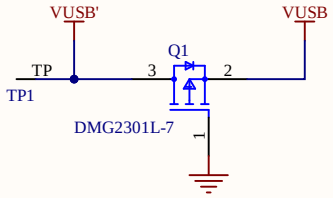
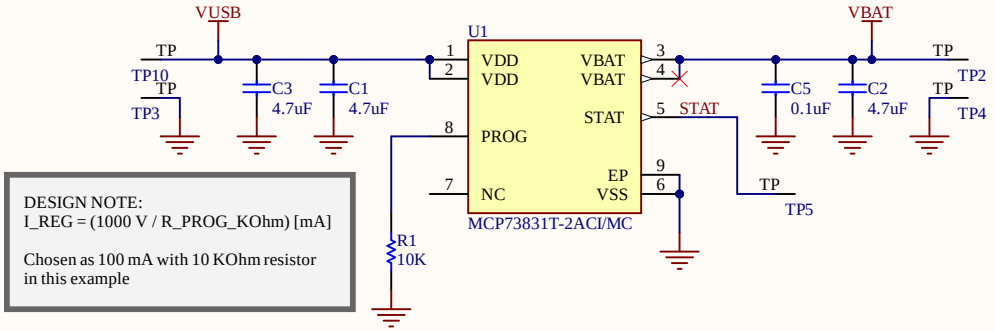
Reverse Protection



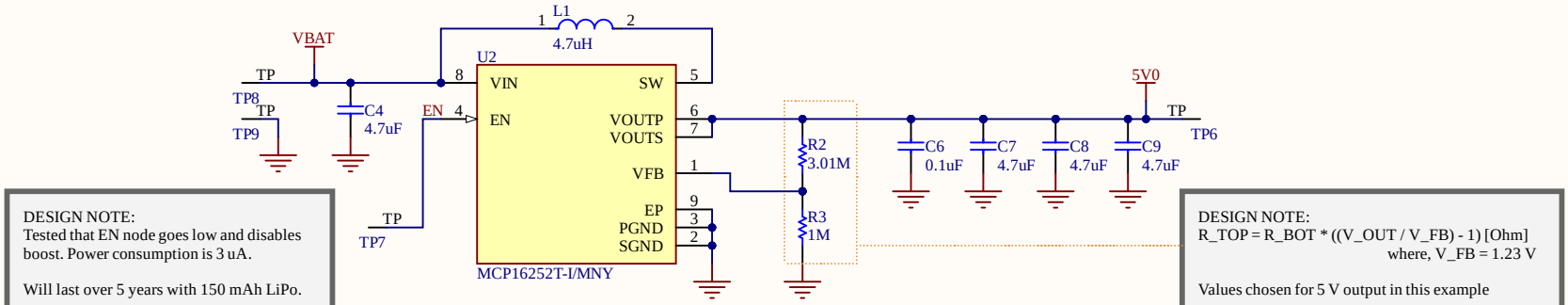
Li-Po Charger (4.2 V)



DESIGN NOTE:
I_REG = (1000 V / R_PROG_KOhm) [mA]

Chosen as 100 mA with 10 KOhm resistor in this example

Boost Converter (5 V)



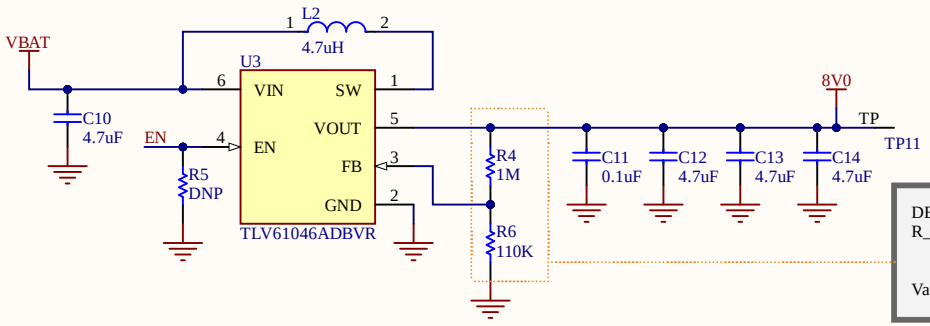
DESIGN NOTE:
Tested that EN node goes low and disables boost. Power consumption is 3 uA.

