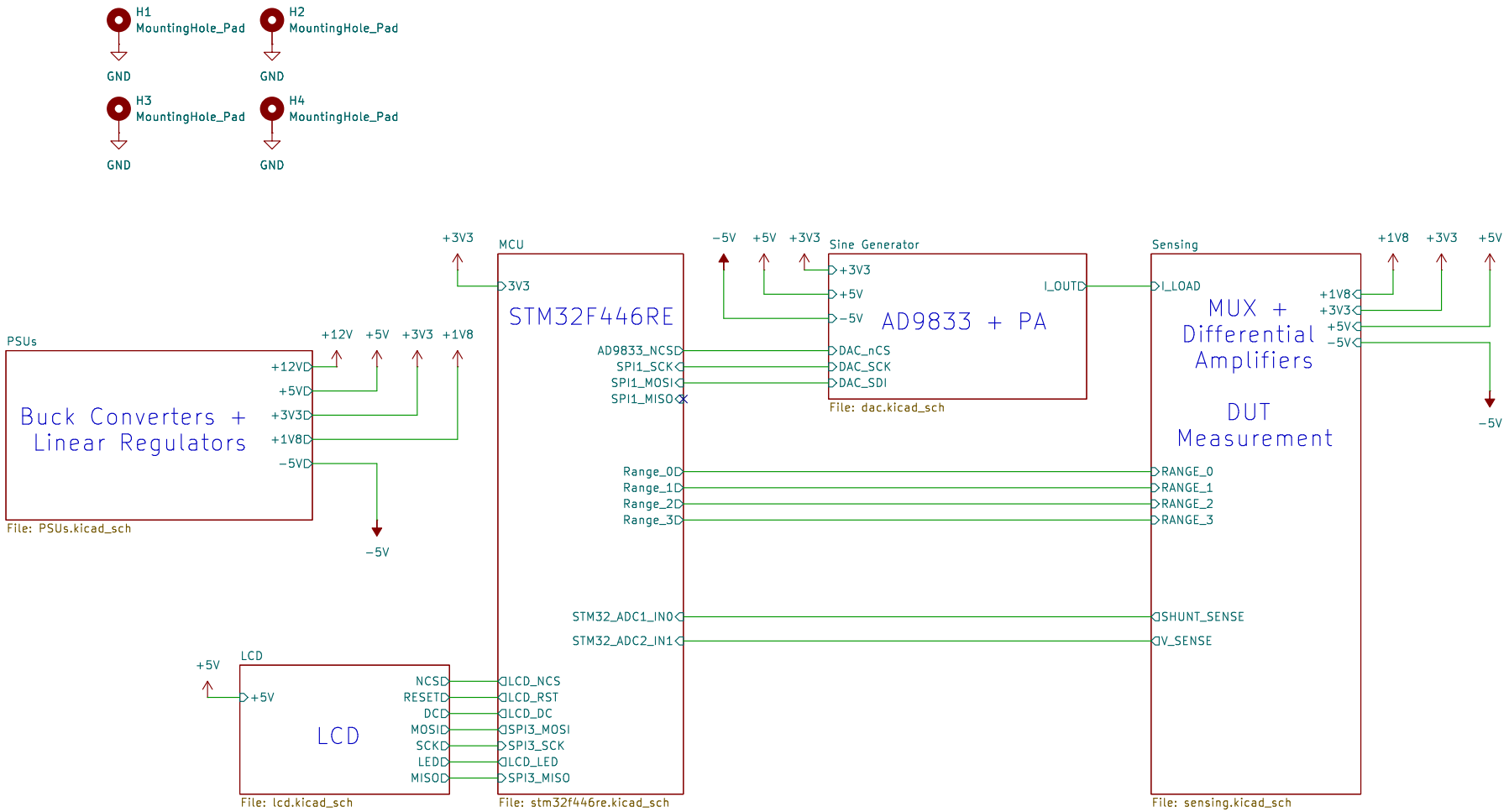

Sheet: / File: lcr−meter.kicad_sch		
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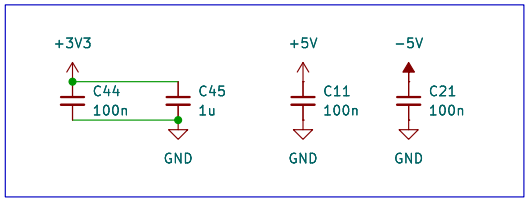
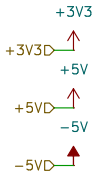
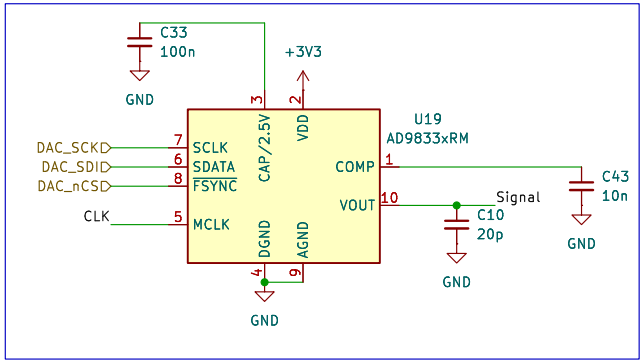
Size: A4	Date:	**Rev:**
KiCad E.D.A. 8.0.3		Id: 1/7

