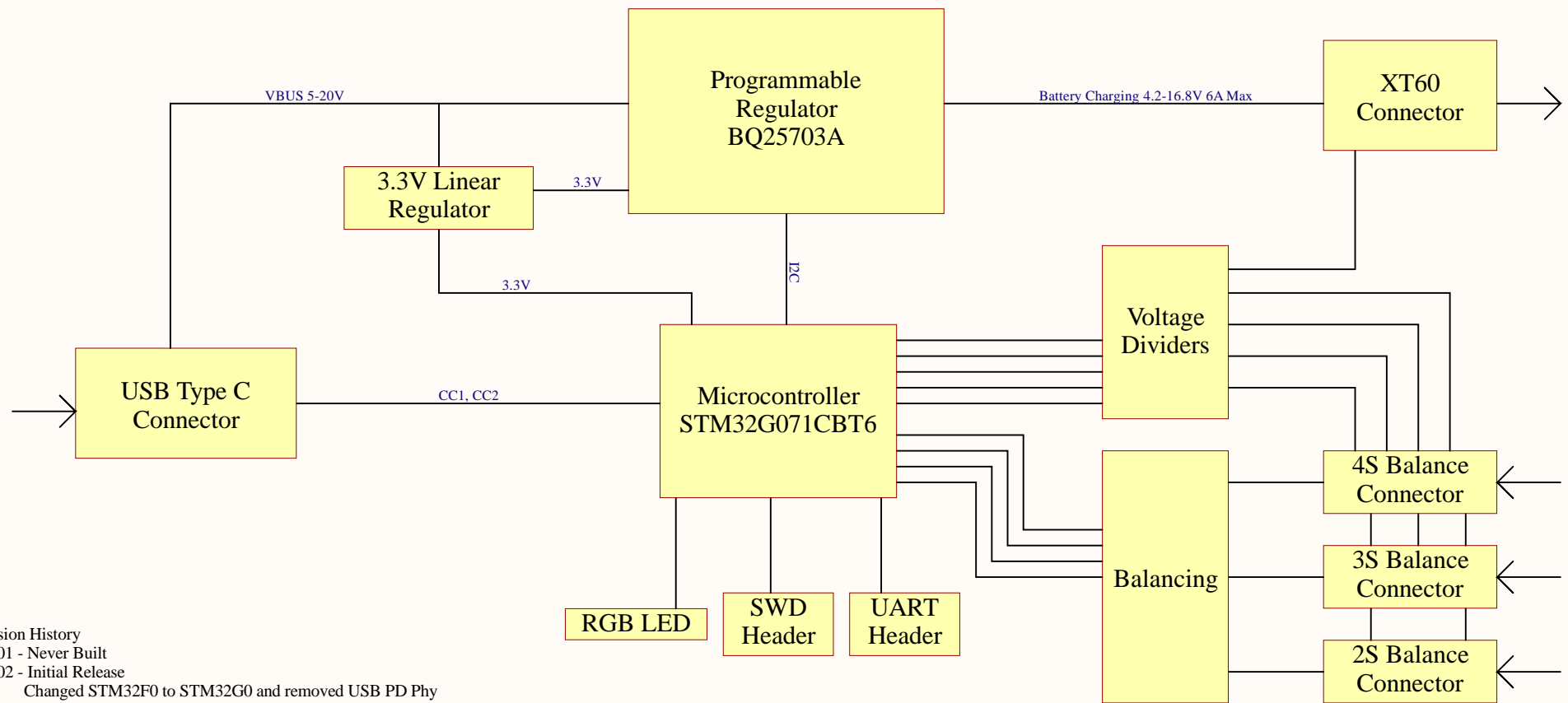


LiPow - The USB Type C with Power Delivery LiPo Battery Charger



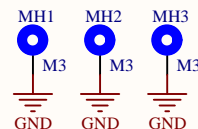
Revision History

Rev 01 - Never Built

Rev 02 - Initial Release

Rev 03 - Changed STM32F0 to STM32G0 and removed USB PD Phy

- Changed R12 from 10k Ω to 5.36k Ω to increase ADC range
- Removed R11 to increase ADC range
- Changed R10 from 3.3k Ω to 3.57k Ω to increase ADC range