Will last over 5 years with 150 mAh LiPo.

DESIGN NOTE:
R_TOP = R_BOT * ((V_OUT / V_FB) - 1) [Ohm]
where, V_FB = 1.23 V

Values chosen for 5 V output in this example

Boost Converter (8 V)



DESIGN NOTE:
R_TOP = R_BOT * ((V_OUT / V_FB) - 1) [Ohm]
where, V_FB = 0.8 V

Values chosen for 8 V output in this example

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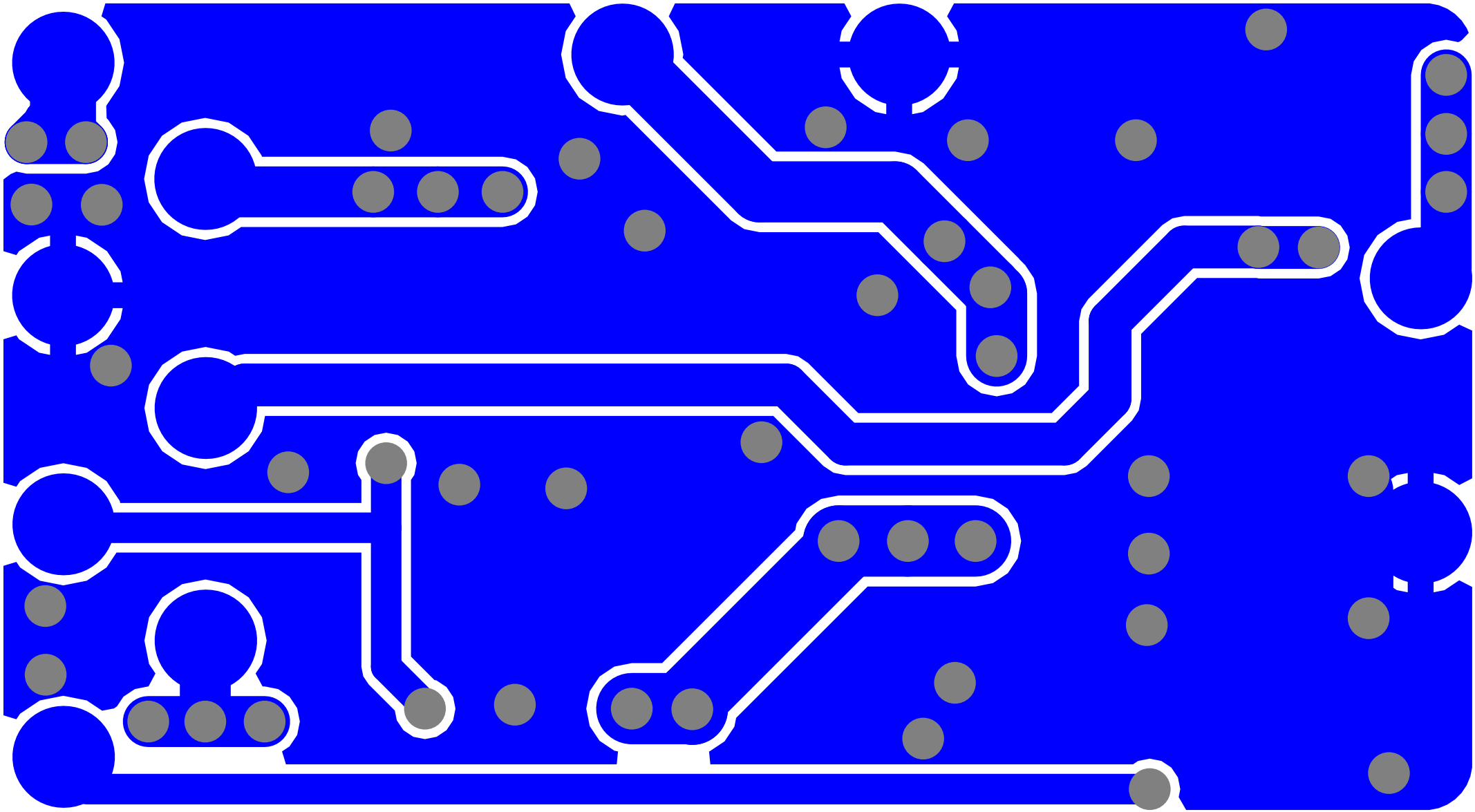
