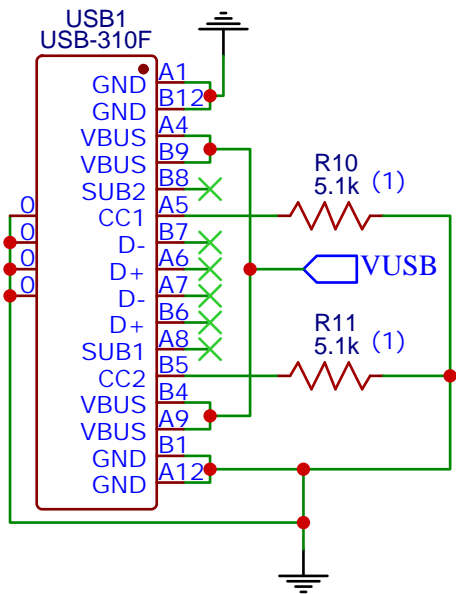
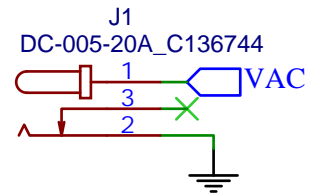


USB Connector

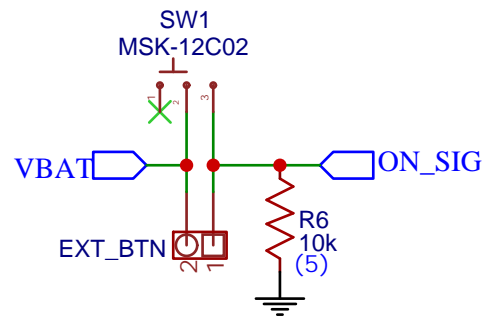


(1) Tolerance < 10%

DC Connector

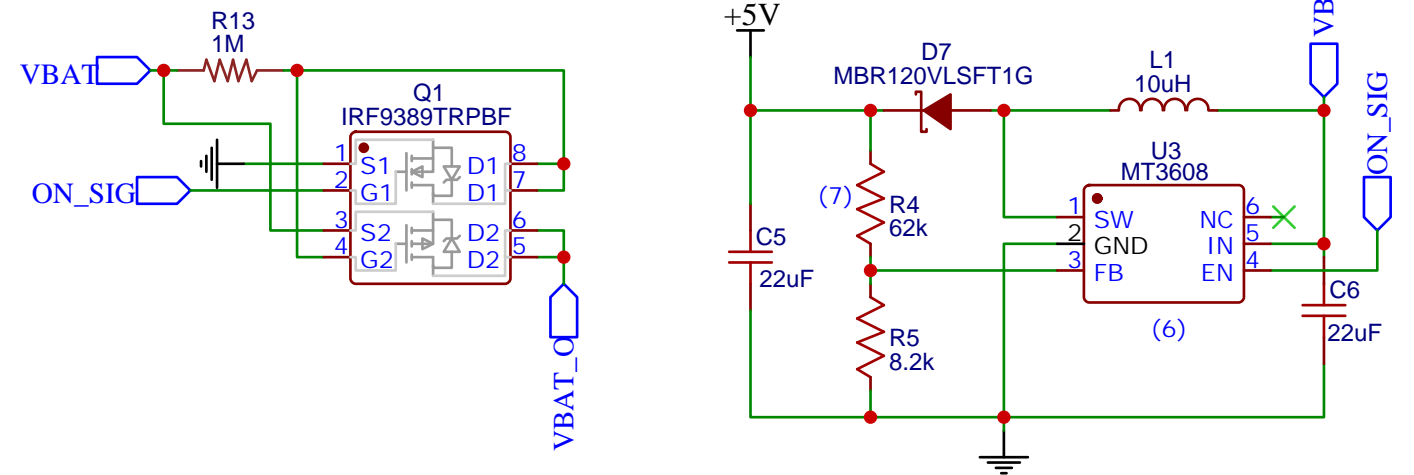


On-Off Switch



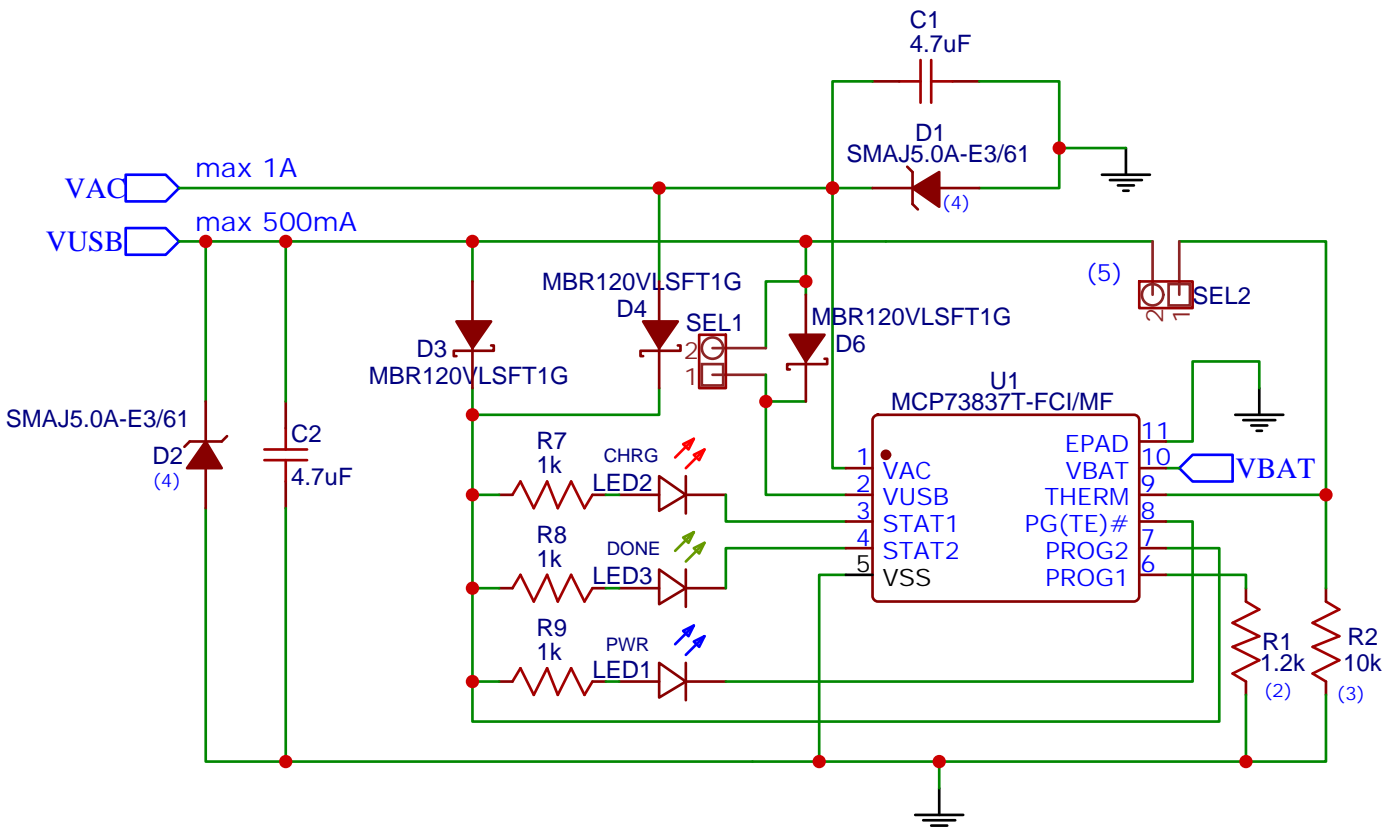
(5) Pull-down resistance to avoid sudden and undesired power up

5V Regulator



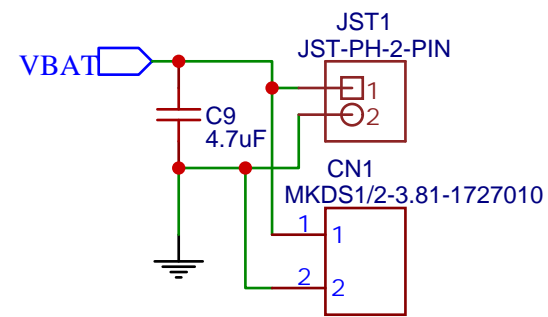
(6) Again, MT3606 reveals its very nature: to be a poor and cheap components because it can't be really turned off! The path between VBAT and 5V remain active even if EN is LOW
 (7) The ratio between R4 and R5 regulate the voltage output $V_o = V_{ref} * (1 + R4/R5)$ where $V_{ref} = 0.6$
 (8) A generic Schottky diode could absorb between 0,2 and 0,5V. In this case is 0.35V@2A.

