

HARDWARE FLOW



**HARDWARE FLOW**

File: hardware\_flow.kicad\_sch

SCHEMATIC



**BlockDiagram**

File: Blockdiagram.kicad\_sch

<b>ONESENSE</b>		
Sheet: /		
File: LORAWAN_GATEWAY.kicad_sch		
<b>Title: LORA_STM BOARD</b>		
Size: A4	Date: 2025-03-12	<b>Rev:</b>
KiCad E.D.A. 8.0.5		Id: 1/12

1

2

3

4

5

6

A

A

B

B

C

C

D

D

BLOCK DIAGRAM



File: BLOCK DIAGRAM.kicad\_sch

<b>ONESENSE</b>		
Sheet: /HARDWARE FLOW/ File: hardware_flow.kicad_sch		
<b>Title: LORA_STM BOARD</b>		
Size: A4	Date: 2025-03-12	<b>Rev:</b>
KiCad E.D.A. 8.0.5		Id: 1/12

1

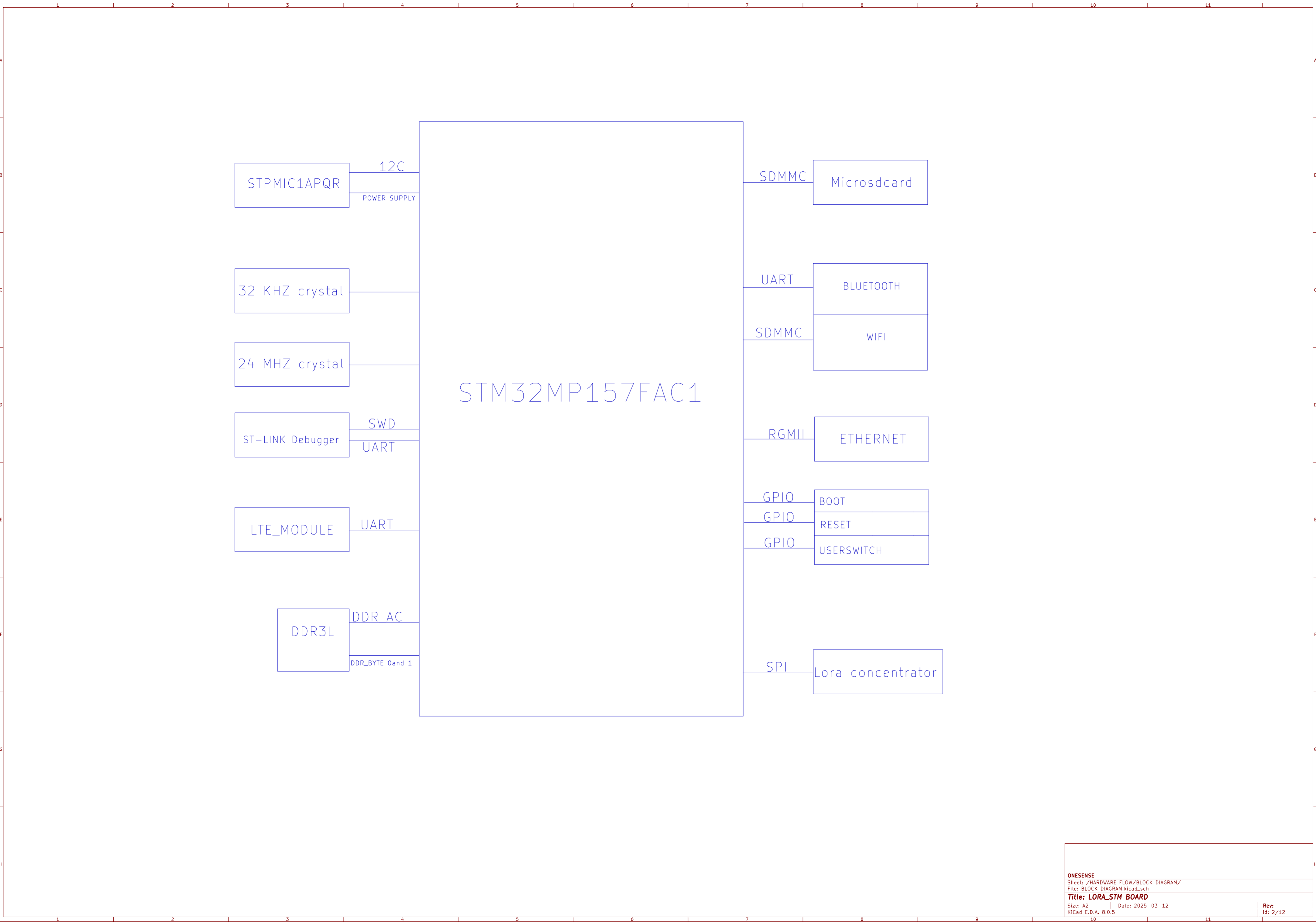
2

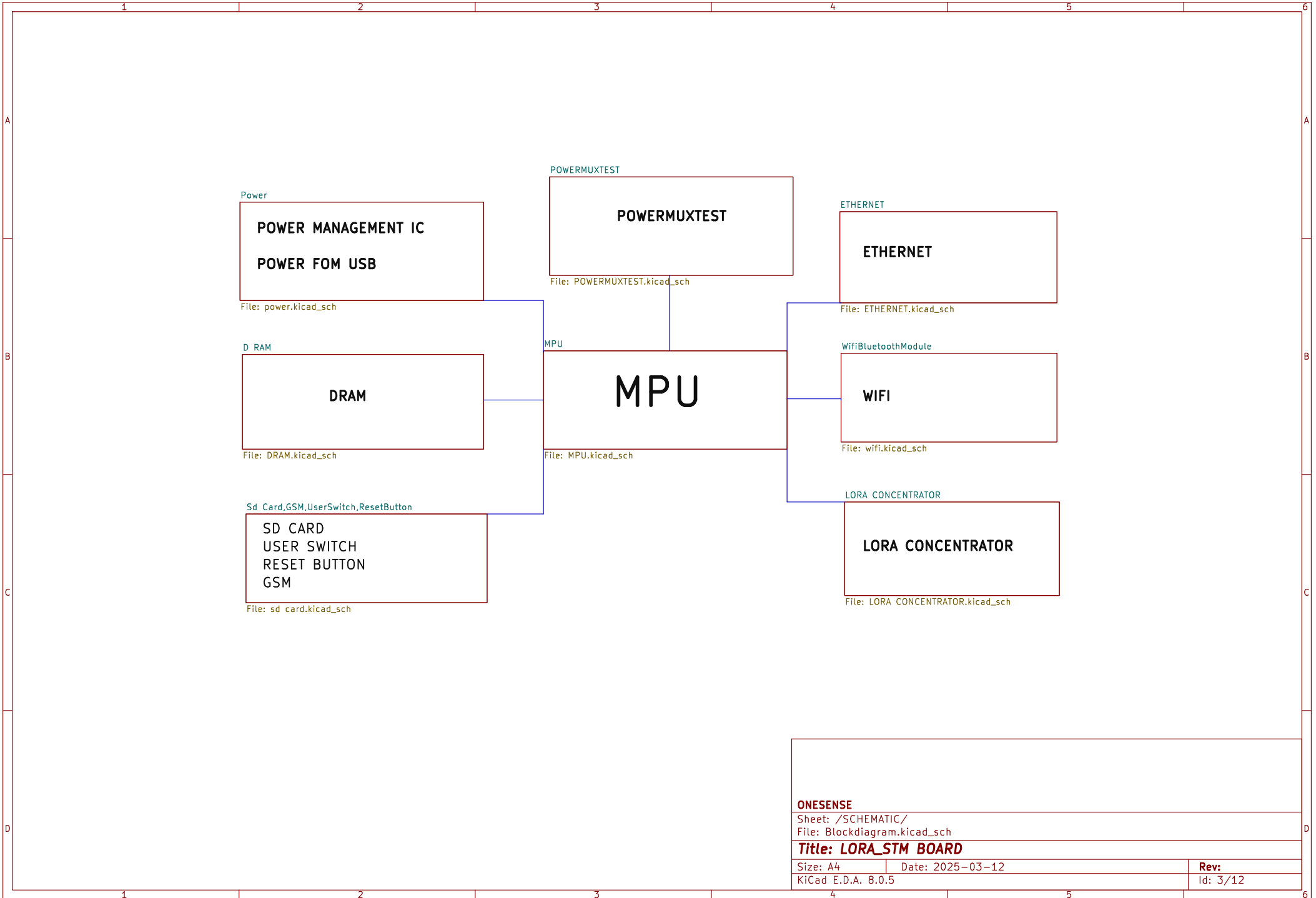
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4

