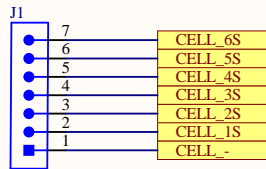
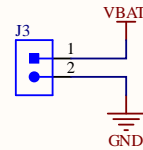


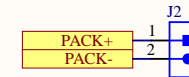
Battery Balancing



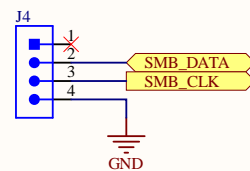
Battery In



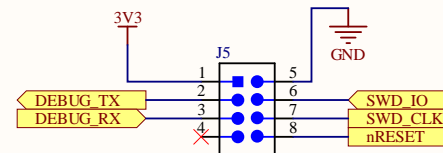
Pack Out



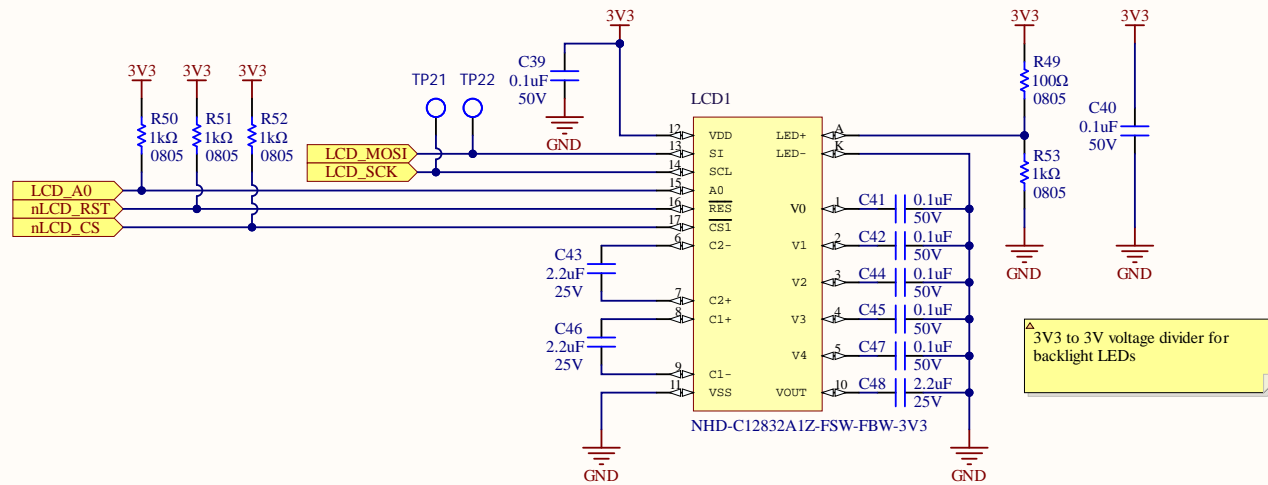
EV2400



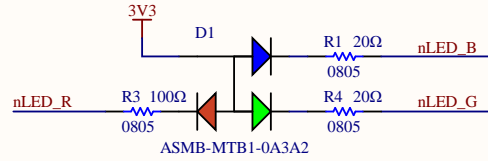
Debug/Programing



LCD



Test LEDs

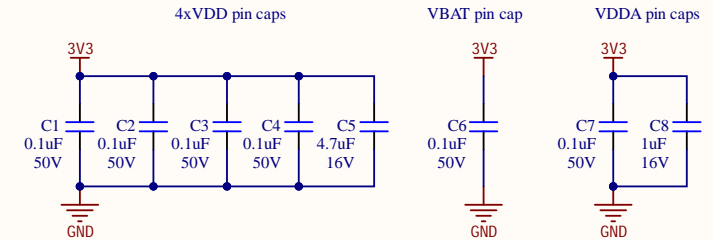


Current Calculations

Green LED voltage drop: 2.2V
 $I = (3.3 - 2.2V) / 100 = 11mA$

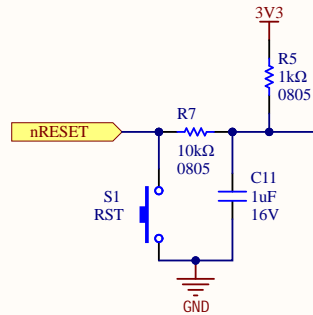
RGB LED voltage drops:
 - Red: 2.1V: $I = (3.3 - 2.1V) / 100 = 12mA$
 - Blue: 3.1V: $I = (3.3 - 3.1V) / 20 = 10mA$
 - Green: 3.1V: $I = (3.3 - 3.1V) / 20 = 10mA$

Decoupling Caps



STM32F446RET6

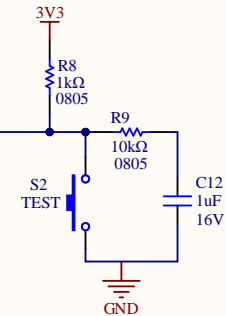
Reset Button



For Debounce Circuit:

$T = RC \rightarrow C = T/R$
 $C = 10ms / 10kOhms = 1uF$

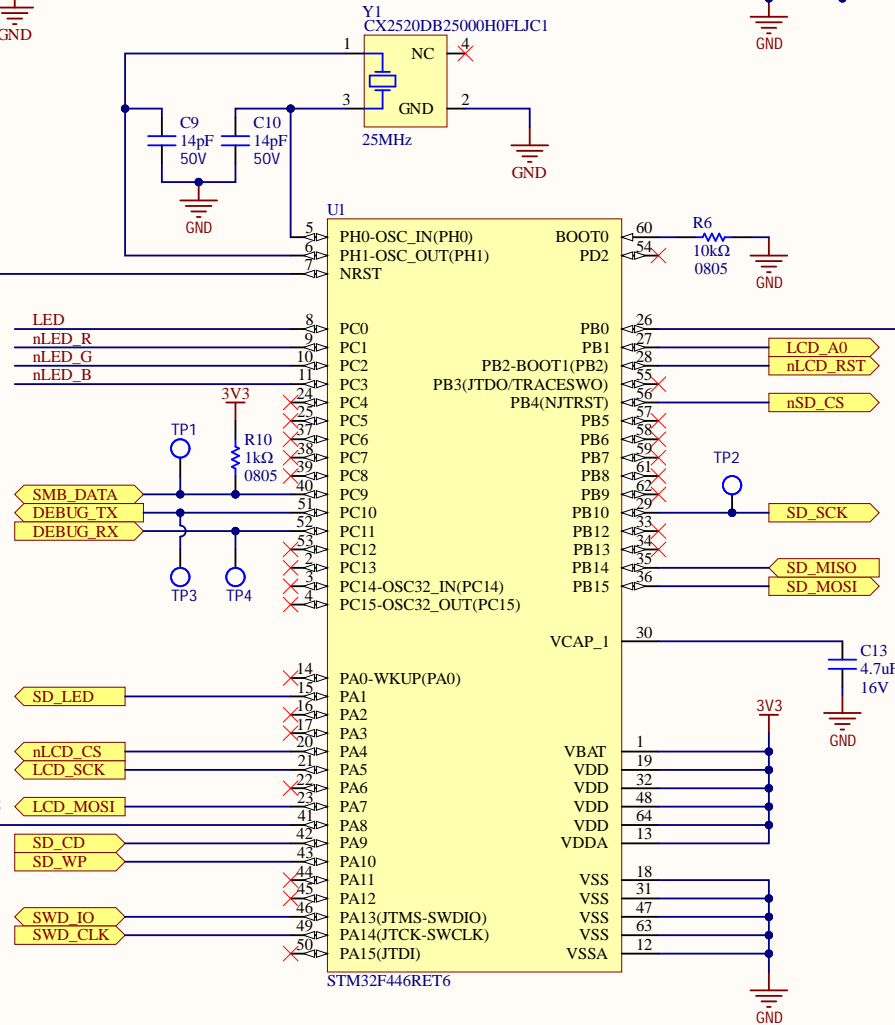
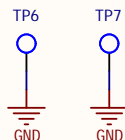
Test Button



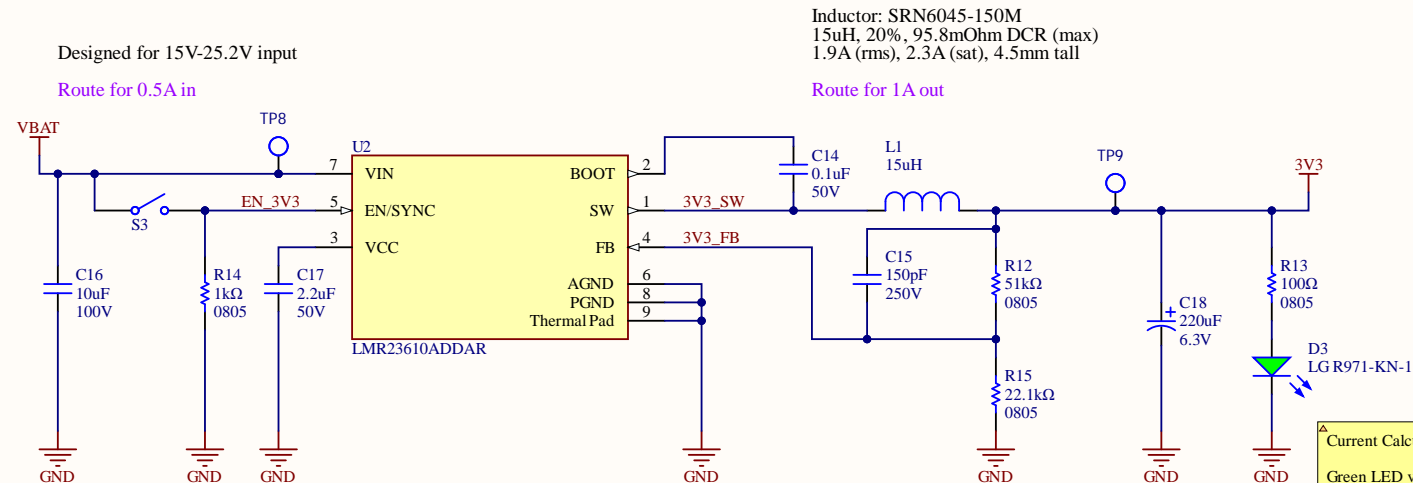
For Debounce Circuit:

$T = RC \rightarrow C = T/R$
 $C = 10ms / 10kOhms = 1uF$

GND Test Points



Battery Voltage to 3V3 Buck @ 1A Max



Max expected power on output = 1.65W
Max current = 0.5A
Expected Efficiency at 1A > 87.7%

SD Card Connector