Supply Decoupling

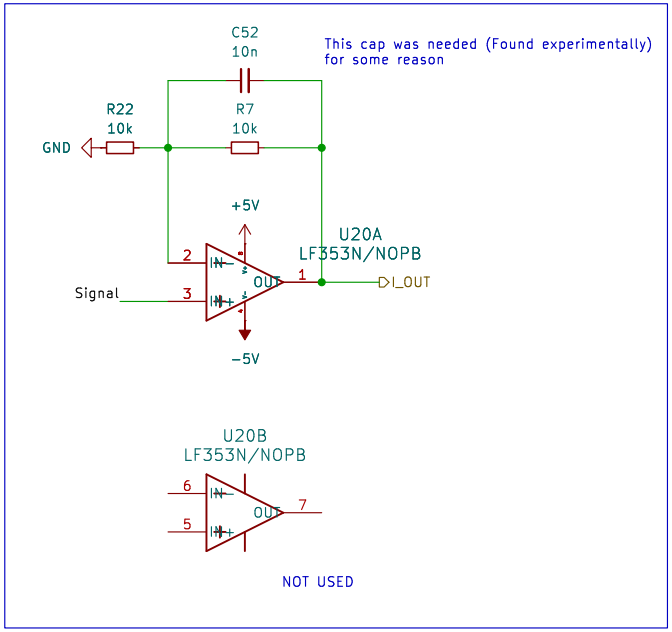




Signal Generation

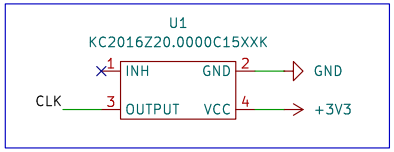


Signal Amplification/Buffering



Pin Compatible wiht LM833N

20 MHz Reference Clock



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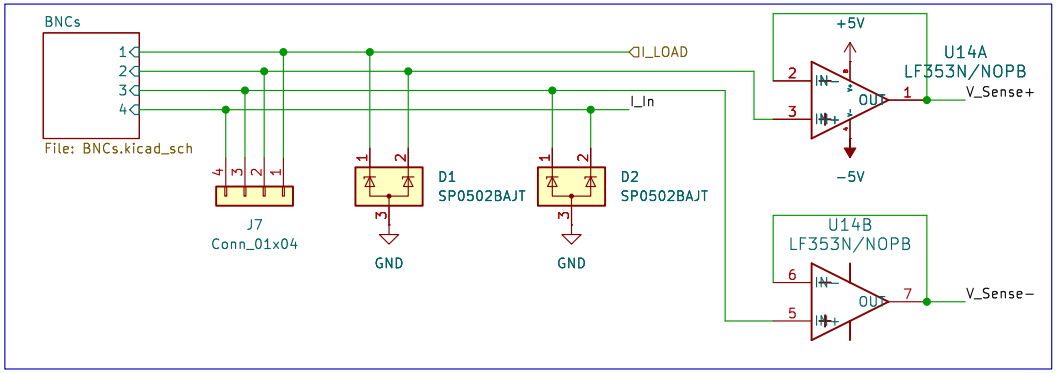
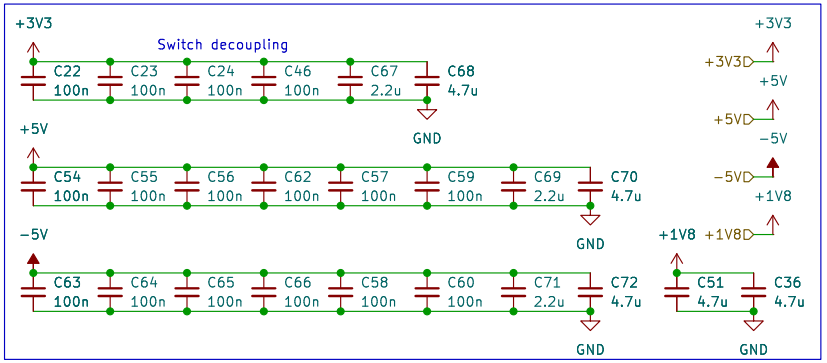
