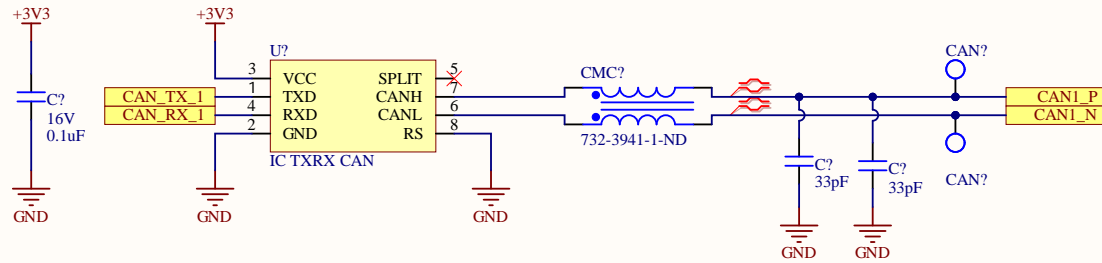
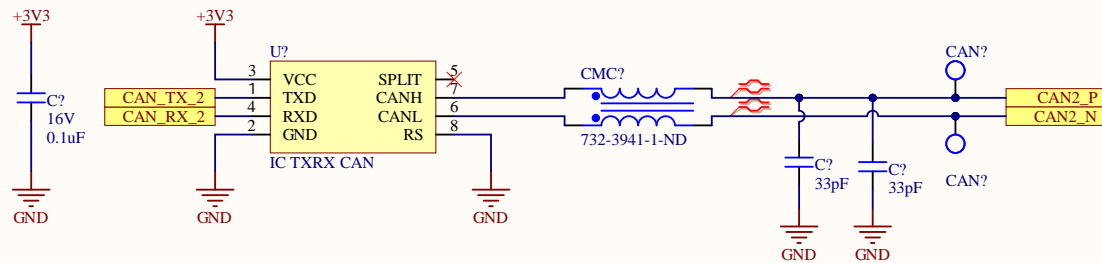


