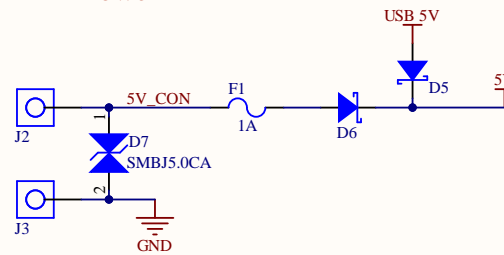
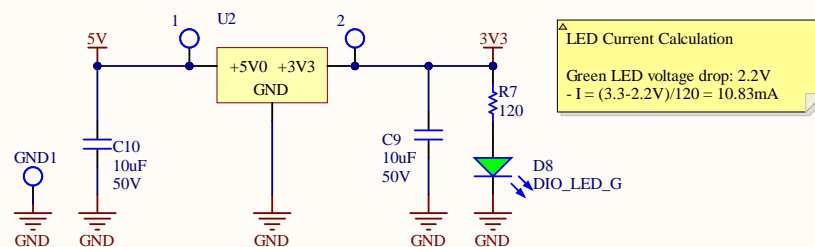


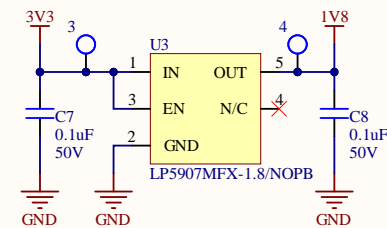
Power In



5V to 3.3V LDO



3.3V to 1.8V LDO



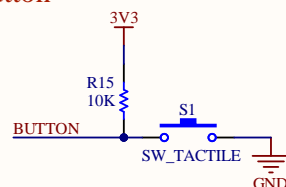
A



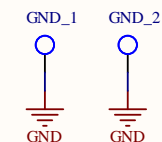
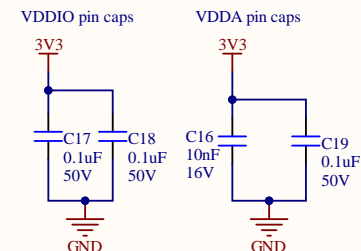
C

D

Test Button




GND Test Points



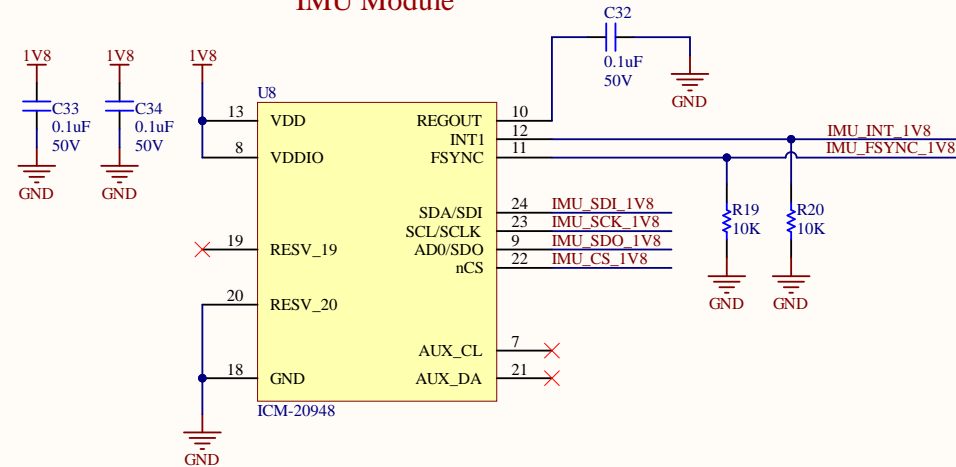
Note: Check CubeMX configuration

MOUNTING HOLES

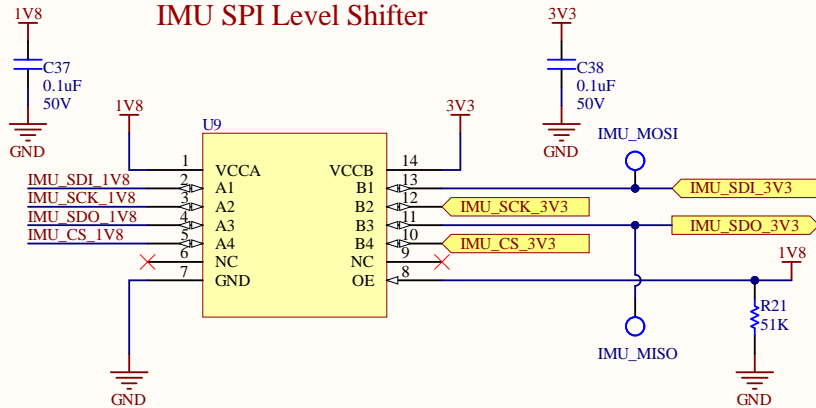
Title Localization		Altium Limited L3, 12a Rodborough Rd Frenchs Forest NSW Australia 2086	
Size: Letter	Drawn By: Alaina Hansen, Cindy Li		
Date: 2020-05-03	Sheet 8 of 7		

