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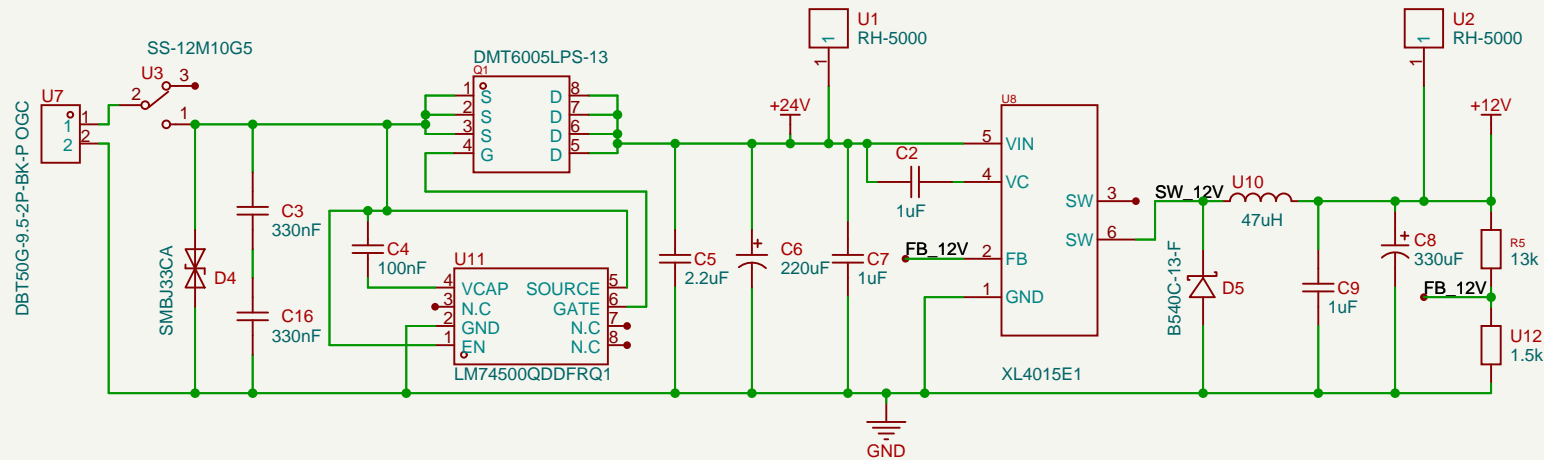
- 1. SCH_ESP32_RelayControl_2024-06-12.pdf
- 2. https://www.waveshare.com/wiki/R7FA4_PLUS_B

Schematic	GController			Update Date	2024-12-04
				Create Date	2024-08-16
Page	USB			Part Number	JLCPCB-002
Drawn	Naren Subburaj	GController			
Reviewed	Naren Subburaj				
		VER	SIZE	PAGE	1 OF 17
EasyEDA		V0.1	A3	Mark	