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. 8.0.3		Id: 3/7

Sensing kelvin connection

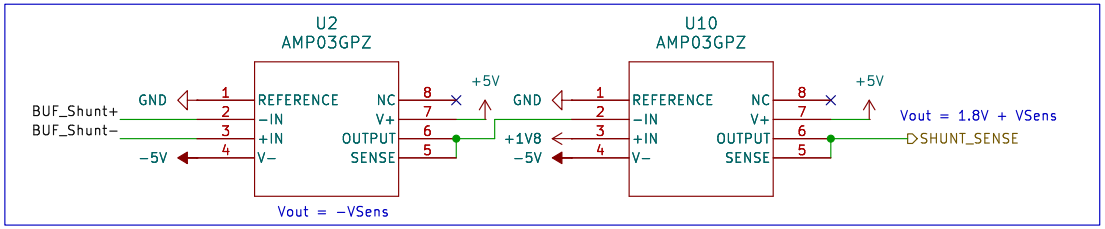


Supply Decoupling

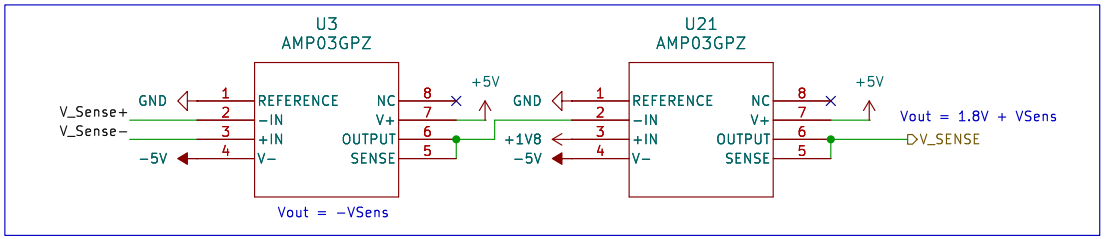


Most of these may not be needed, just here to help PSRR.
3.3V caps are more critical here for the analog switches.