5

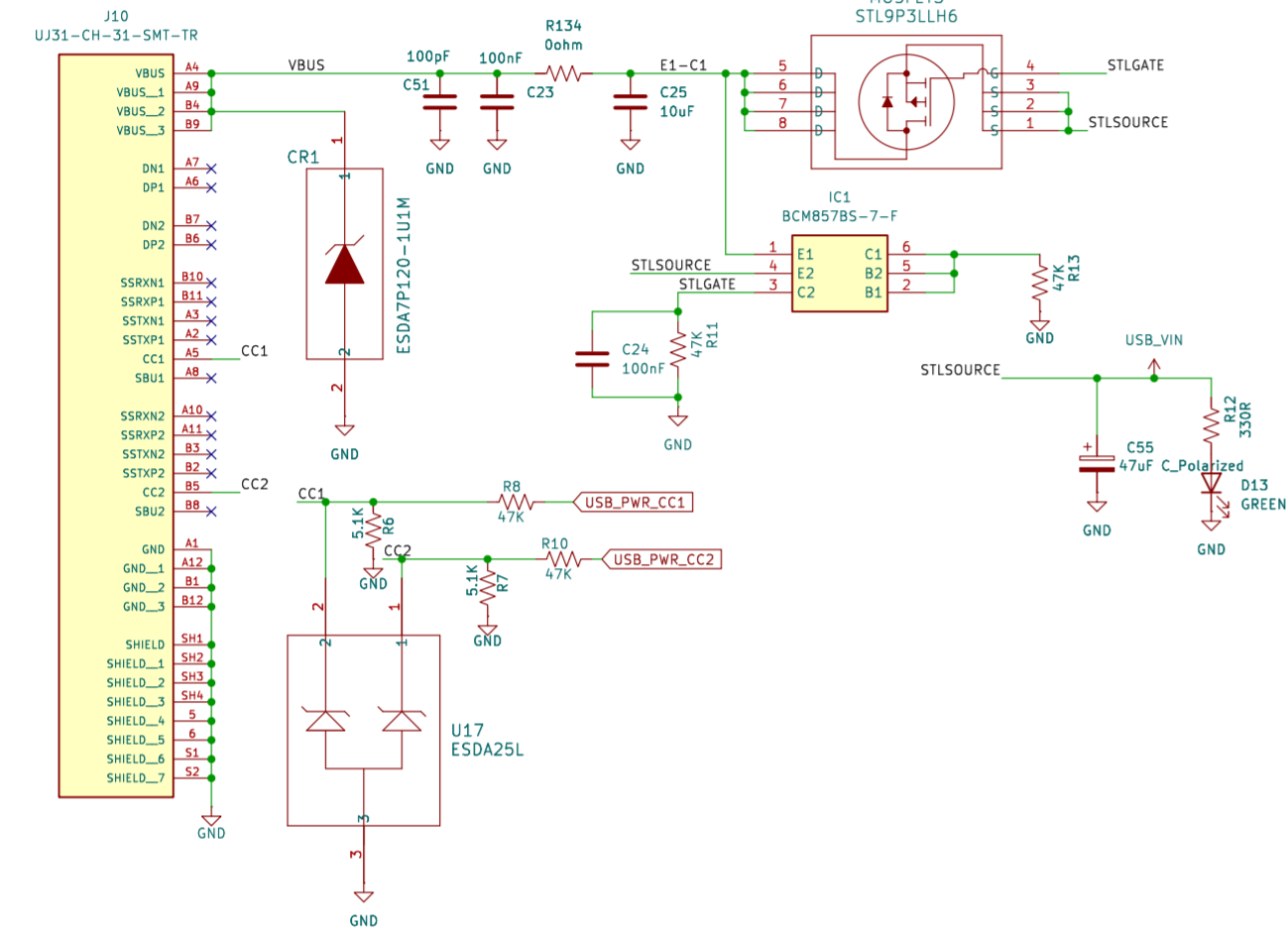
6





<b>ONESENSE</b>	
Sheet: /SCHEMATIC/	
File: Blockdiagram.kicad_sch	
<b>Title: LORA_STM BOARD</b>	
Size: A4	Date: 2025-03-12
KiCad E.D.A. 8.0.5	Rev: Id: 3/12