Power Supply

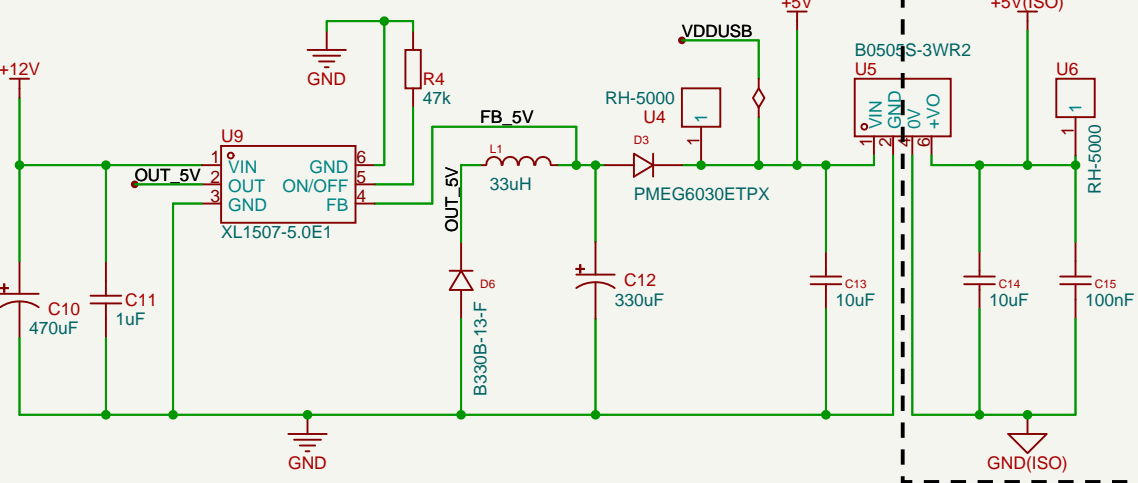
Buck Converter

Input : 15VDC - 36VDC
Output : 12V 5A



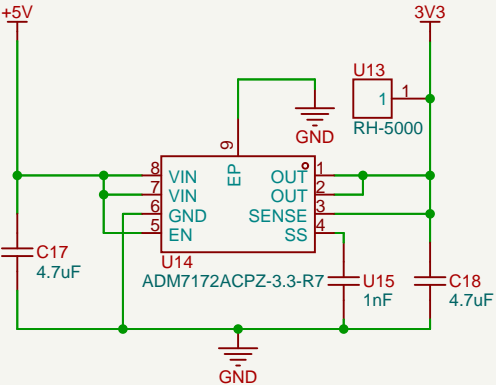
Buck Converter

Input : 12V 5A
Output : 5V 3A and Isolated 5V 3A




LDO

Input : 5V 3A
Output : 3.3V 2A

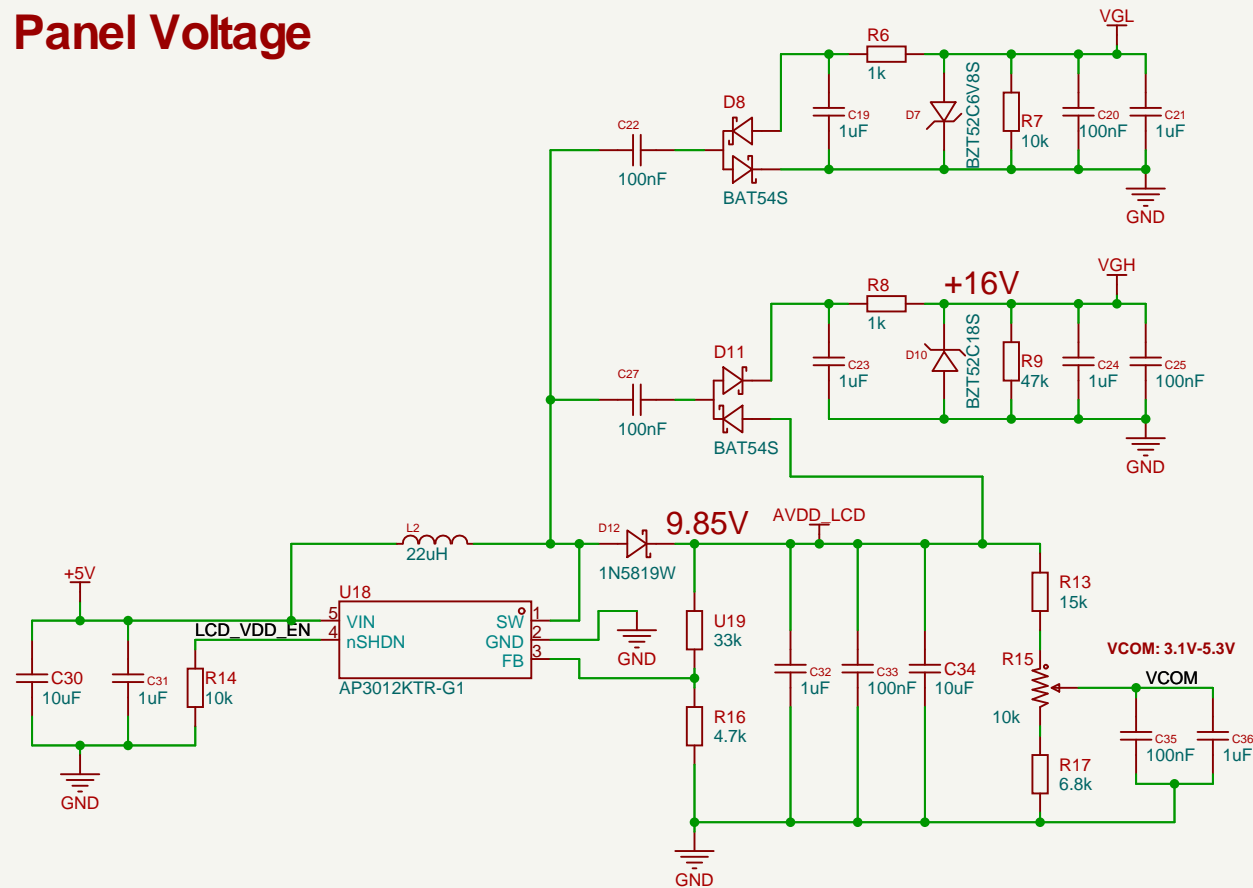


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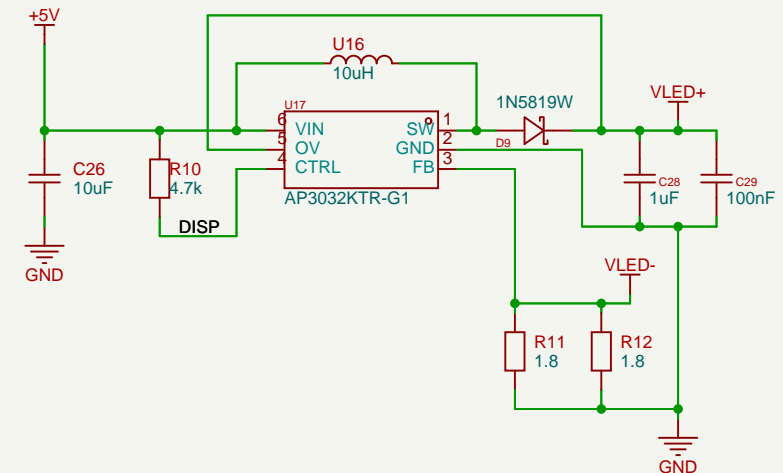
- https://www.ti.com/lit/ug/snou172/snou172.pdf?ts=1728768049324&ref_url=https%253A%252F%252Fwww.google.com%252F
- https://www.lcsc.com/datasheet/lcsc_datasheet_1811081616_XLSEMI-XL4015E1_C51661.pdf
- https://www.lcsc.com/datasheet/lcsc_datasheet_2304140030_XLSEMI-XL1507-ADJE1_C74194.pdf
- https://www.lcsc.com/datasheet/lcsc_datasheet_2004231133_Analog-Devices-ADM7172ACPZ-3-3-R7_C514342.pdf

Schematic	GController			Update Date	2024-12-04
				Create Date	2024-08-13
Page	PowerSupply			Part Number	JLCPCB-002
Drawn	Naren Subburaj	GController			
Reviewed	Naren Subburaj				
		VER	SIZE	PAGE	2 OF 17
		V0.1	A3	Mark	