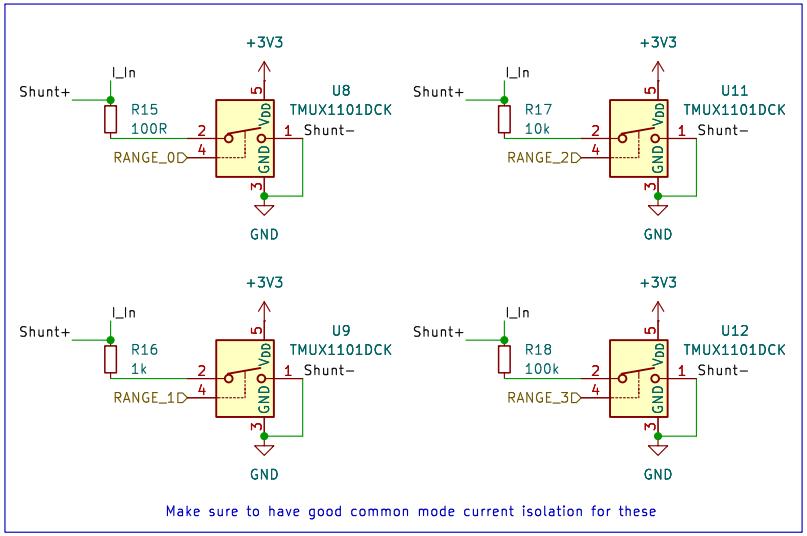
Current Shunt Sensing



Kelvin Load Voltage Sensing

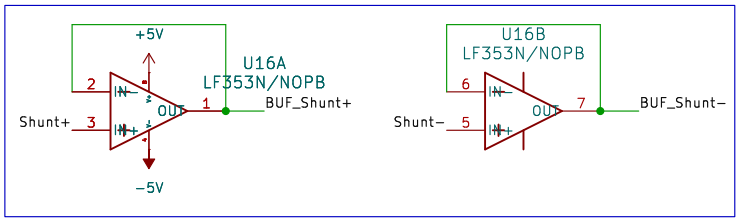


Range Resistor Switches



Make sure to have good common mode current isolation for these

Shunt Buffering



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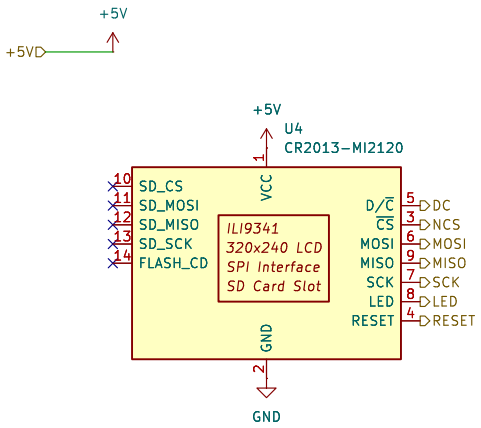
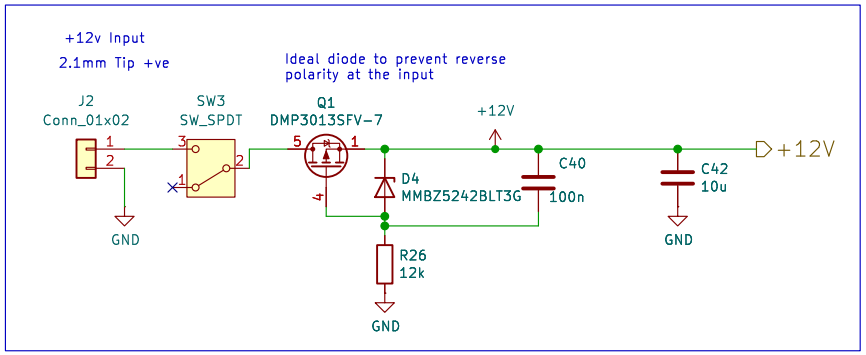
Size: A4	Date:	**Rev:**
KiCad E.D.A. 8.0.3		Id: 6/7



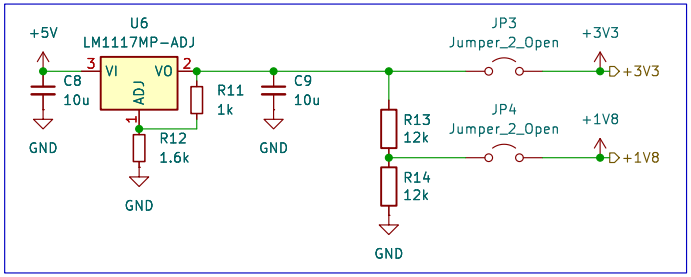
Should not need decoupling or any external components.