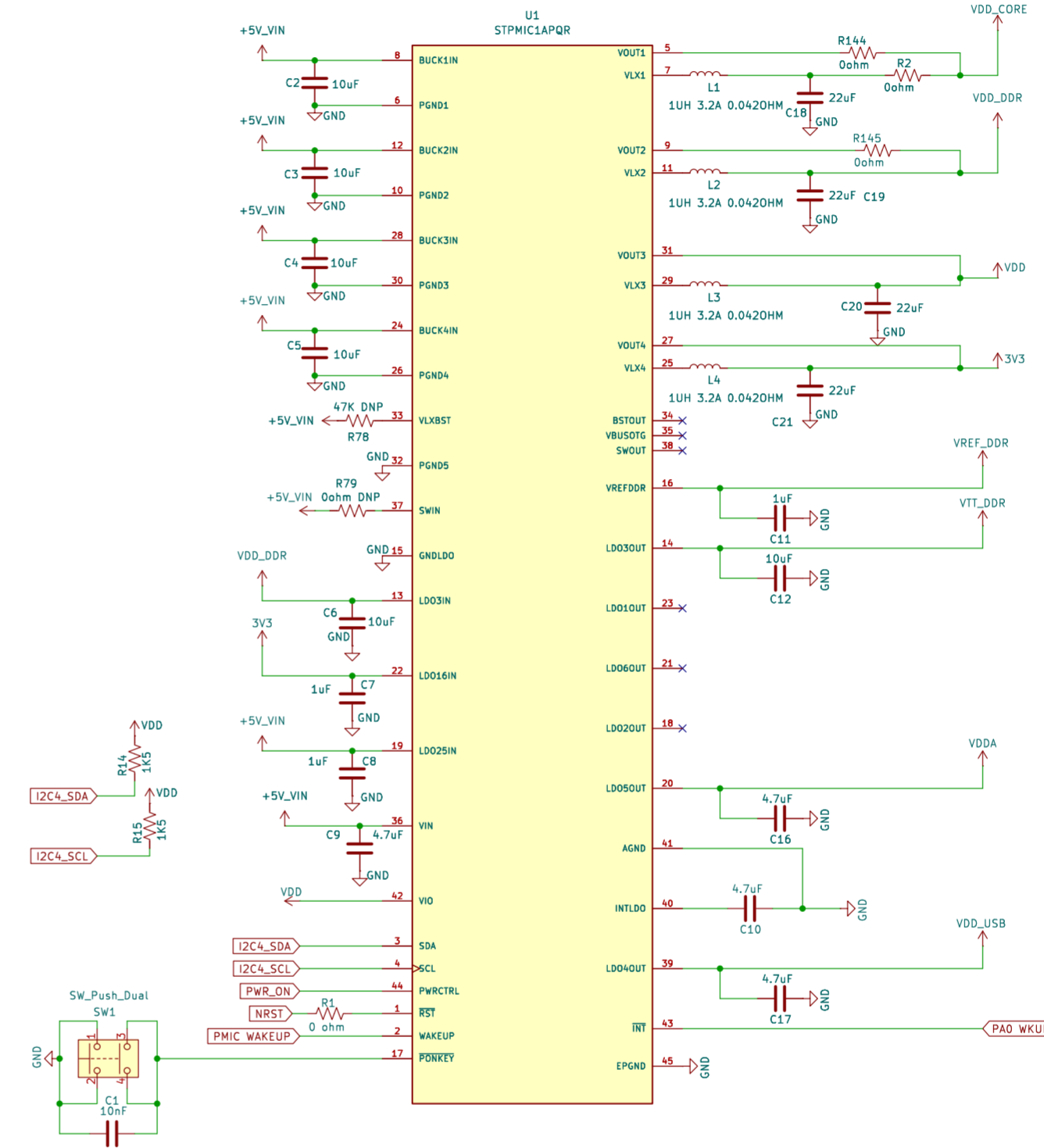
power from USB

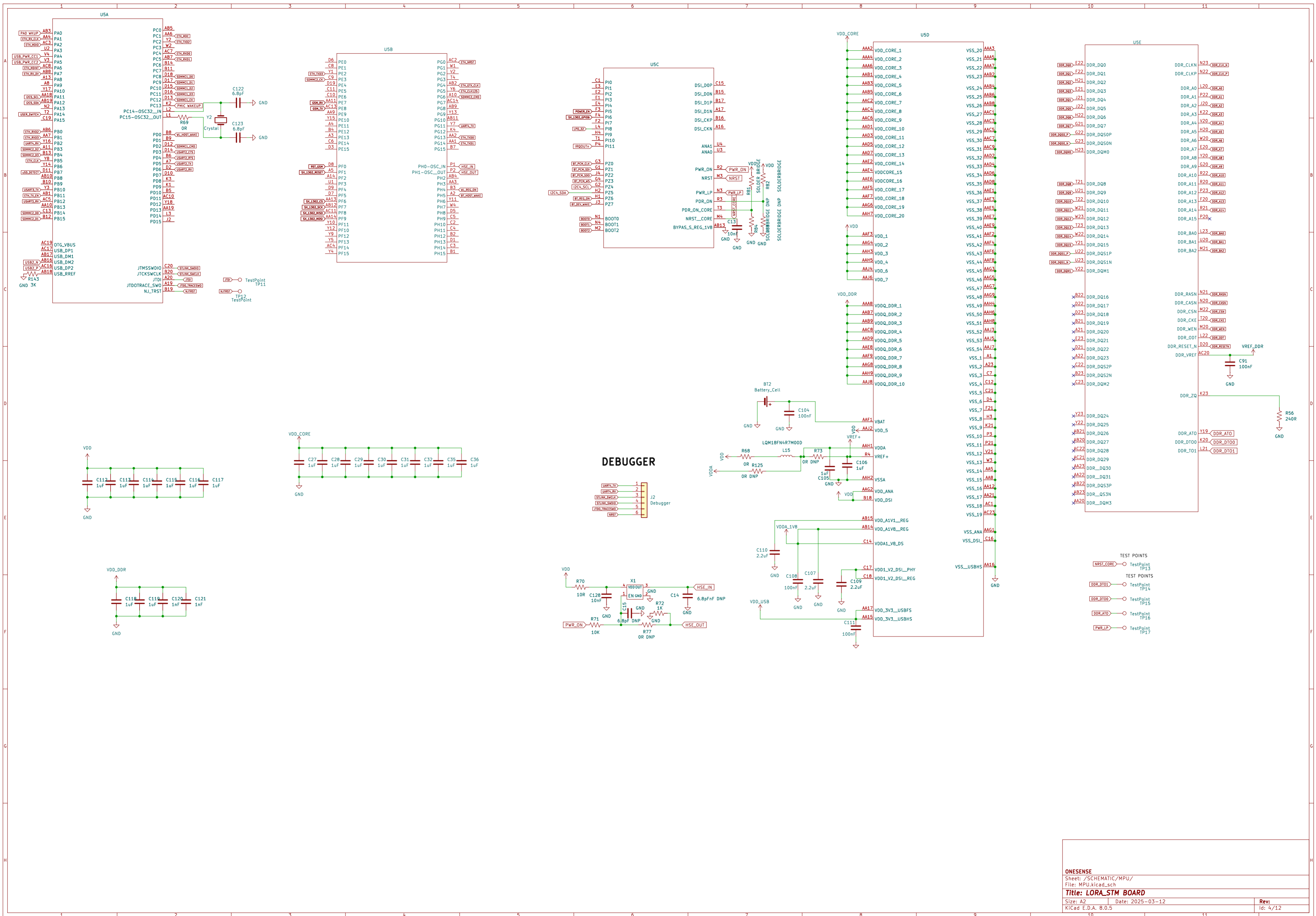


POWER TEST POINTS

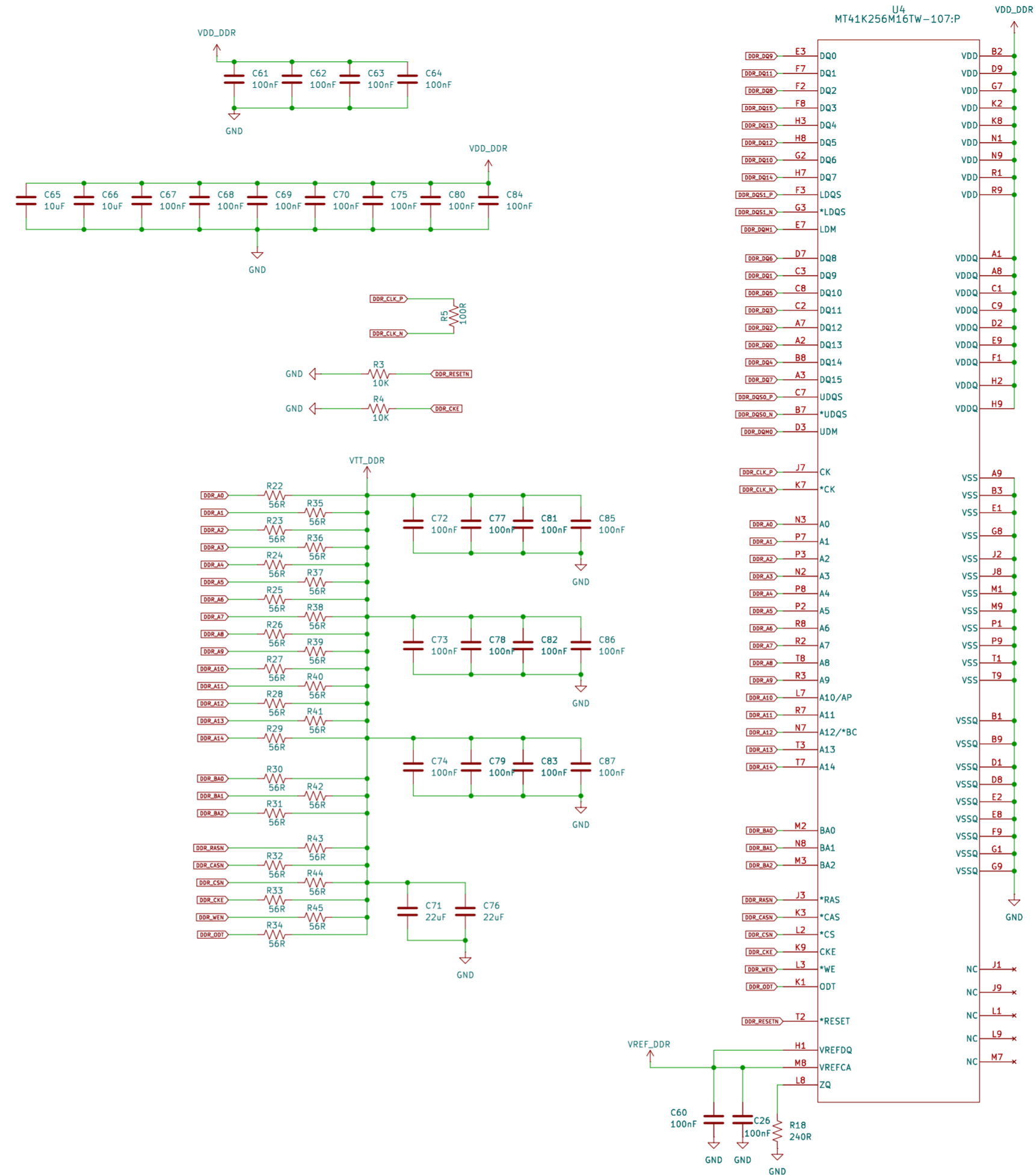
- VDD\_CORE ←
- VDD\_DDR ←
- VDD ←
- 3V3 ←
- VREF\_DDR ←
- VIT\_DDR ←
- VDDA ←
- VDD\_USB ←