Panel Voltage



Backlight

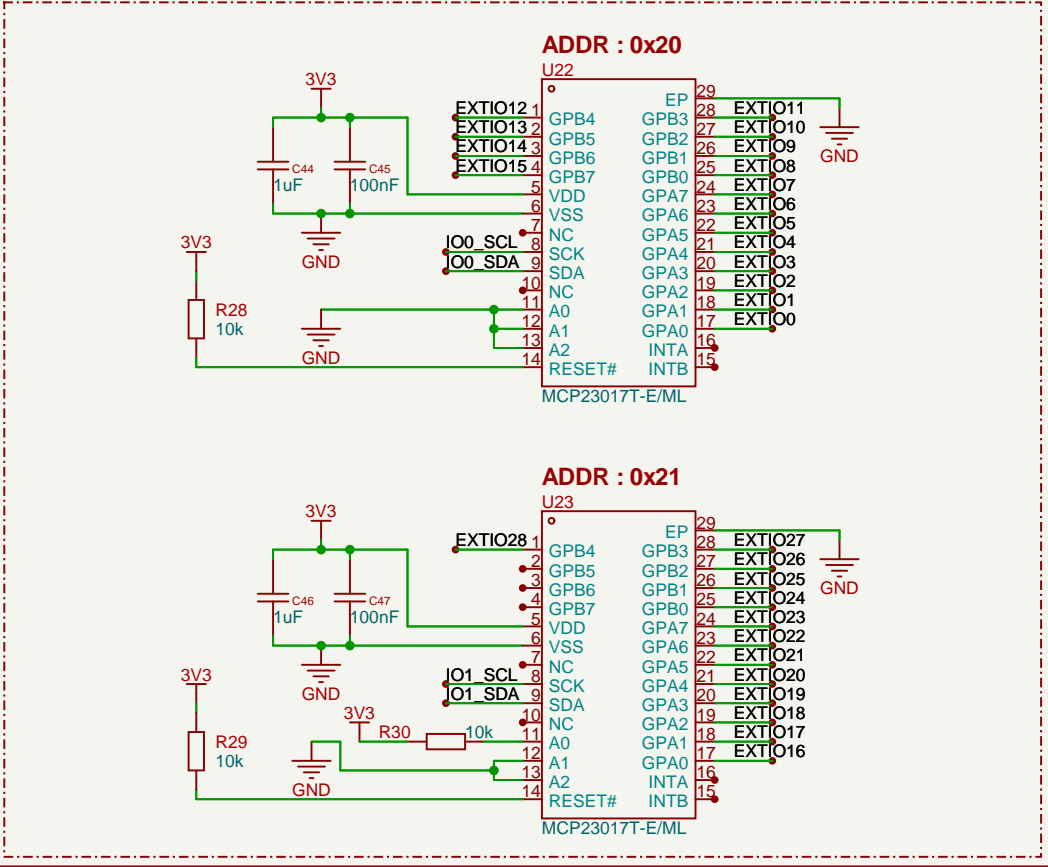


1. <https://www.waveshare.com/wiki/ESP32-S3-Touch-LCD-7>

Schematic	GController			Update Date	2024-12-04
				Create Date	2024-08-28
Page	Touchscreen-PowerSupply			Part Number	JLCPCB-002
Drawn	Naren Subburaj	GController			
Reviewed	Naren Subburaj				
		VER	SIZE	PAGE	3 OF 17
		V0.1	A3	Mark	

I/O Expander

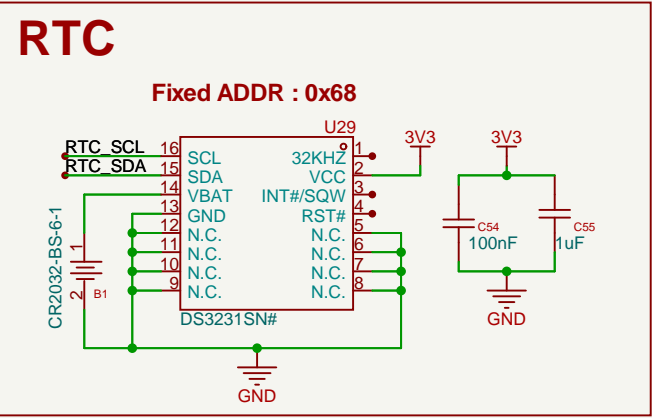
ADDR	A0	A1	A2	ADDR	A0	A1	A2
0x20	L	L	L	0x24	L	L	H
0x21	H	L	L	0x25	H	L	H
0x22	L	H	L	0x26	L	H	H
0x23	H	H	L	0x27	H	H	H



Links:

- 1. <https://learn.adafruit.com/adafruit-mcp23017-i2c-gpio-expander/downloads>
- 2. <https://dfimg.dfrobot.com/nobody/wiki/3ce3119985b8f9f527018369cbe7be41.pdf>

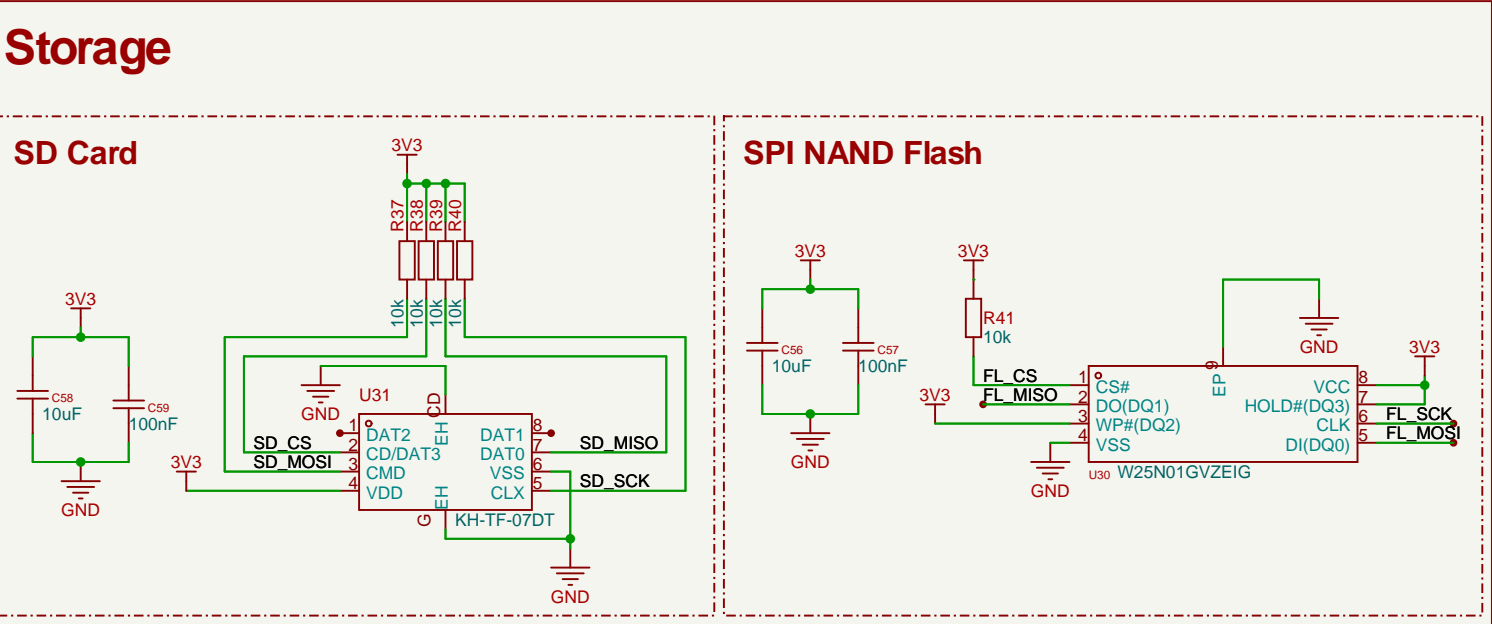
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			Create Date	2024-09-24
Page	IO-Expander		Part Number	JLCPCB-002
Drawn	Naren Subburaj	GController		
Reviewed	Naren Subburaj			
		VER	SIZE	PAGE 5 OF 17
EasyEDA		V0.1	A3	Mark