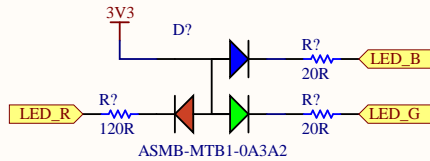
# CAN 1



# CAN 2



## Test LEDs

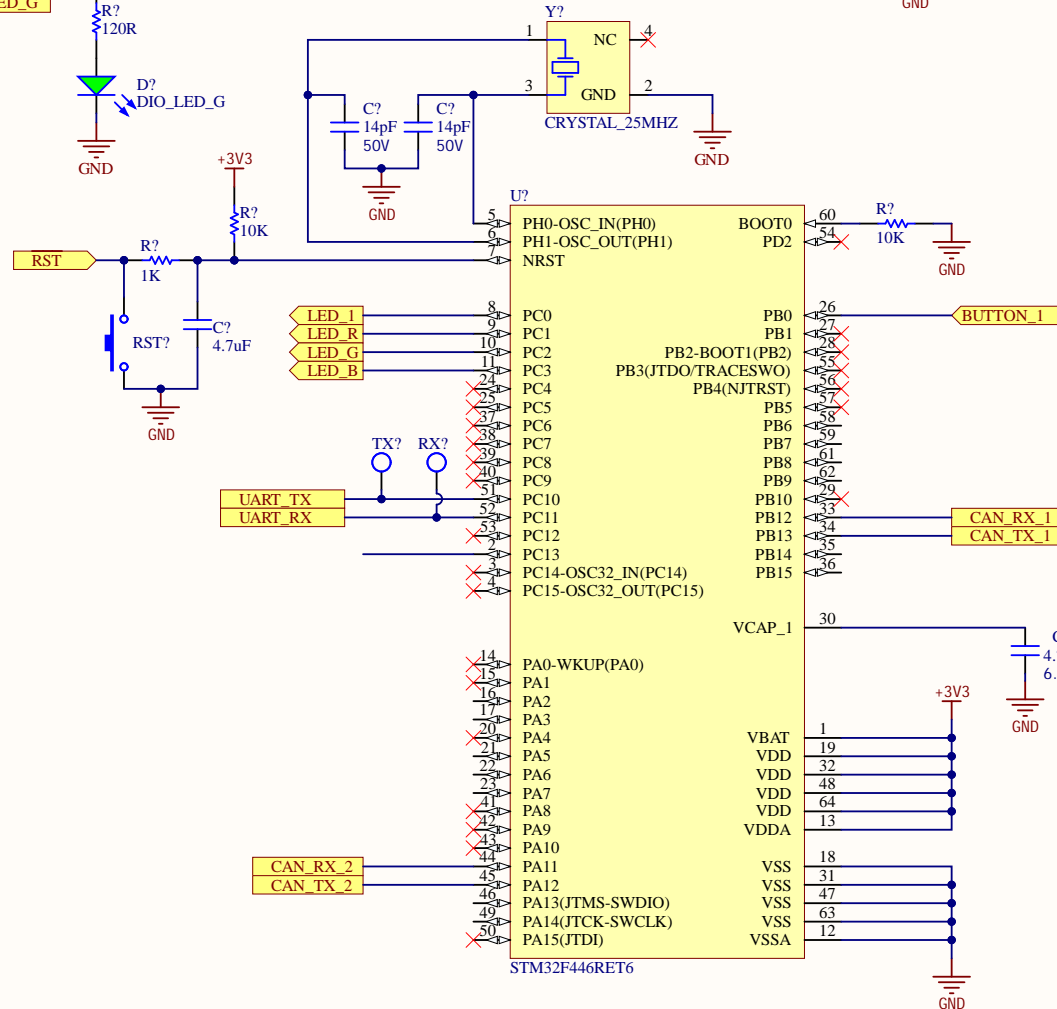


**Current Calculations**

Green LED voltage drop: 2.2V  
 $I = (3.3 - 2.2V) / 120 = 10.83mA$

RGB LED voltage drops:  
 - Red: 2.1V:  $I = (3.3 - 2.1V) / 120 = 10mA$   
 - Blue: 3.1V:  $I = (3.3 - 3.1V) / 20 = 10mA$   
 - Green: 3.1V:  $I = (3.3 - 3.1V) / 20 = 10mA$

## STM32F446RET6

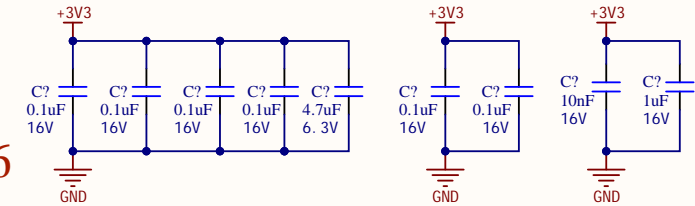


## Decoupling Caps

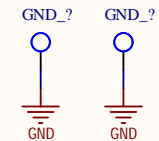
4xVDD pin caps

VDDIO pin caps

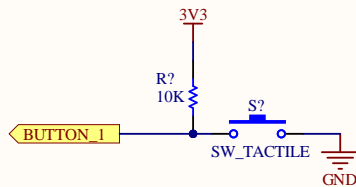
VDDA pin caps



## GND Test Points



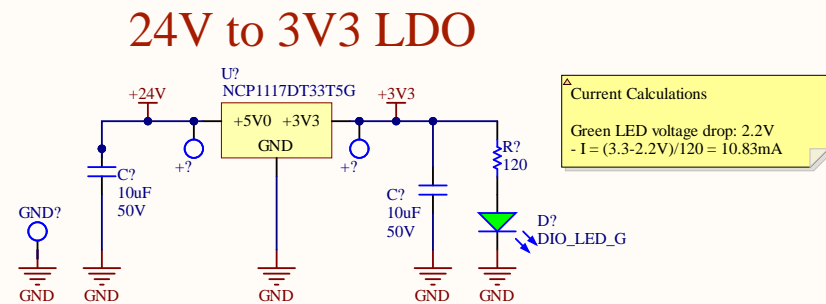
## Test Button




Title	MCU	*
Size:	Letter	Drawn By: Ayesha Ebrahi m
Date:	2020-04-29	Sheet* of *
File:	C:\Users\yayesh\Documents\GitHub\MarsRover2020-PCB\Projects\BMS\Rev1\MCU_SchDoc	

Update to new LDO

Add XTAL Connector and Battery Balancing Connector



Title Power		* * * *	
Size: Letter	Drawn By: Ayesha Ebrahim		
Date: 2020-04-29	Sheet * of *		
File: C:\Users\ayesh\Documents\GitHub\MarsRover2020-PCB\Projects\BMS\Rev1\Power_SchDoc			