Power management IC

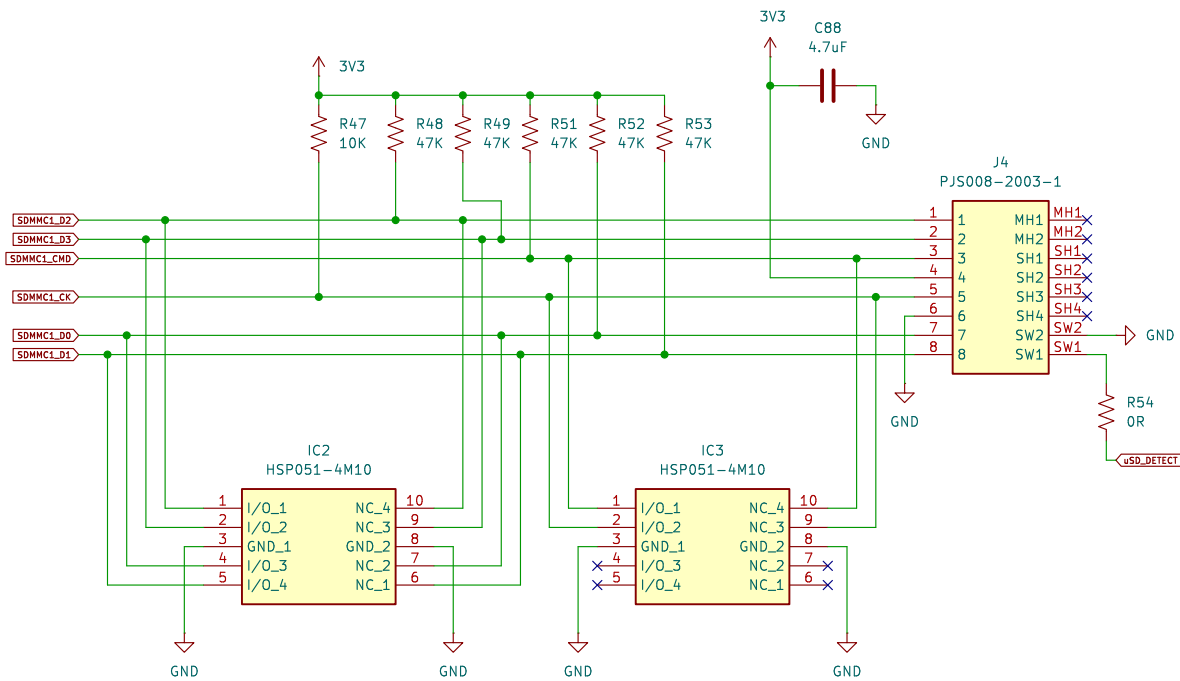




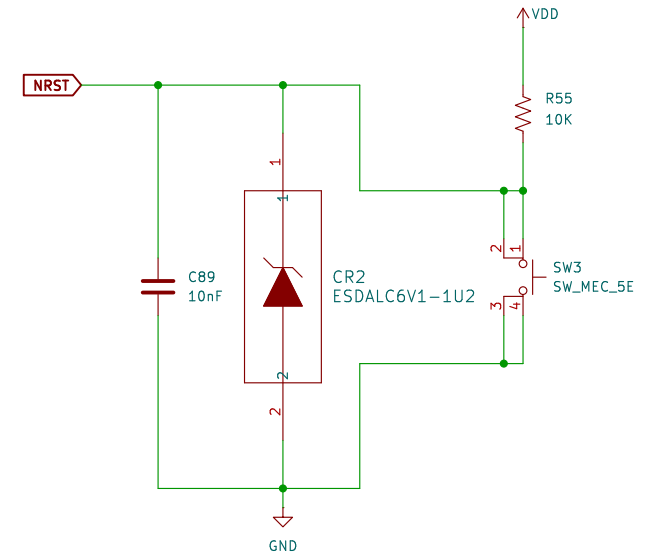
# DRAM



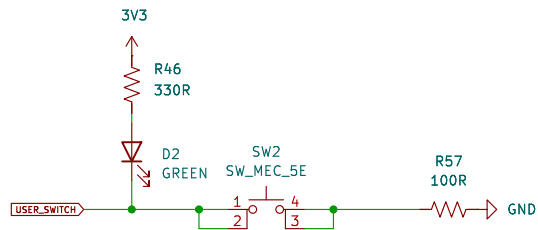
# SD CARD



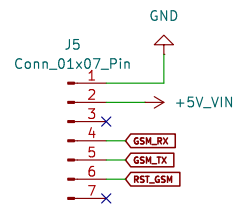
# RESET BUTTON



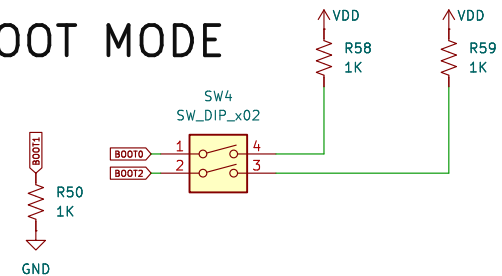
# USER SWITCH



# GSM



# BOOT MODE



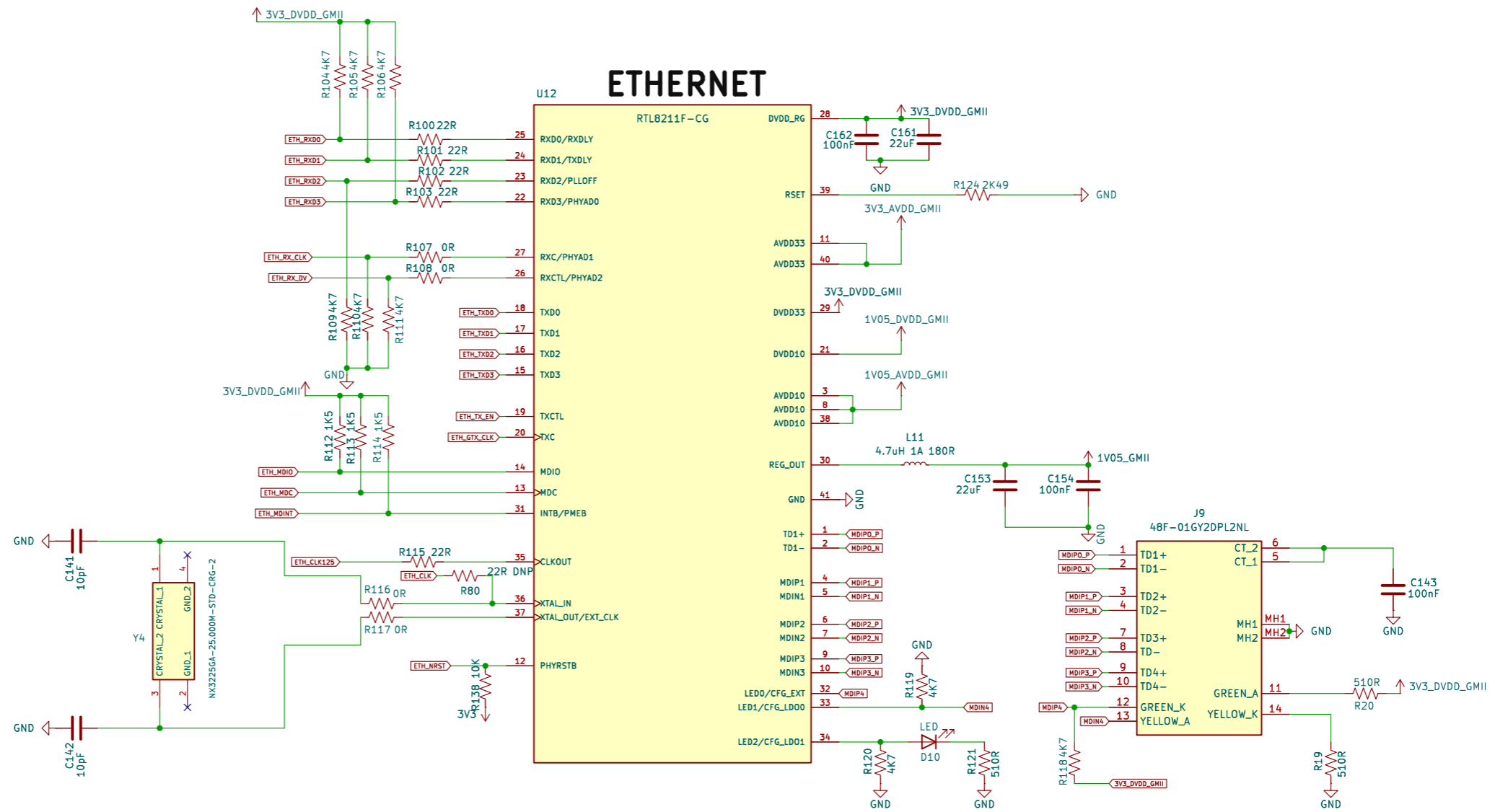
## ONSENSE

Sheet: /SCHEMATIC/Sd Card,GSM,UserSwitch,ResetButton/  
File: sd\_card.kicad\_sch