Links:

- 1. <https://learn.adafruit.com/adafruit-ds3231-precision-rtc-breakout/downloads>
- 2. https://www.lcsc.com/datasheet/lcsc_datasheet_2310091153_Analog-Devices-Inc--Maxim-Integrated-DS3231SN-_C722469.pdf

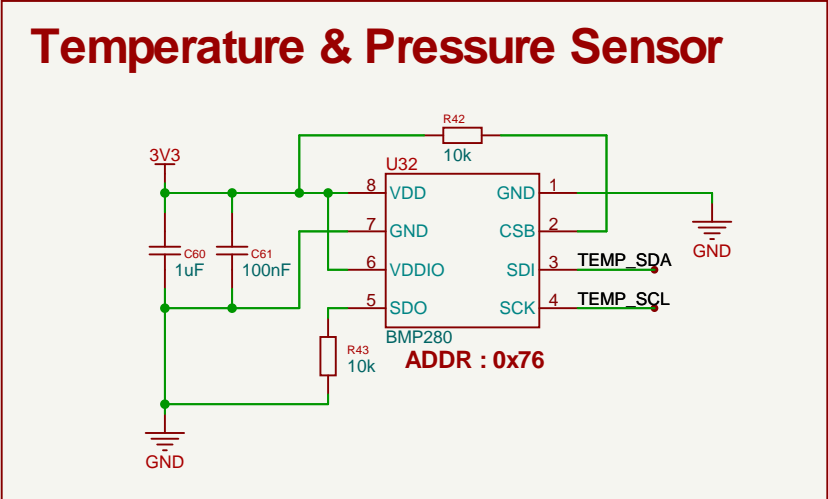
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				Create Date	2024-09-24
Page	RTC			Part Number	JLCPCB-002
Drawn	Naren Subburaj	GController			
Reviewed	Naren Subburaj				
		VER	SIZE	PAGE	7 OF 17
EasyEDA		V0.1	A3	Mark	



Links:

- 1. <https://www.waveshare.com/wiki/ESP32-S3-Touch-LCD-7>
- 2. https://www.lcsc.com/datasheet/lcsc_datasheet_2304140030_Winbond-Elec-W25N01GVZEIG_C907680.pdf
- 3. <https://learn.adafruit.com/assets/116721>
- 4. https://cdn-learn.adafruit.com/assets/assets/000/116/721/original/components_schem.png?1668619694

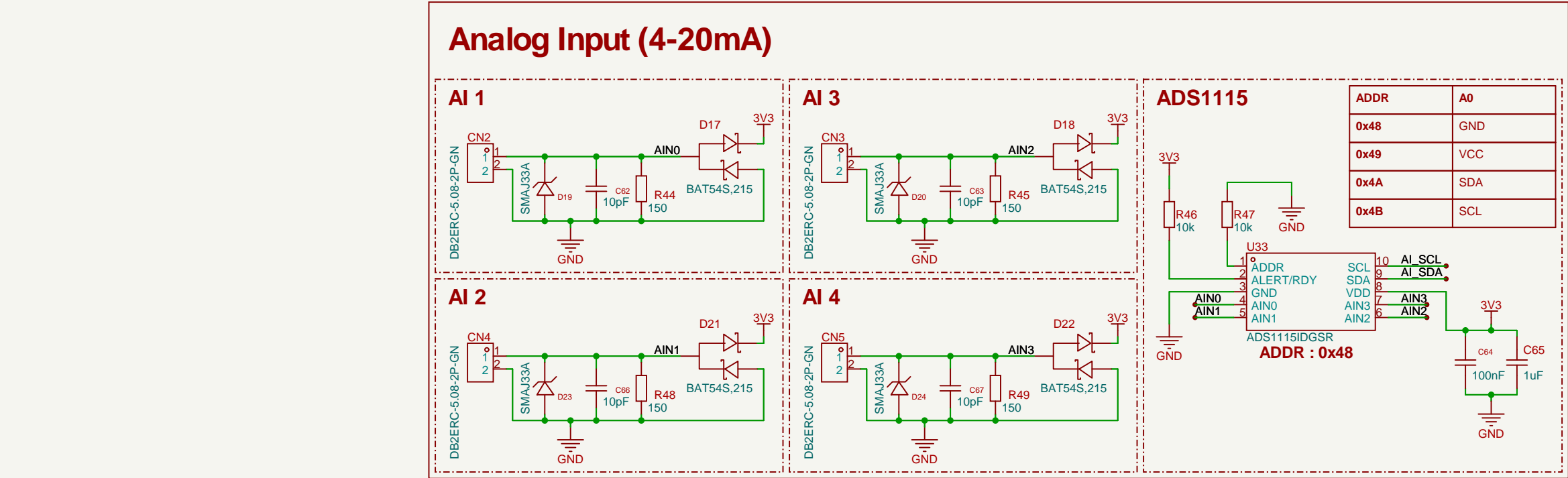
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				Create Date	2024-09-24
Page	Storage			Part Number	JLCPCB-002
Drawn	Naren Subburaj	GController			
Reviewed	Naren Subburaj				
		VER	SIZE	PAGE	8 OF 17
EasyEDA		V0.1	A3	Mark	