Sheet: /LCD/		
File: lcd.kicad_sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. 8.0.3		Id: 7/7

Input Reverse Polarity Protection



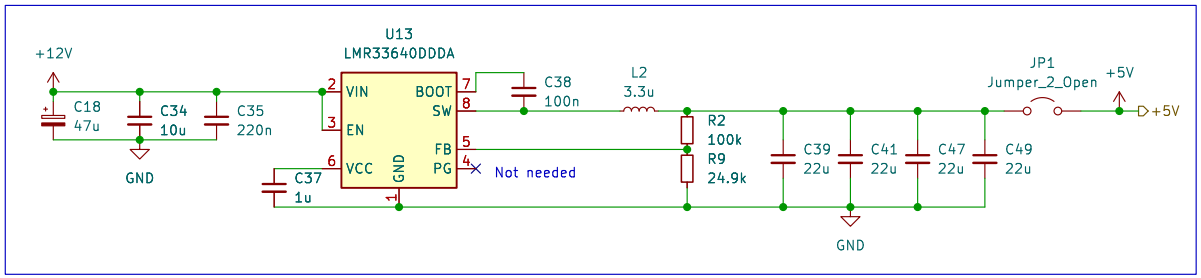
3V3 Linear Regulation



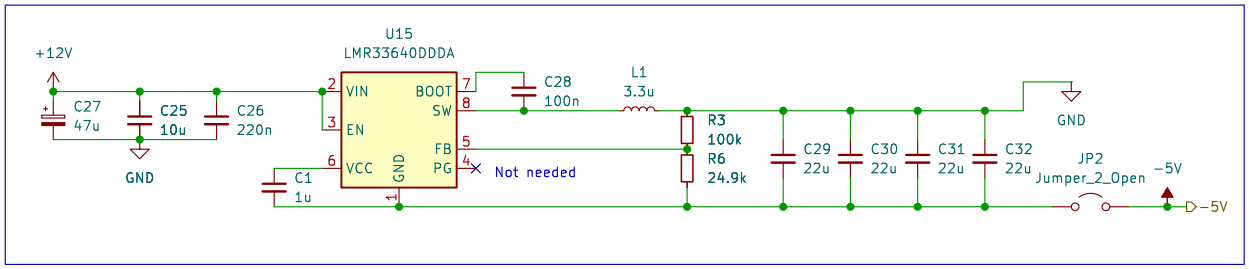
V_out = 1.25V * (1 + R12 / R11)
V_out = 3.25 V

Simpler 1V8 supply but will need some startup time

+5V Buck



−5V Buck

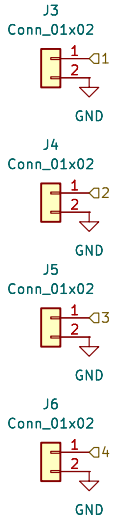


ALL CAPS IN BOM MUST BE 35V RATED CAPS.

Sheet: /PSUs/
File: PSUs.kicad_sch

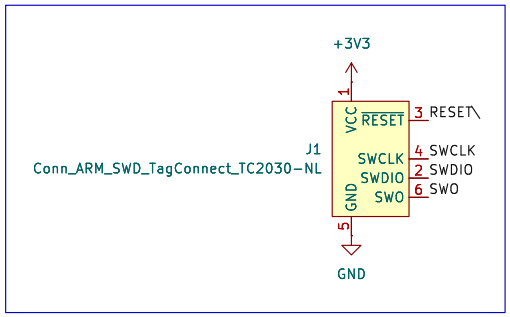
Title: Compute Module 4 IO Board – PSUs

Size: A4	Date:	Rev:
KiCad E.D.A. 8.0.3		Id: 8/7

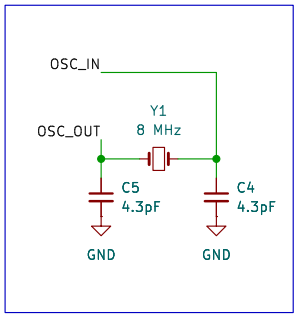


Sheet: /Sensing/BNCs/ File: BNCs.kicad_sch		
Title:		
Size: A4	Date:	**Rev:**
KiCad E.D.A. 8.0.3		Id: 8/7