## Title: LORA\_STM BOARD

Size: A4 | Date: 2025-03-12  
KiCad E.D.A. 8.0.5

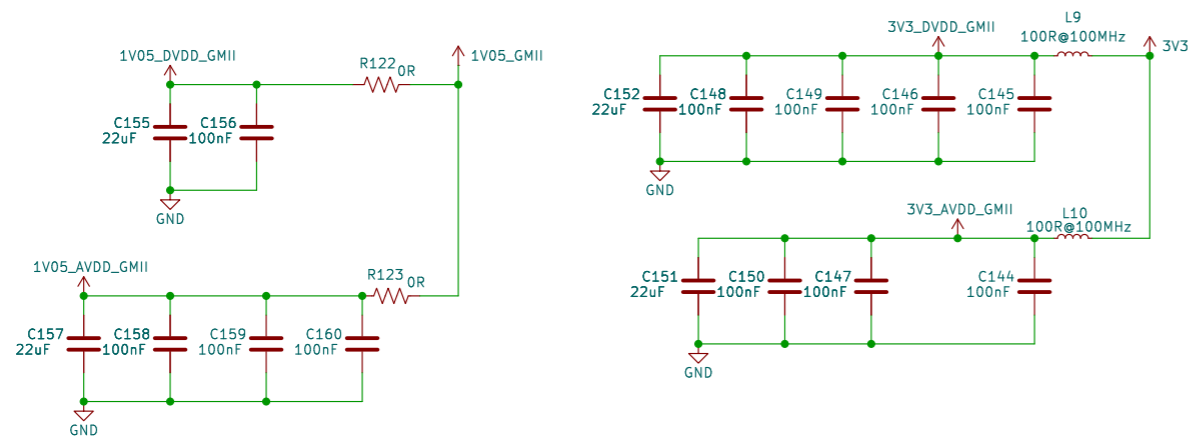
Rev:  
Id: 6/12



# ETHERNET

## POWER ETHERNET TEST POINTS

- 3V3\_DVDD\_GMII ←
- 3V3\_AVDD\_GMII ←
- 1V05\_GMII ←
- 1V05\_AVDD\_GMII ←



### ONESENSE

Sheet: /SCHEMATIC/ETHERNET/  
File: ETHERNET.kicad\_sch

**Title: LORA\_STM BOARD**

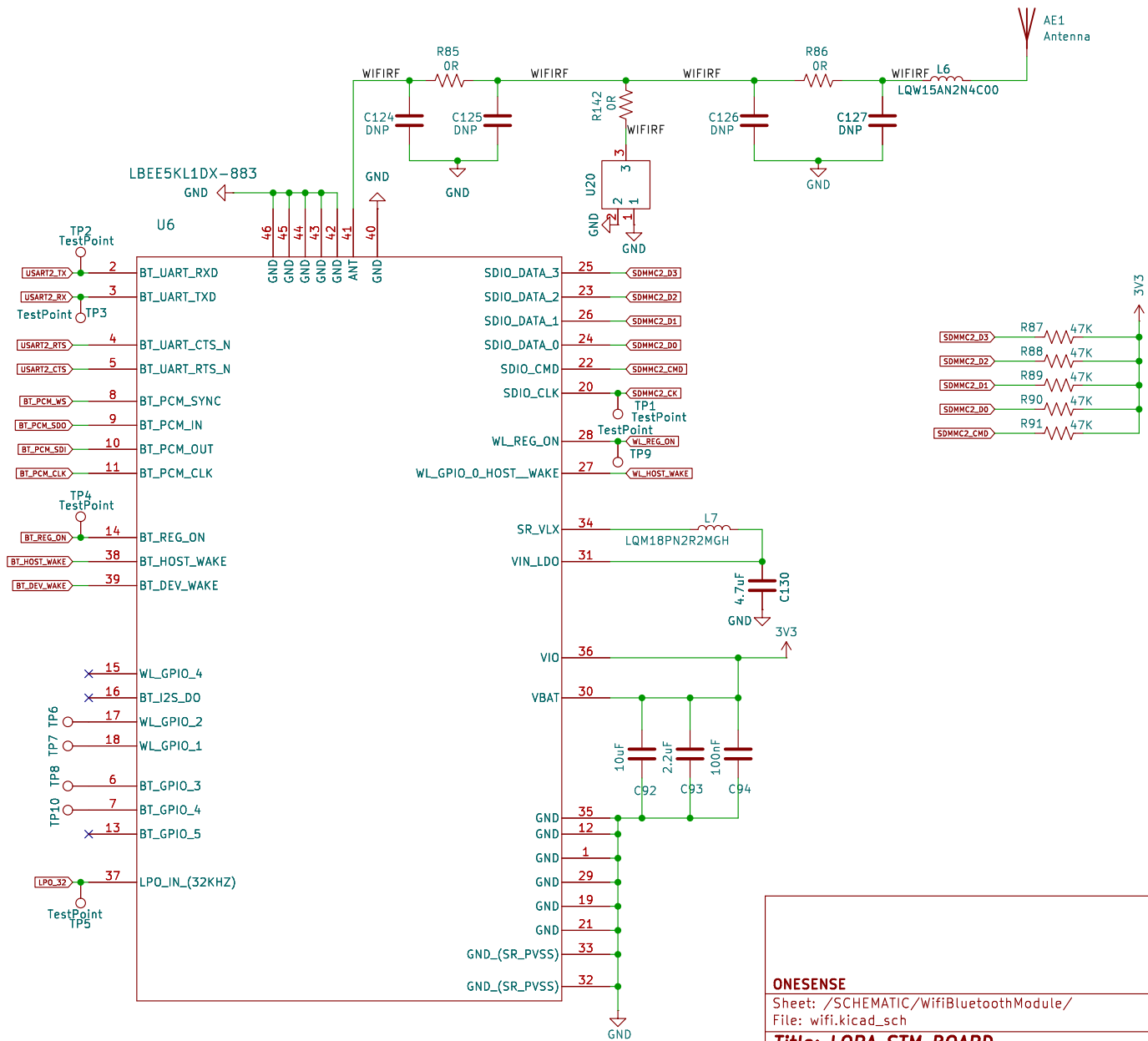
Size: A3 Date: 2025-03-12

Rev:

KiCad E.D.A. 8.0.5

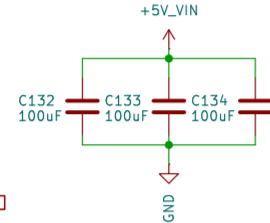
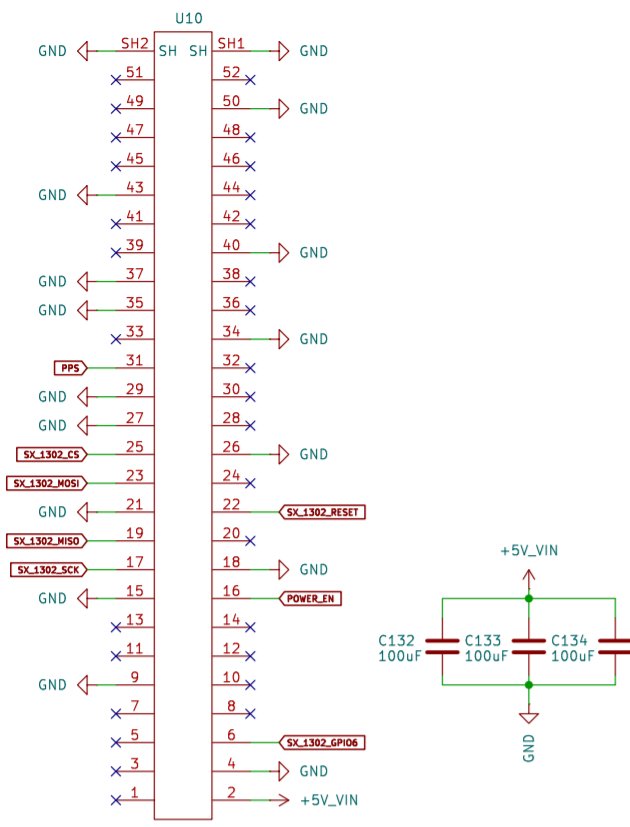
Id: 7/12

# WIFI

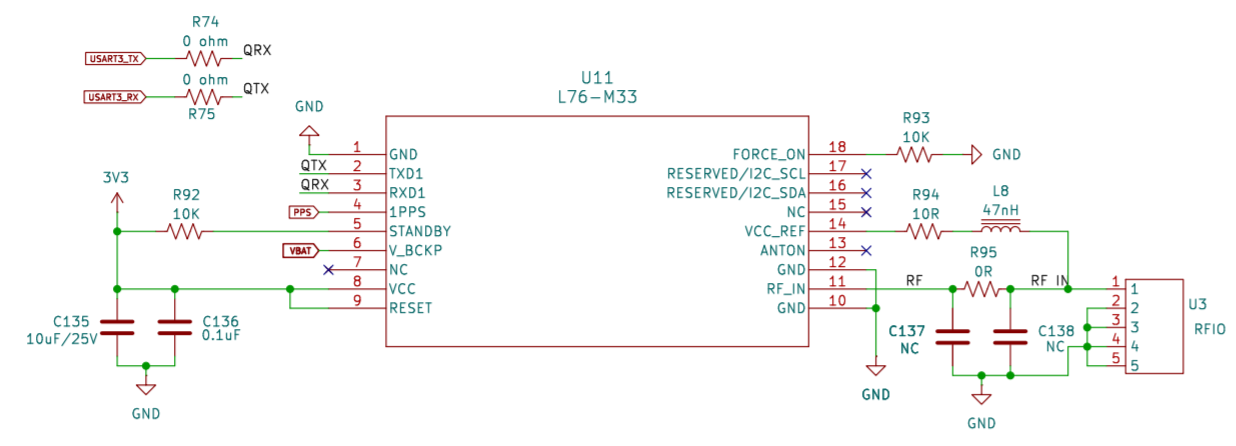


<b>ONESENSE</b>	
Sheet: /SCHEMATIC/WifiBluetoothModule/	
File: wifi.kicad_sch	
<b>Title: LORA_STM BOARD</b>	
Size: A4	Date: 2025-03-12
KiCad E.D.A. 8.0.5	Rev: 1
	Id: 8/12

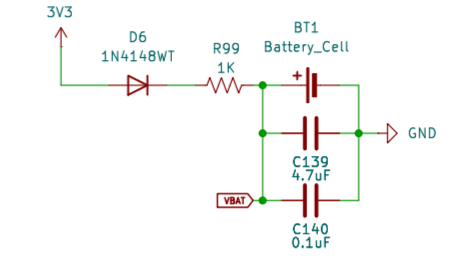
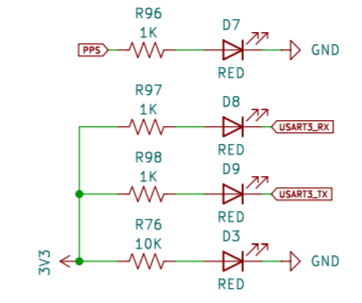
### PCI-E INTERFACE