Links:


1. https://docs.sunfounder.com/projects/umsk/en/latest/01_components_basic/20-component_bmp280.html

Schematic	GController			Update Date	2024-12-04
				Create Date	2024-10-15
Page	Temp/Pressure-Sensor			Part Number	JLCPCB-002
Drawn	Naren Subburaj	GController			
Reviewed	Naren Subburaj				
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EasyEDA		V0.1	A3	Mark	

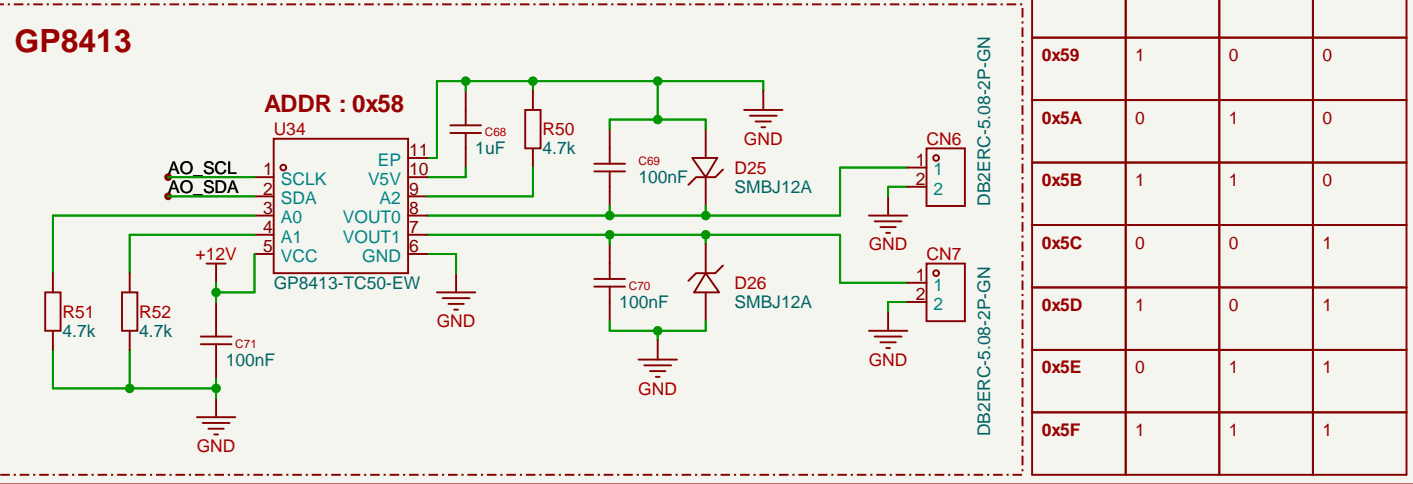


Links:

- 1. <https://how2electronics.com/how-to-use-ads1115-16-bit-adc-module-with-arduino/>
- 2. https://www.lcsc.com/datasheet/lcsc_datasheet_1809192322_Texas-Instruments-ADS1115IDGSR_C37593.pdf


Schematic	GController			Update Date	2024-12-04		
				Create Date	2024-10-03		
Page	Analog-Input			Part Number	JLCPCB-002		
Drawn	Naren Subburaj	GController					
Reviewed	Naren Subburaj						
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		V0.1	A3	Mark			

Analog Output (0-10v)