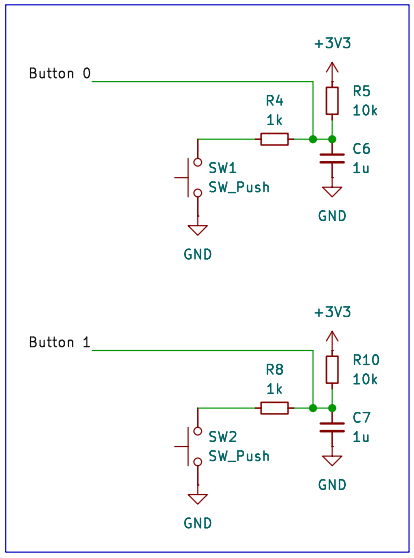
SWD



HF Oscillator

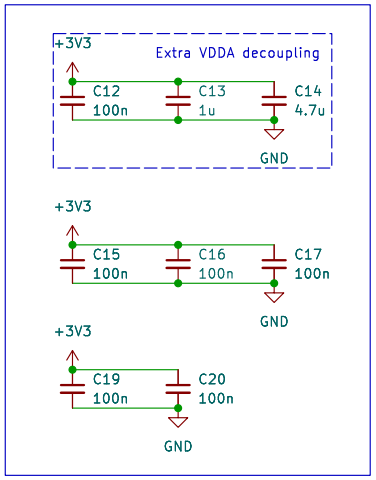


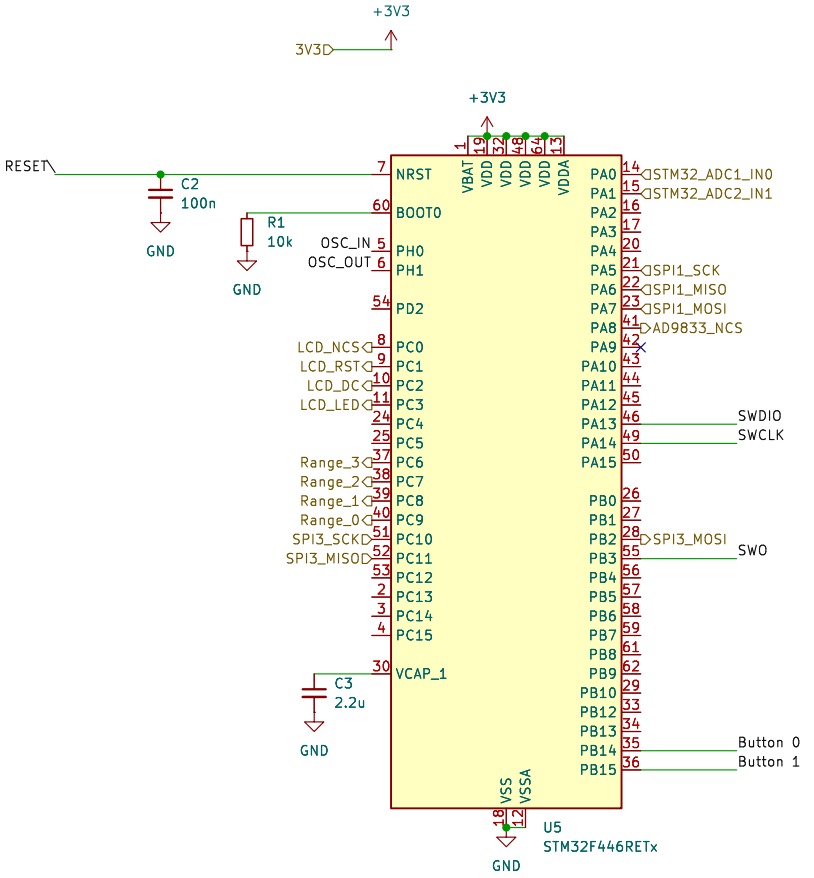
User Buttons



Time Constant = RC = 1 ms
Should be more than enough to remove debouncing

Supply Decoupling





Sheet: /MCU/		
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Size: A4	Date:	**Rev:**
KiCad E.D.A. 8.0.3		Id: 11/7