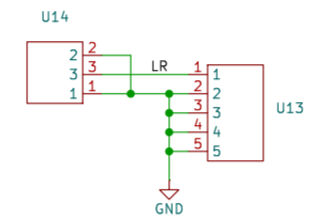
### GPS



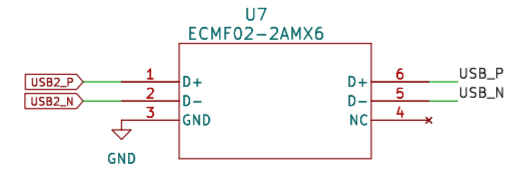
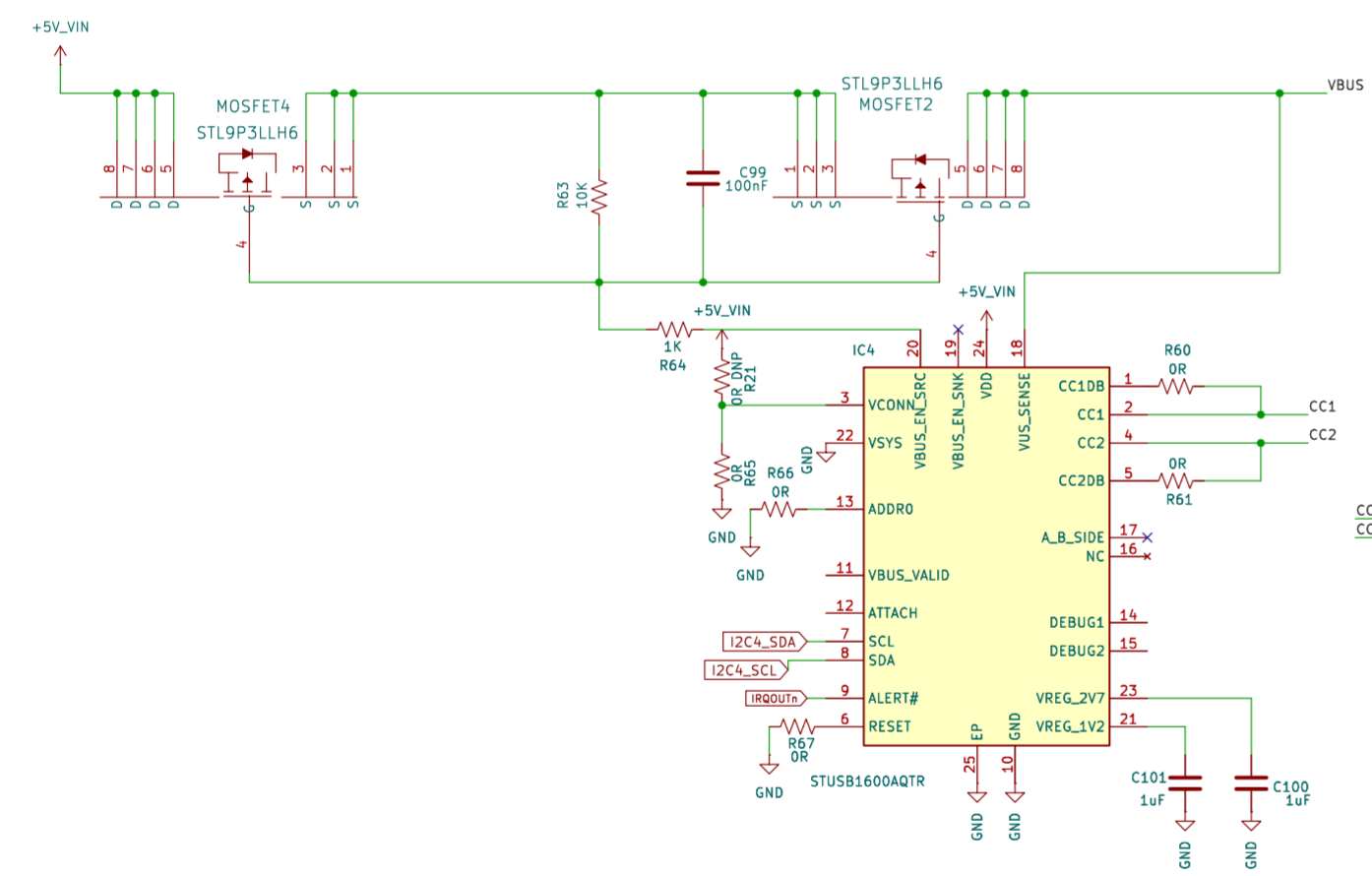
### LORA CONCENTRATOR