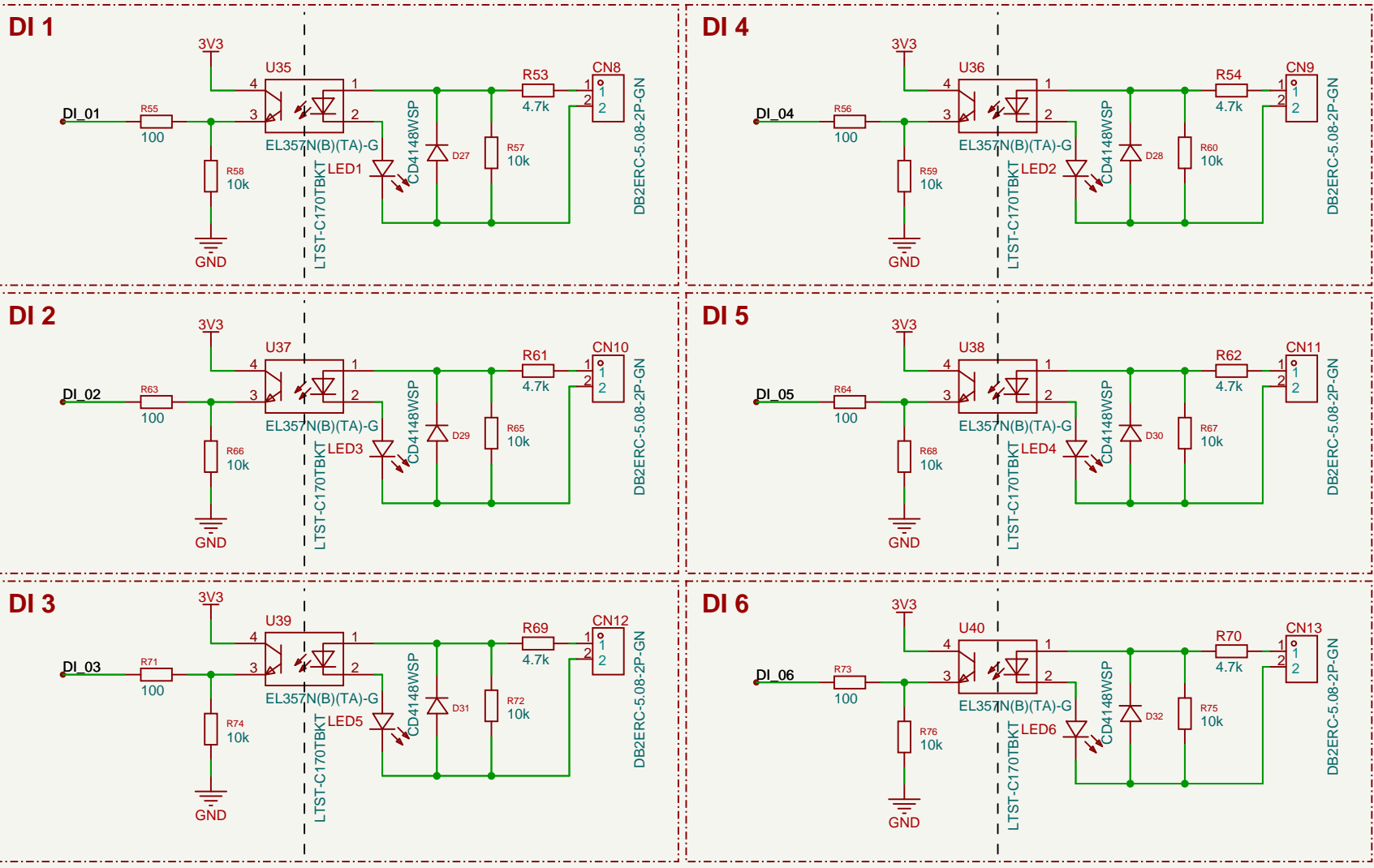


Links:


1. https://wiki.dfrobot.com/SKU_DFR1073_2_Channel_15bit_I2C_to_0-10V_DAC
2. https://www.lcsc.com/datasheet/lcsc_datasheet_2304281536_Guestgood-GP8413-TC50-EW_C5464816.pdf

Schematic	GController			Update Date	2024-12-04		
				Create Date	2024-10-07		
Page	Analog-Output			Part Number	JLCPCB-002		
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Reviewed	Naren Subburaj						
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		V0.1	A3	Mark			

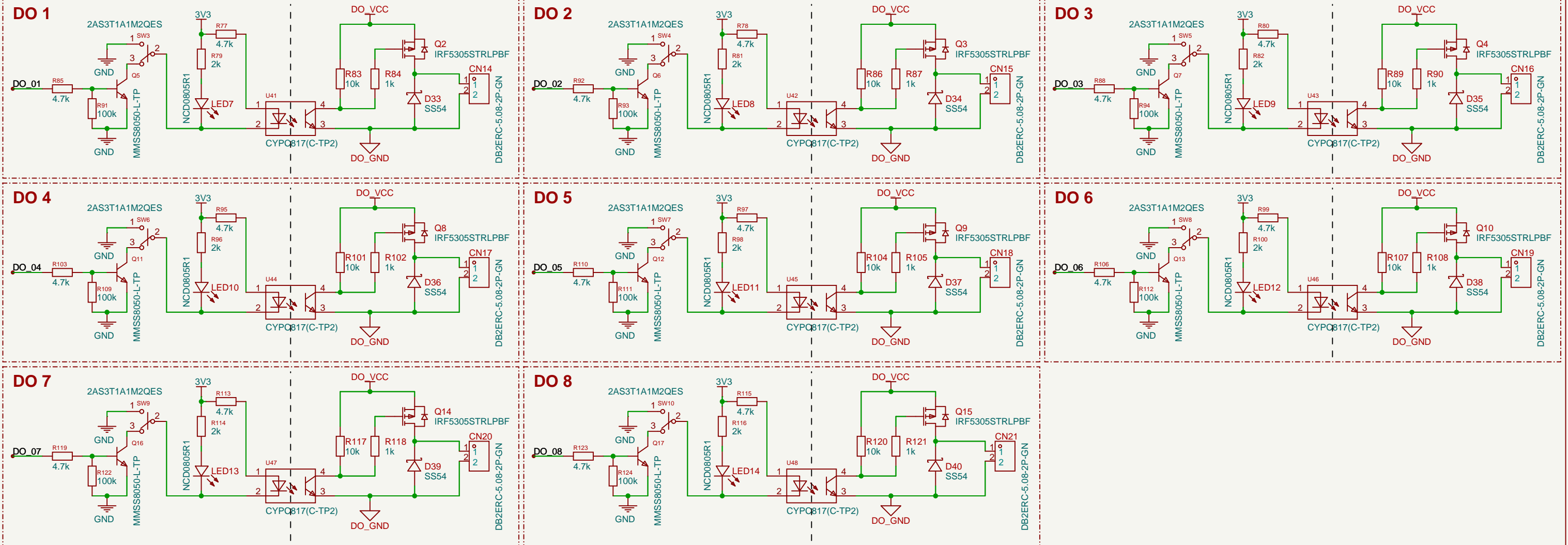
Digital Input (3 - 32VDC@5mA)



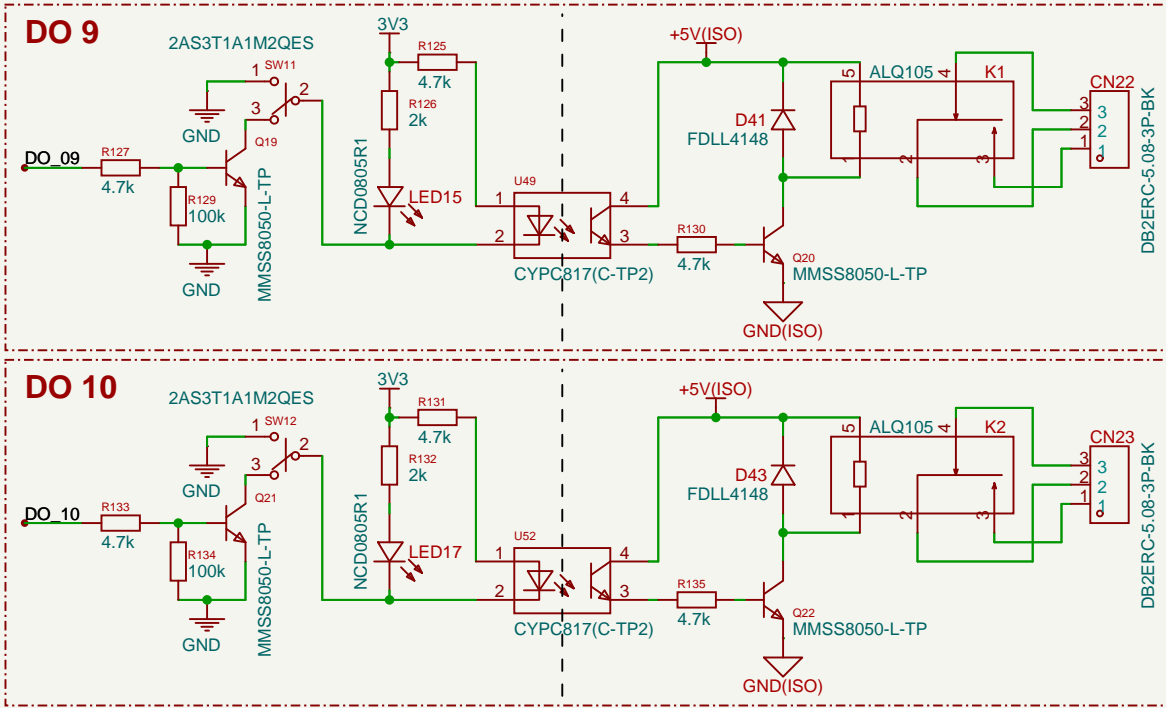
Links:
1. <https://www.makeriot2020.com/index.php/tag/diy/>

