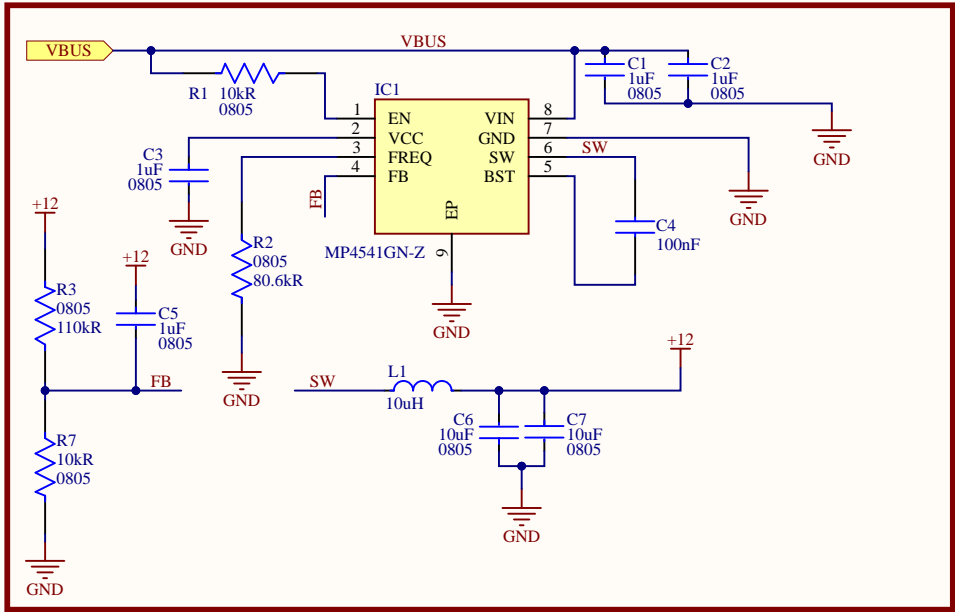
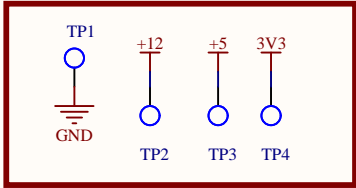


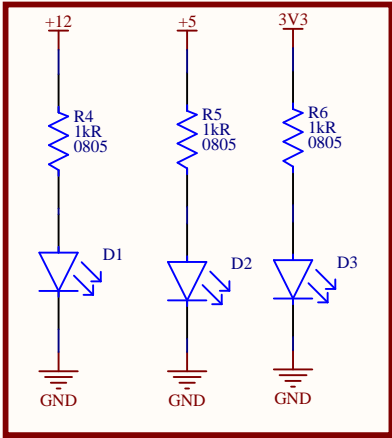
Switching Regulator (8-80V --> 12V)



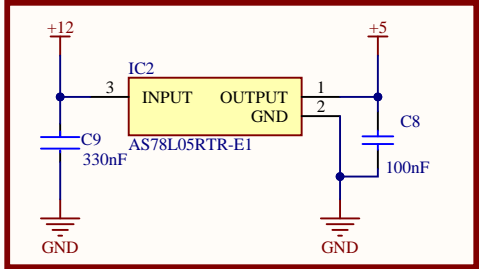
Test Points



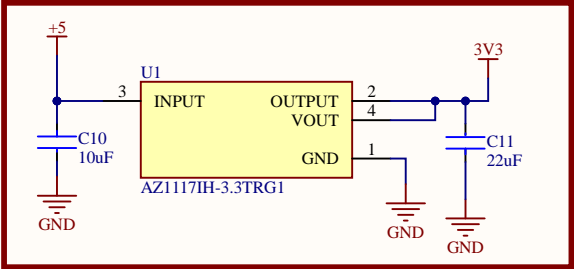
Supply Indication LEDs



12V -> 5V Regulator



5V -> 3V3 Regulator



Title		
Size	Number	Revision
A4		
Date:	2-01-2023	Sheet of
File:	D:\Documents\...\Power.SchDoc	Drawn By:

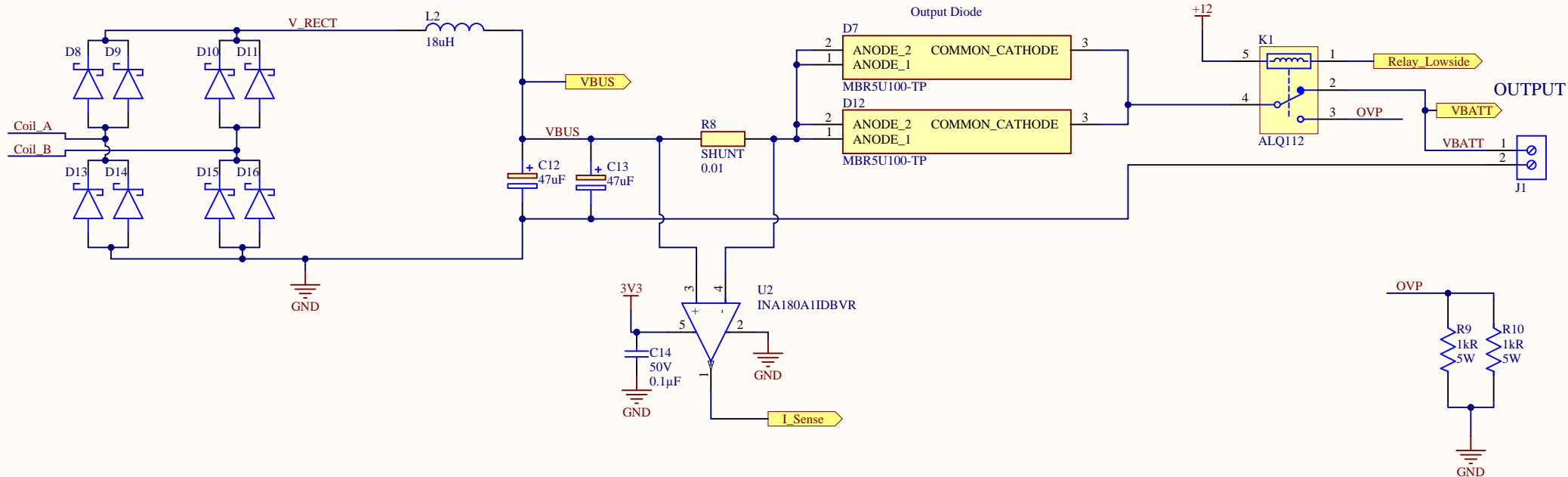
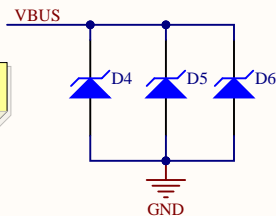
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2

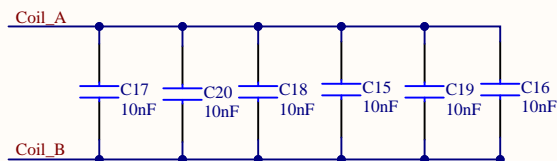
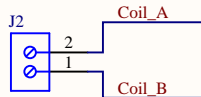
3

4

Crude overvoltage
protection (82V Max)



Coil In



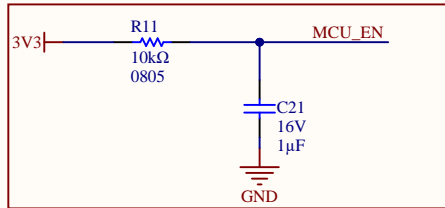
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Date:	2-01-2023	Sheet of
File:	D:\Documents\...\Rectifier.SchDoc	Drawn By:

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2

3

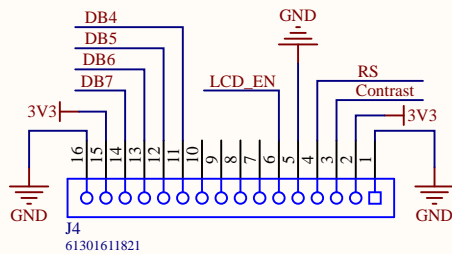
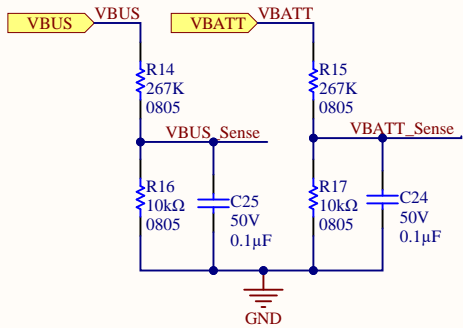
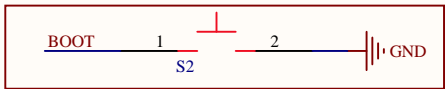
4



