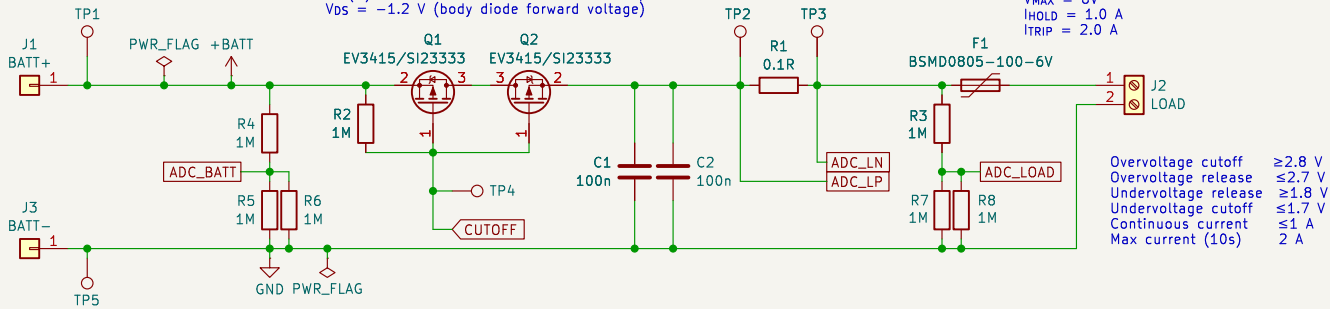


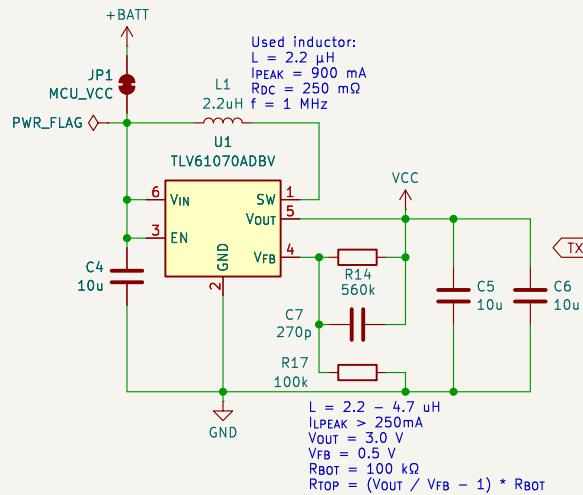
EV3415
 $R_{DS(on)} < 46 \text{ m}\Omega$ for $V_{GS} = -1.8 \text{ V}$, $I_D = -6 \text{ A}$
 $V_{GS(th)} < -1 \text{ V}$ for $V_{DS} = V_{GS}$, $I_D = -250 \mu\text{A}$
 $V_{DS} = -1 \text{ V}$ (body diode forward voltage)

SI2333
 $R_{DS(on)} < 45 \text{ m}\Omega$ for $V_{GS} = -1.8 \text{ V}$, $I_D = -5 \text{ A}$
 $V_{GS(th)} < -1 \text{ V}$ for $V_{DS} = V_{GS}$, $I_D = -250 \mu\text{A}$
 $V_{DS} = -1.2 \text{ V}$ (body diode forward voltage)

F1
 $V_{MAX} = 6\text{V}$
 $I_{HOLD} = 1.0 \text{ A}$
 $I_{TRIP} = 2.0 \text{ A}$

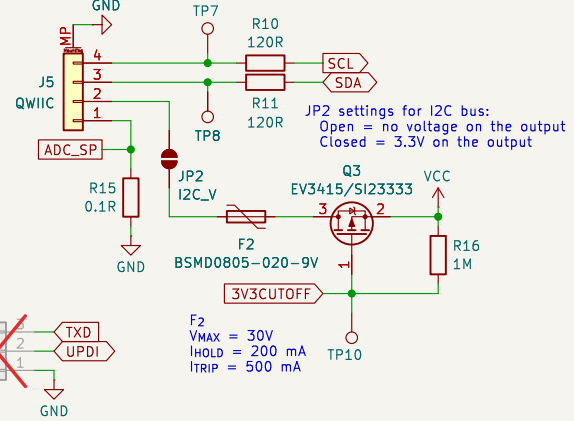
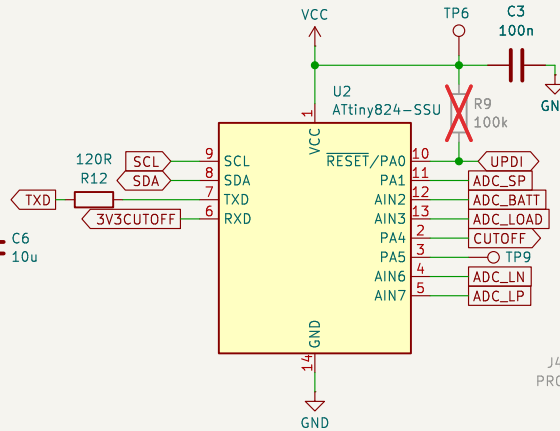


Overvoltage cutoff $\geq 2.8 \text{ V}$
 Overvoltage release $\leq 2.7 \text{ V}$
 Undervoltage release $\geq 1.8 \text{ V}$
 Undervoltage cutoff $\leq 1.7 \text{ V}$
 Continuous current $\leq 1 \text{ A}$
 Max current (10s) 2 A



Used inductor:
 $L = 2.2 \mu\text{H}$
 $I_{PEAK} = 900 \text{ mA}$
 $R_{DC} = 250 \text{ m}\Omega$
 $f = 1 \text{ MHz}$

$L = 2.2 - 4.7 \mu\text{H}$
 $I_{LPEAK} > 250 \text{ mA}$
 $V_{OUT} = 3.0 \text{ V}$
 $V_{FB} = 0.5 \text{ V}$
 $R_{BOT} = 100 \text{ k}\Omega$
 $R_{TOP} = (V_{OUT} / V_{FB} - 1) * R_{BOT}$



JP2 settings for I2C bus:
 Open = no voltage on the output
 Closed = 3.3V on the output

F2
 $V_{MAX} = 30\text{V}$
 $I_{HOLD} = 200 \text{ mA}$
 $I_{TRIP} = 500 \text{ mA}$

Vlastimil Slinták
 μArt.cz

Sheet: /
 File: lto-bms-revB-panel.kicad_sch

Title: LTO Battery Management System

Size: A4 Date: 2024-10-24

KiCad E.D.A. 9.0.1

Rev: B

Id: 1/1