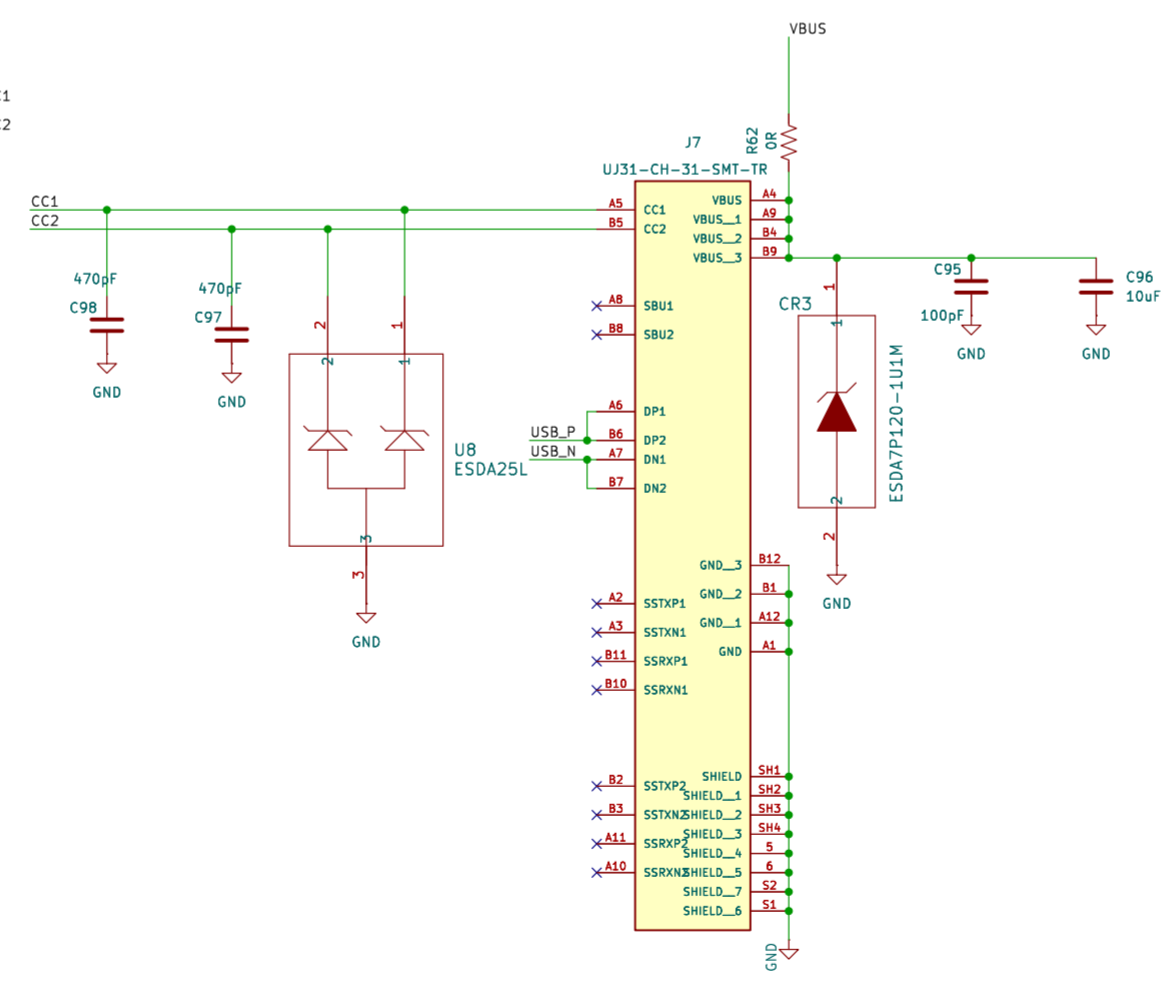
### INDICATOR



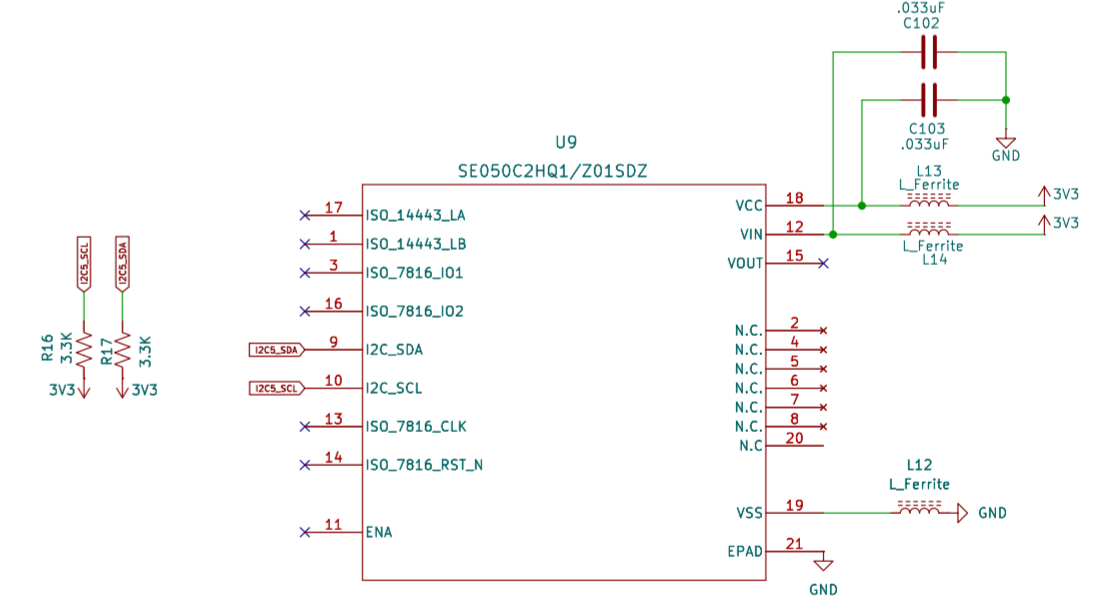
### USB\_PHY



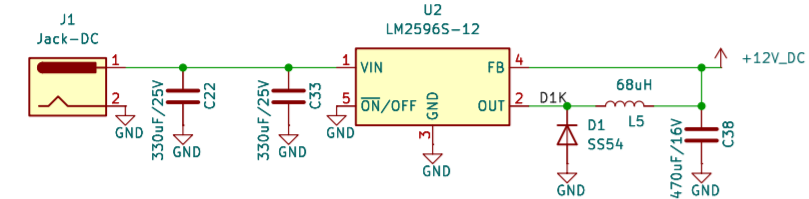
### FLASH\_USB



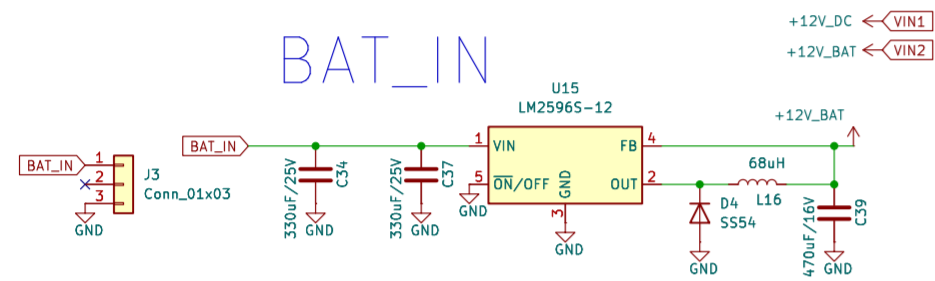
### HSM



## DC POWER JACK\_IN

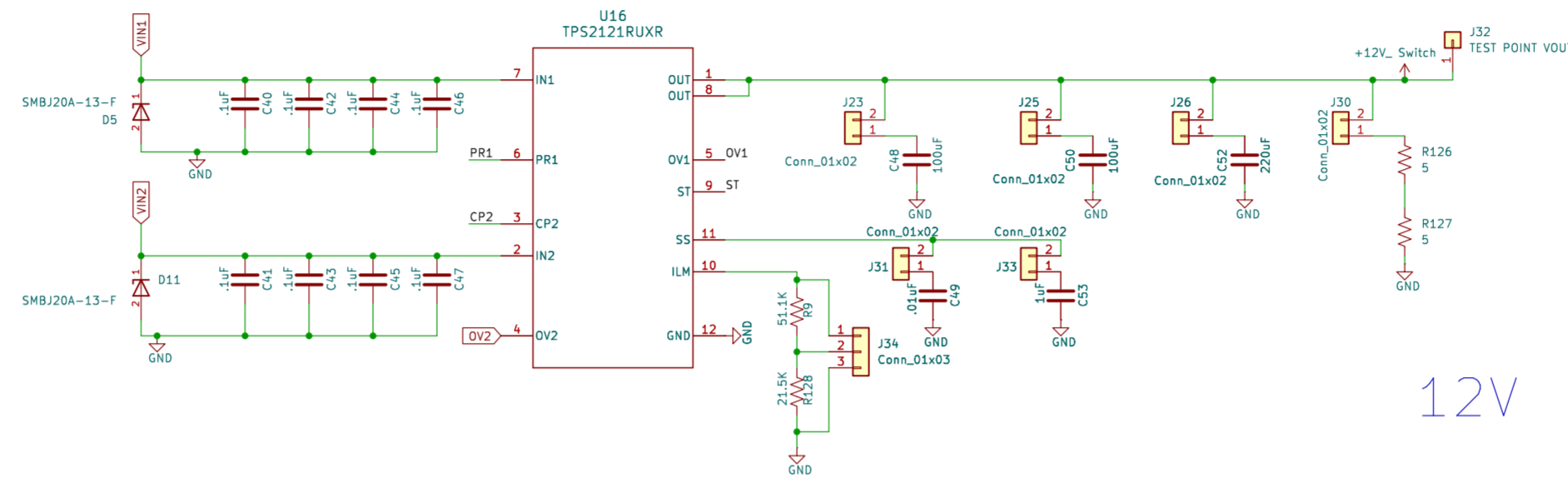