- Change R9 and R19 from 10K Ω to 3.57k Ω and remove R21 and R18 to decrease ADC error
- Changed R51 from 40.2k Ω to 10k Ω to increase SYSOVP limit
- Changed R3 and R4 from 3.3k Ω to 1.2k Ω to decrease I2C rise time
- Added R44, R48, R58, R59 for USB PD DB
- Added D4, D5, D6, D7, and D8 for balance port ADC ESD protection
- Change R26, R28, R30, and R32 from 100 Ω to 47 Ω and increase power rating
- Add Q6, Q7, R2, R11, R18, R21, R22, and R23 to have option for CC input protection and level shifting



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Page Title:
Cover Sheet

Drawn By: Alex Klimaj

Project Title:
USB Type C PD 3.0 Lipo Charger

Checked By: *

Date: 4/30/2019

Time: 4:33:04 PM

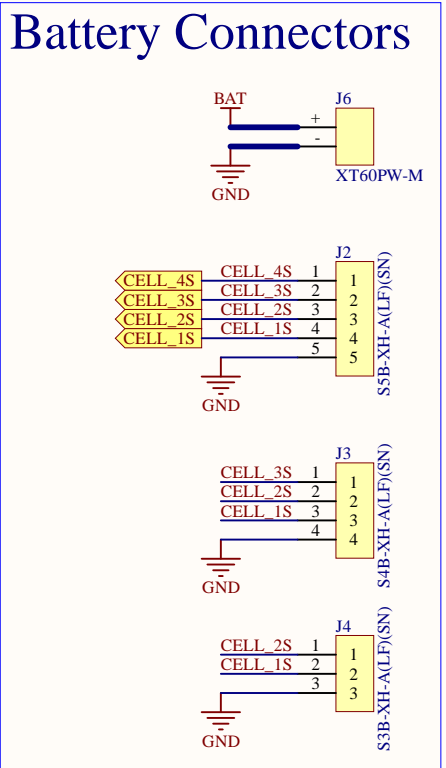
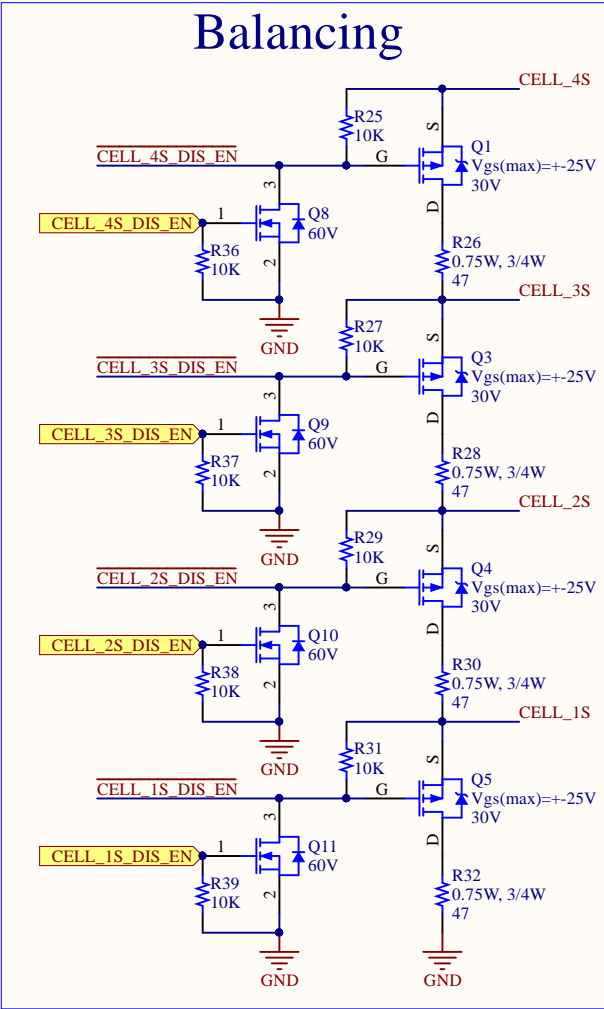
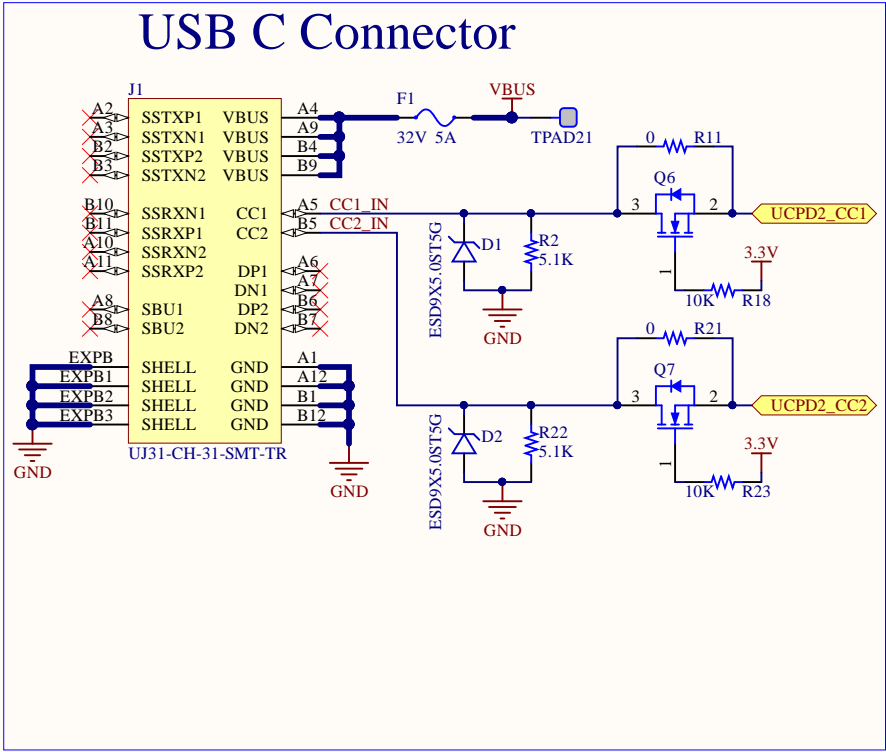
Revision: 3.0