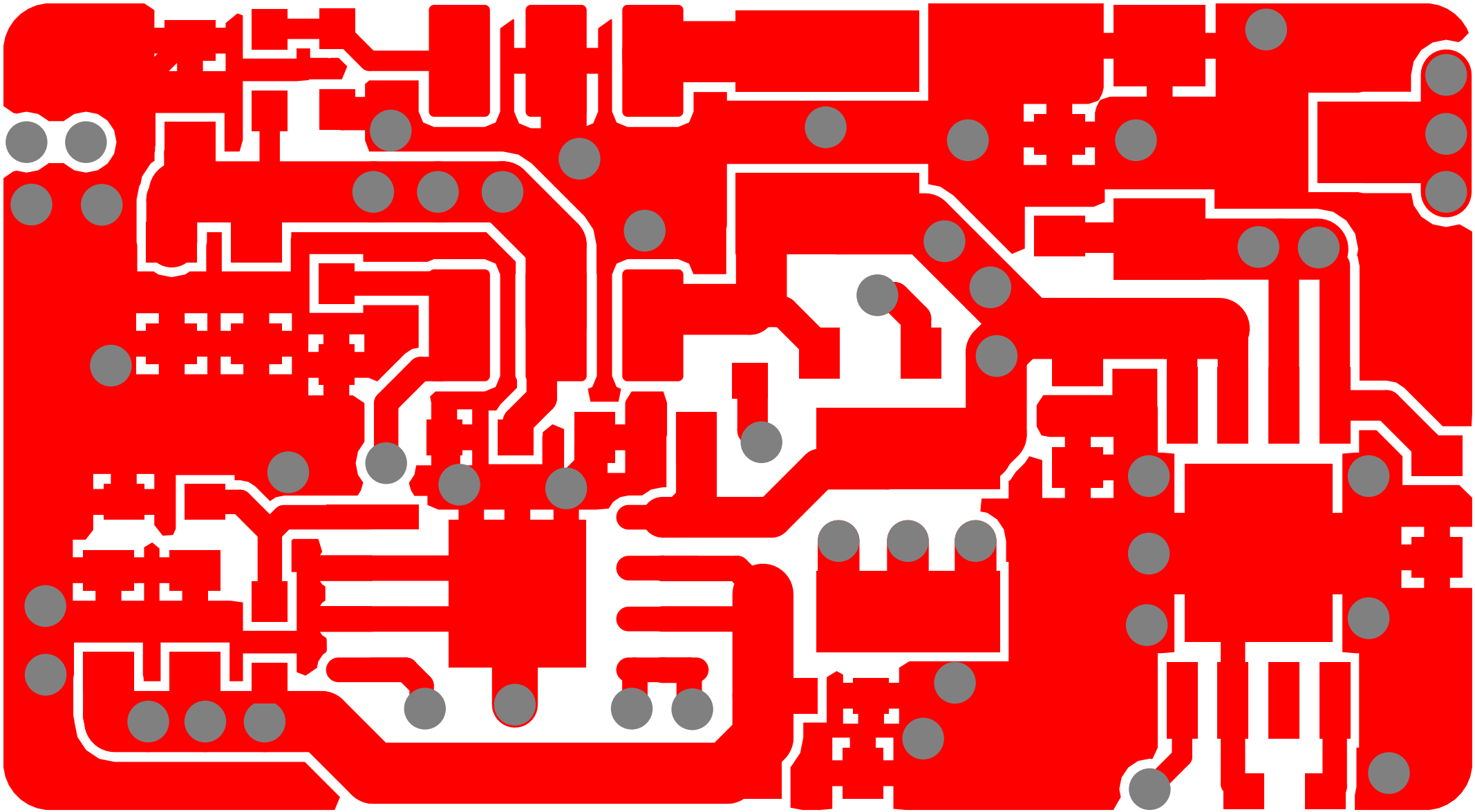
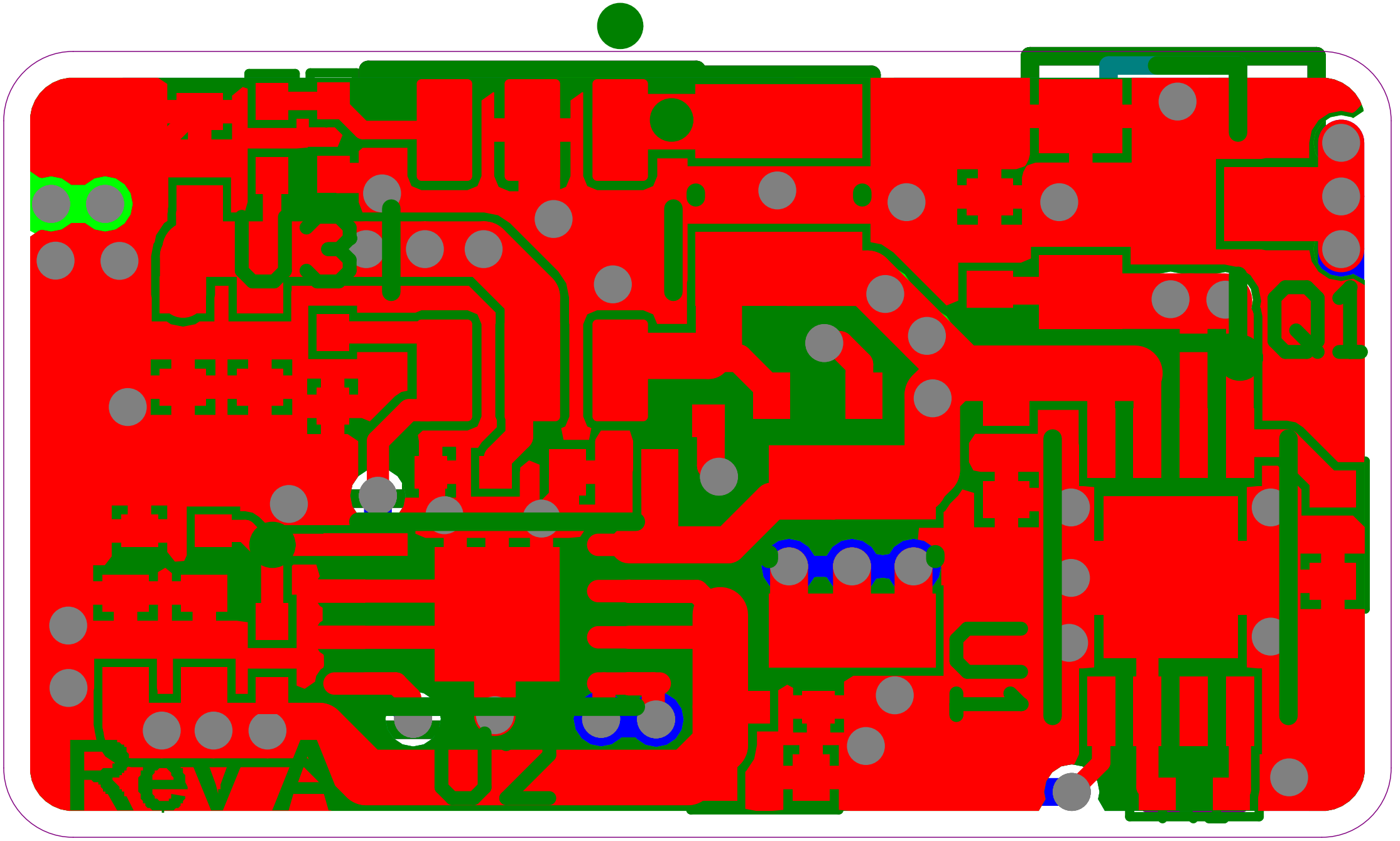
Project: Power.PrjPcb	
Name: Schematic.SchDoc	
Date: 2023-08-28	Sheet 1 of 1






U3
Q1
Rev A