File: C:\UWRT\marsRover2020-PCB\Projects\Localization\Rev1\schMCU_SchDoc

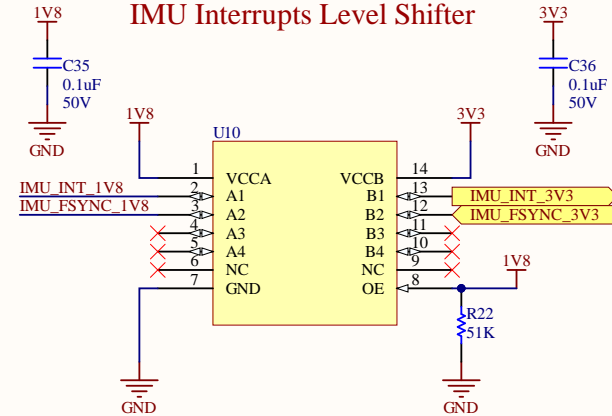
IMU Module



IMU SPI Level Shifter

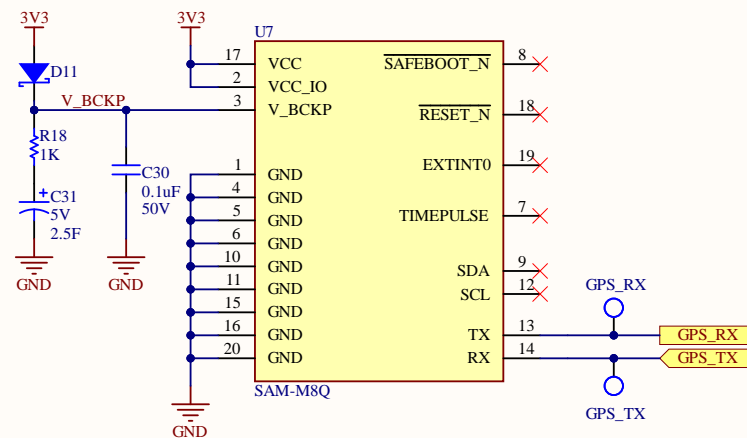


IMU Interrupts Level Shifter



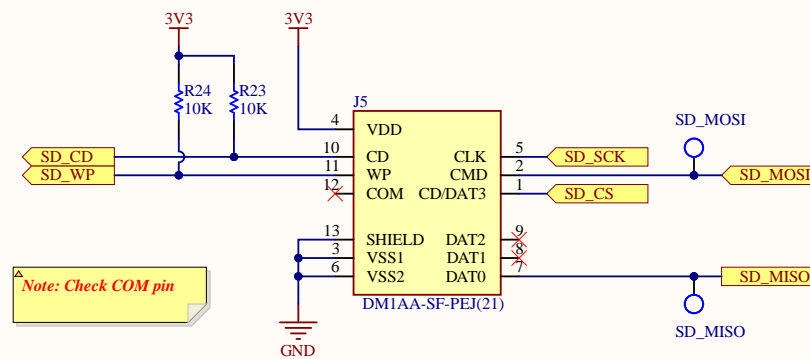
RTC Backup Power

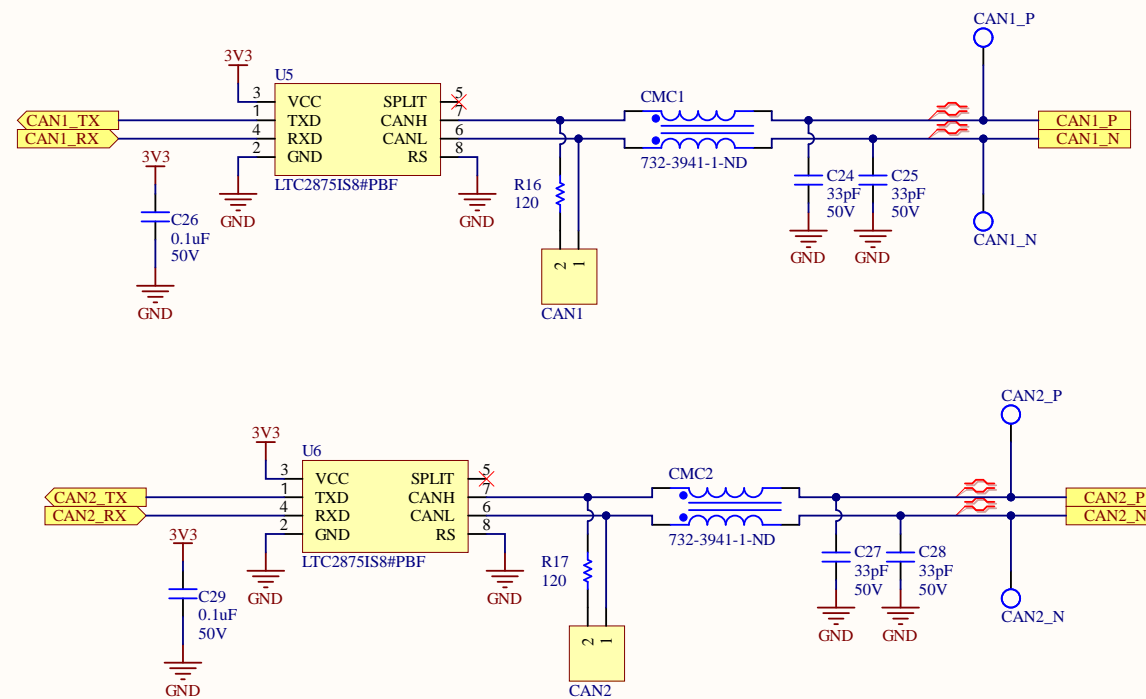
GPS Module



Supercapacitor Calculations

$V_{cc} = 3.3V$, $V_f = 0.22V$, $V_{min} = 1.4V$, $I_{bkp} = 15\mu A$, $C = 2.5F$
 $t_{bkp} = (2.5F) * (3.3V - 0.22V - 1.4V) / (15\mu A) = 280,000s = 3.241 \text{ days}$
 Capacitor tolerance: -0%, +100%





Board Stack Report