Variant: [No Variations]

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Sheet 1 of 4

Connectors, USB PD, and Balancing



Alternates for Q1, Q3, Q4, and Q5

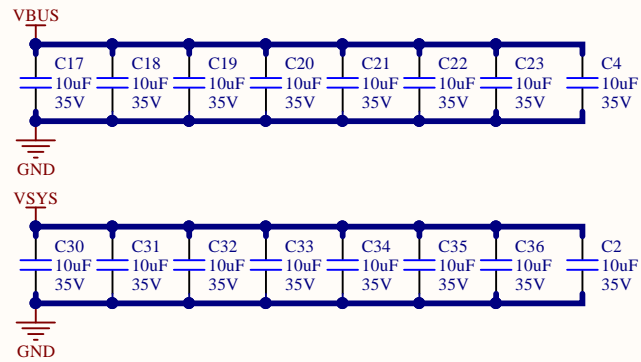
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- DMP510DL-7
- PMV250EPEAR
- Si2347DS

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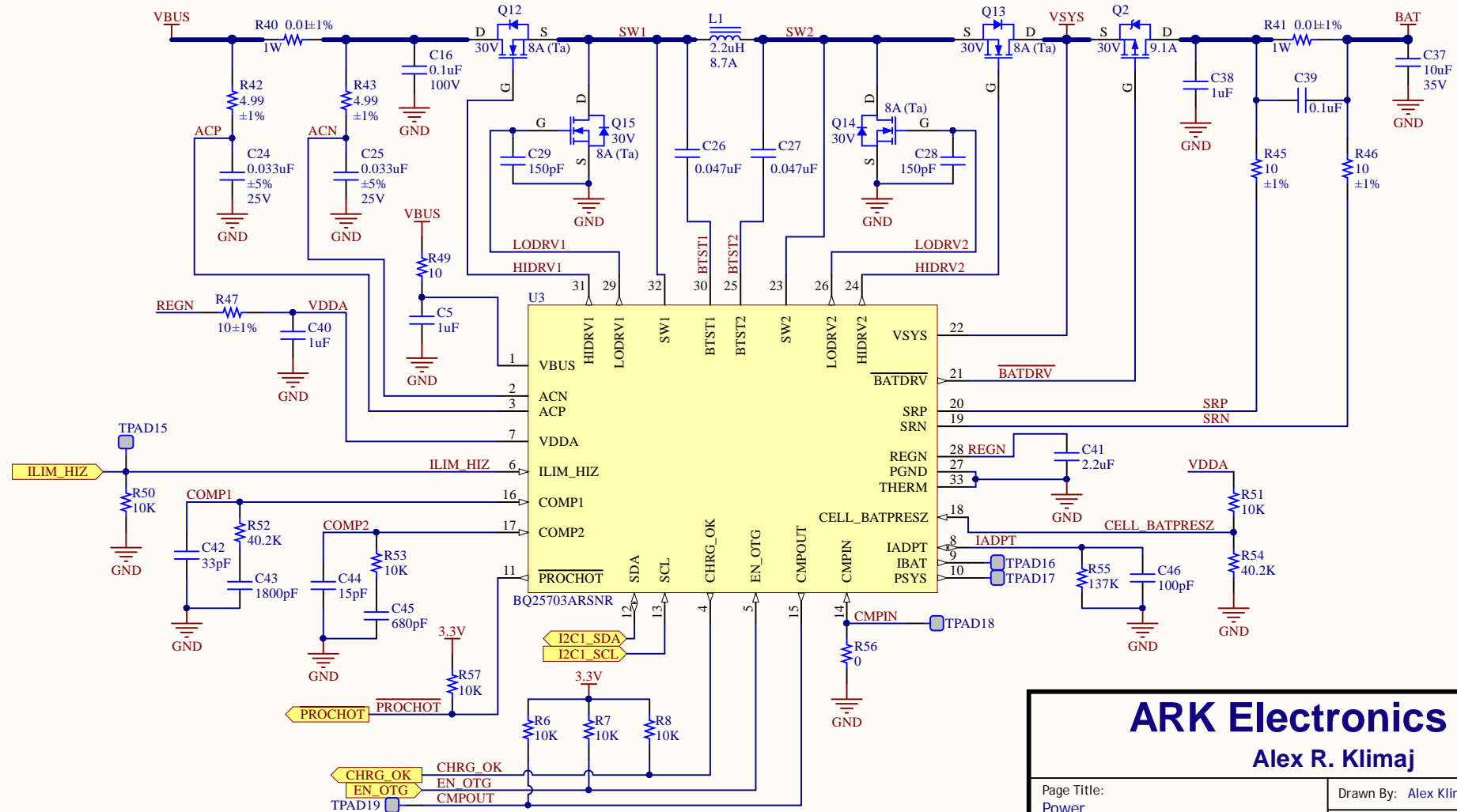
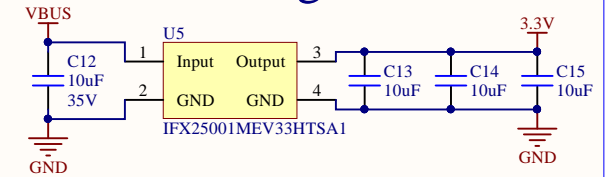
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Project Title: USB Type C PD 3.0 Lipo Charger	Checked By: *
Date: 4/30/2019	Time: 4:33:04 PM
Size: LETTER	Sheet 2 of 4

Power



3.3V Power Requirements
Oscillator - 10mA
FUSB302BMPX - 25uA
STM32F030K6T6TR - 120mA
RGB LED - 15mA
Total = 145mA
Total x 30% = 190mA

3.3V Regulator



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Page Title: Power	Drawn By: Alex Klimaj		
Project Title: USB Type C PD 3.0 Lipo Charger	Checked By: *		
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Size: LETTER		Sheet 3	of 4