Schematic	GController			Update Date	2024-12-04
				Create Date	2024-10-06
Page	Digital-Input			Part Number	JLCPCB-002
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Reviewed	Naren Subburaj				
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		V0.1	A3	Mark	

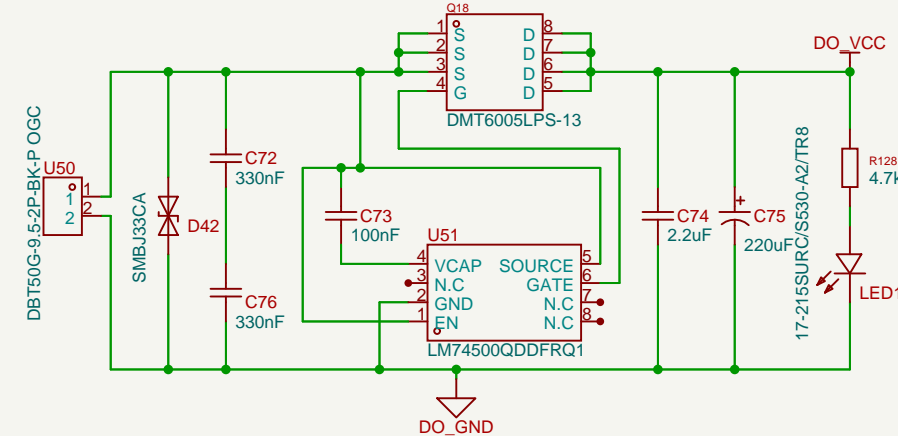
Digital Output - MOSFET



Digital Output - Relay




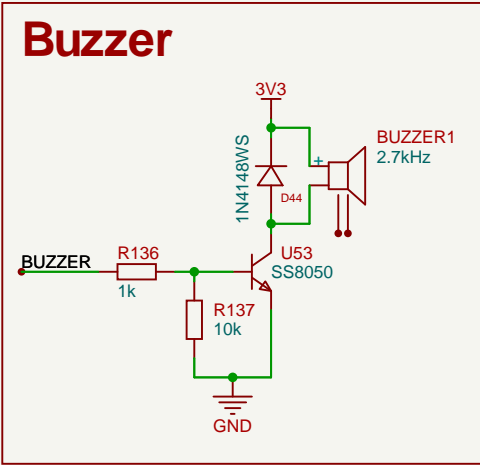
Digital Output Power Supply



Links:

- https://robojax.com/learn/arduino/?vid=robojax_e-switch_IRF5305
- <https://www.waveshare.com/wiki/ESP32-S3-Relay-6CH>

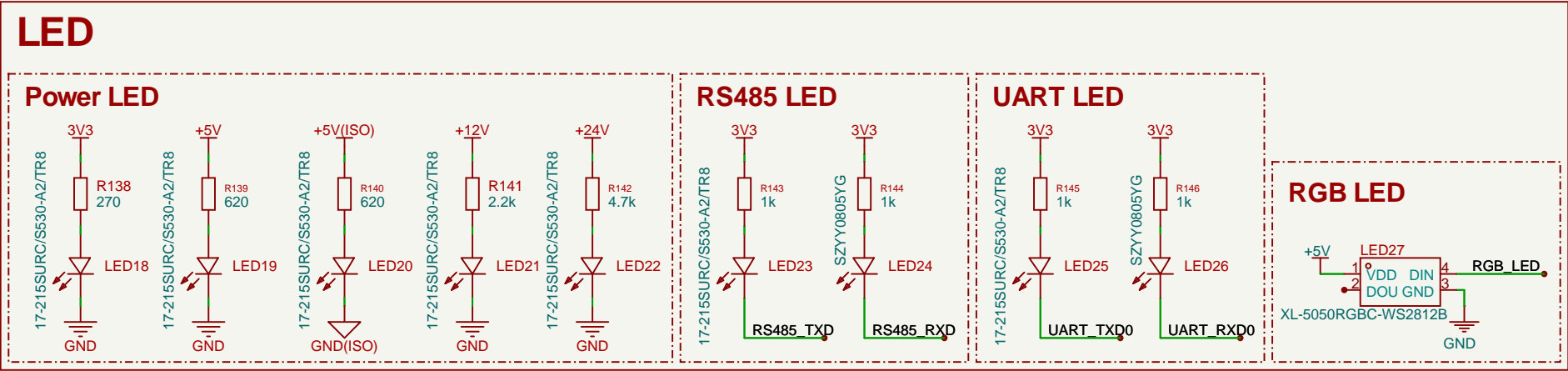
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Page	Digital-Output			Part Number	JLCPCB-002		
Drawn	Naren Subburaj	GController					
Reviewed	Naren Subburaj						
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		V0.1	A3	Mark			