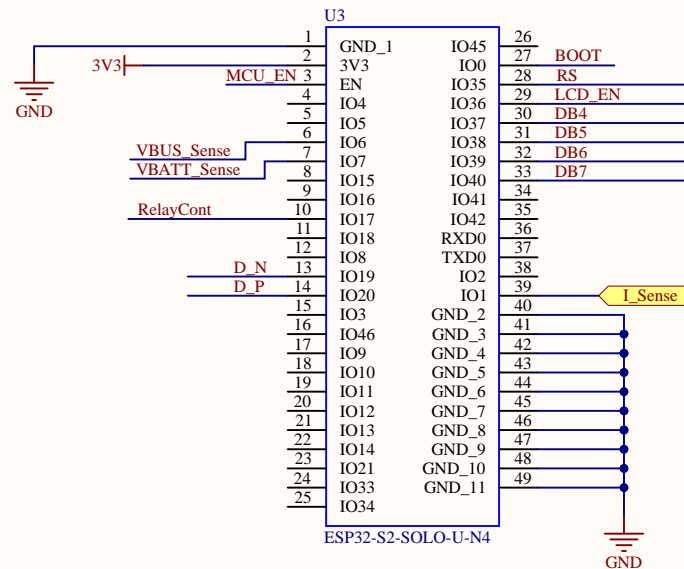
MCU Reset



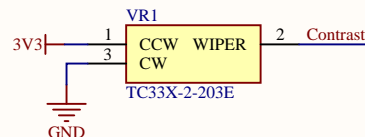
MCU Boot Mode



LCD Connector

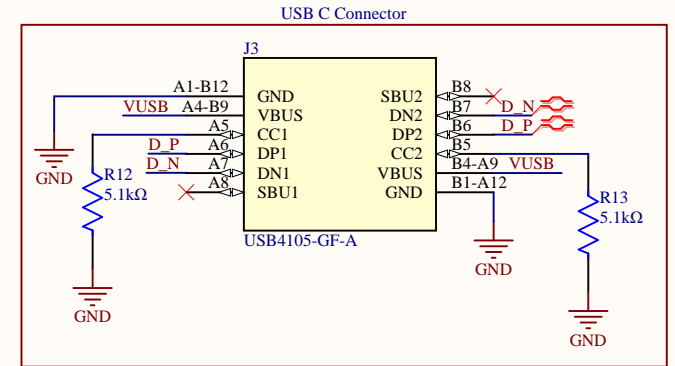
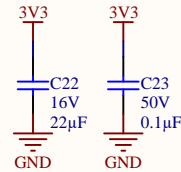


check if 3v3 will work or if we need 5V
Try this:
<https://www.instructables.com/LCD-Display-16x2-on-33V/>
<https://www.codrey.com/electronic-circuits/hack-your-16x2-lcd/>

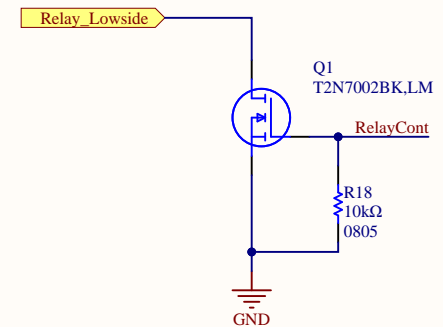
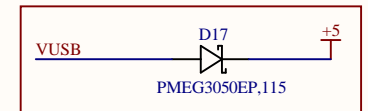


Module Decoupling Caps

Place Close to Pin 2



USB VBUS ORING Diodes



GND Pins on Bottom of ESP32-S2 Module are not strictly necessary to be soldered to PCB - but will help with thermal performance

Title			
ESP32-S2 Processor			
Size	Number	Revision	
A4			
Date:	2-01-2023	Sheet of	
File:	D:\Documents\...\Processor.SchDoc	Drawn By:	