Recharge Circuit

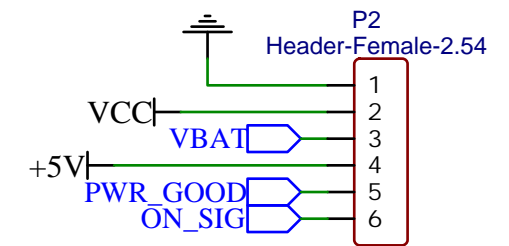


(2) 1k to allow up to 1A battery charge. NOTE that the charge termination is influenced by this resistor. More info on the datasheet.
 (3) Possibility to add a real battery temperature sensor instead placeholder resistor
 (4) Surface Mount TRANSZORB® Transient Voltage Suppressors
 (5) To work as LDO (no battery attached) $V_{therm} > V_{dd} - 100mV$ (open SEL1 and short SEL2).

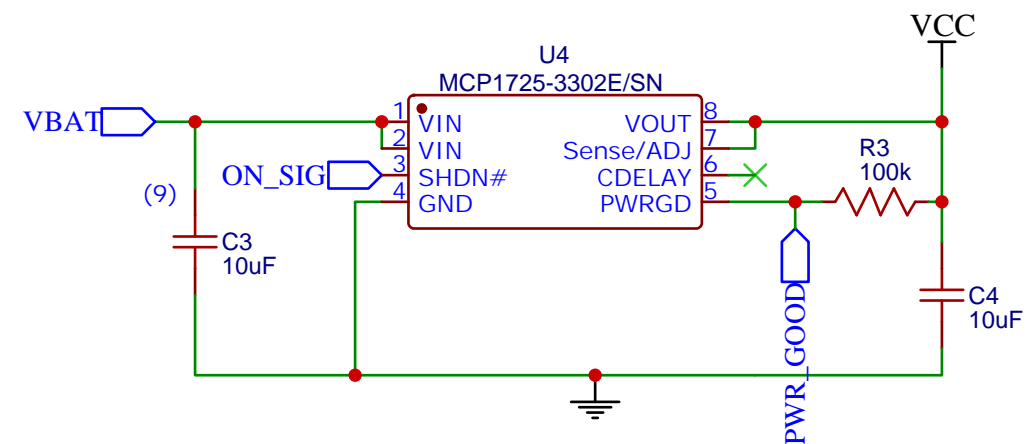
Battery Connectors



Output Header



3.3V Regulator



(9) $C_{in} \geq C_{out}$, as close as possible to V_{in}

TITLE: LiPo Power Board		REV: 3.0.0
Company: -		Sheet: 1/1
Date: 2021-04-24	Drawn By: Fabiano Riccardi	