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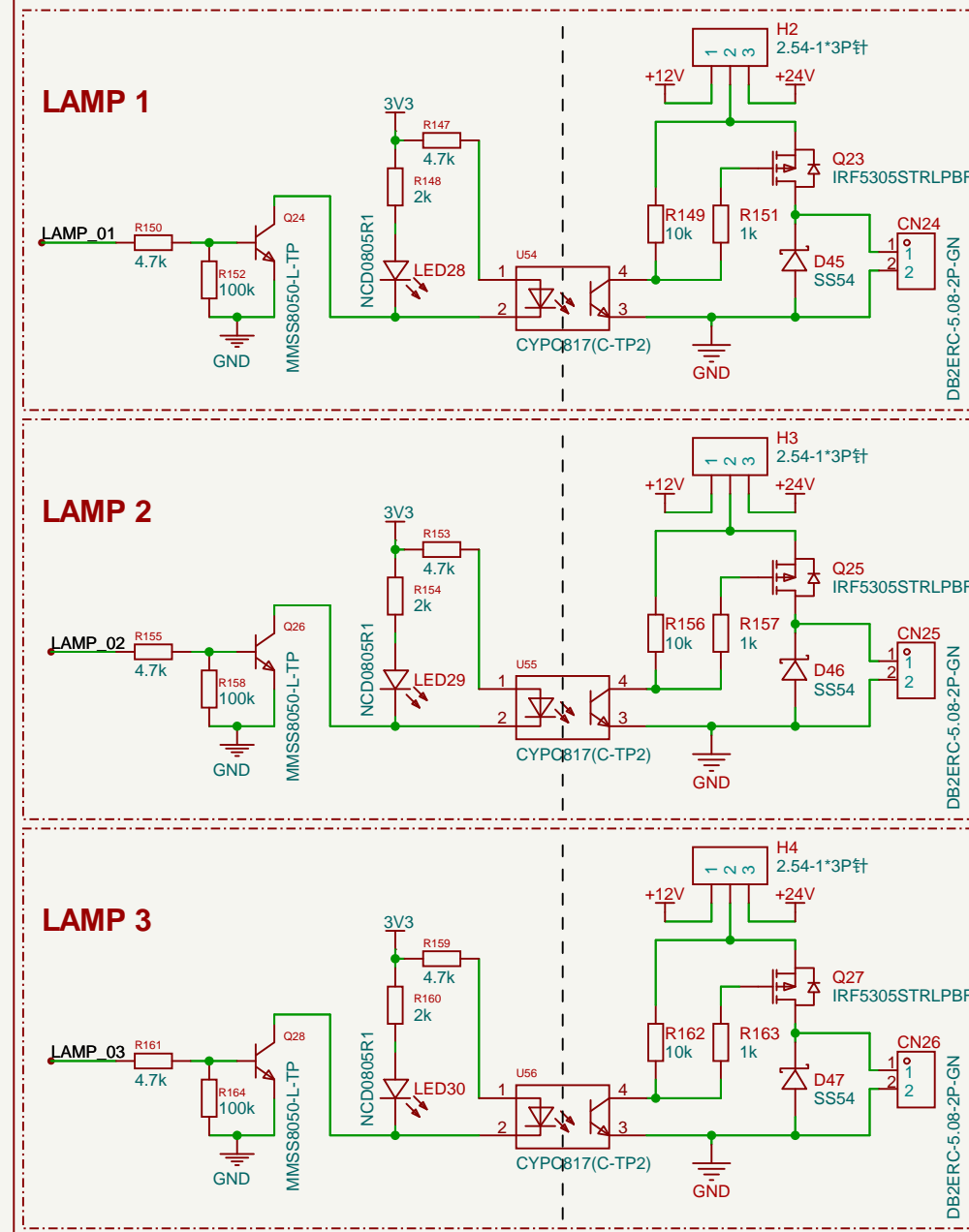
1. <https://www.waveshare.com/wiki/ESP32-S3-Relay-6CH>


Schematic	GController			Update Date	2024-12-04
				Create Date	2024-09-24
Page	Buzzer			Part Number	JLCPCB-002
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Reviewed	Naren Subburaj				
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EasyEDA		V0.1	A3	Mark	

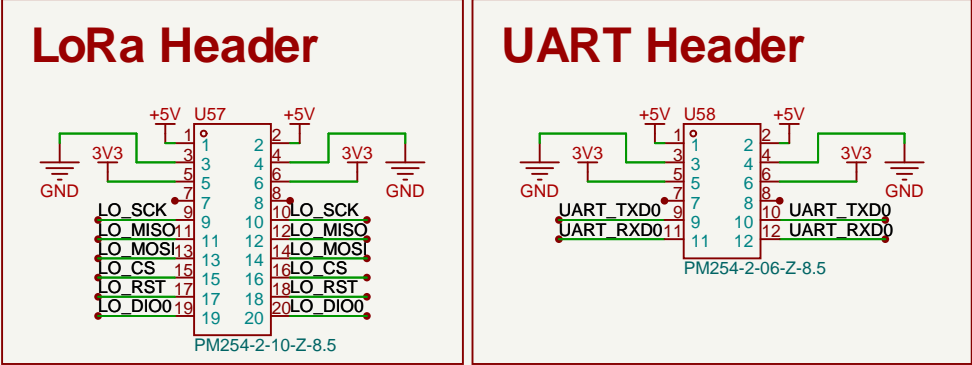


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Page	LED				Part Number	JLCPCB-002		
Drawn	Naren Subburaj	GController						
Reviewed	Naren Subburaj							
		VER	SIZE	PAGE 15 OF 17				
		V0.1	A3	Mark				

Pilot Lamp (Running, Alarm and Stopped)



Schematic	GController			Update Date	2024-12-04		
				Create Date	2024-10-14		
Page	Pilot-Lamp			Part Number	JLCPCB-002		
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Reviewed	Naren Subburaj						
		VER	SIZE	PAGE	16	OF	17
		V0.1	A3	Mark			



Schematic	GController			Update Date	2024-12-04
				Create Date	2024-10-09
Page	Headers			Part Number	JLCPCB-002
Drawn	Naren Subburaj	GController			
Reviewed	Naren Subburaj				
		VER	SIZE	PAGE	17 OF 17
		V0.1	A3	Mark	