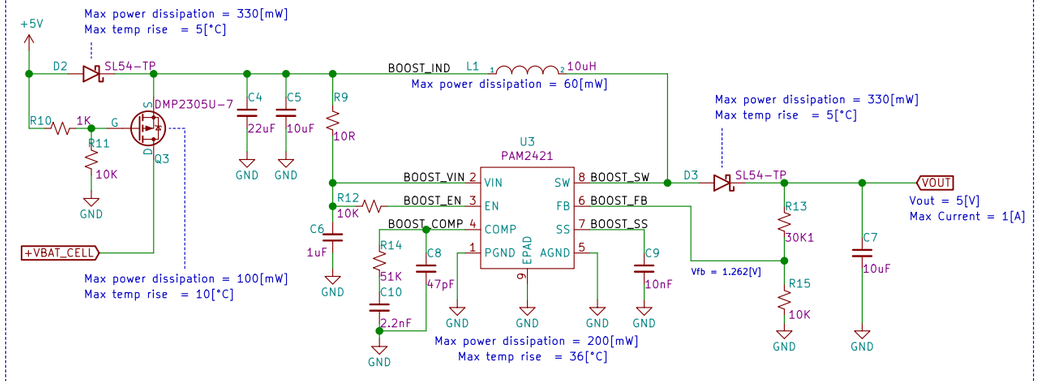
TABLE 5-1: STATUS OUTPUTS

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

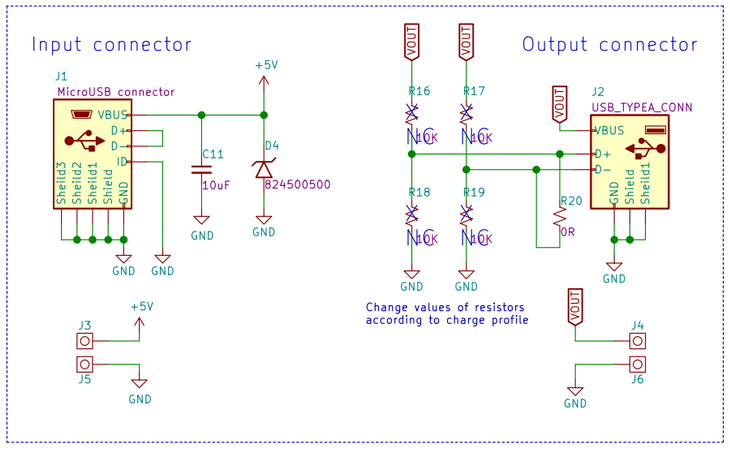
Battery cell



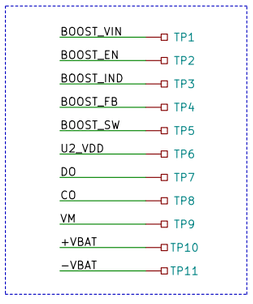
Boost converter 3.7 [V] -> 5 [V]



Connectors



Test points



Specifications:

Vin = 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 WITHSTAND THE MAX RATINGS

X
NC - Marks 'not connected' components

Rechargable 5[V] power bank

Designed by Shahar S.

Sheet: /
File: Battery Charger Rev 0.3.sch

Title: Main

Size: A3 | Date: 7-Jul-2020 | **Rev:** 0.3
KiCad E.D.A. kicad (5.1.6)-1 | Id: 1/1