## BAT\_IN



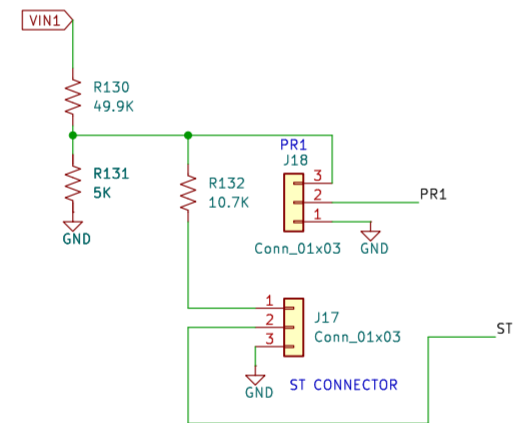
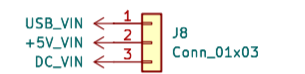
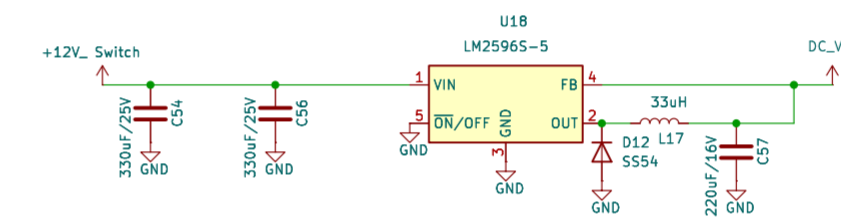
- H2 MountingHole
- H3 MountingHole
- H4 MountingHole

## POWER MUX TEST BOARD

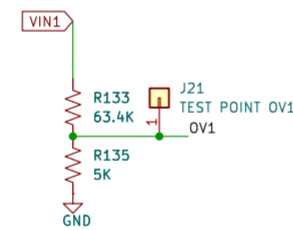


12V to 5v

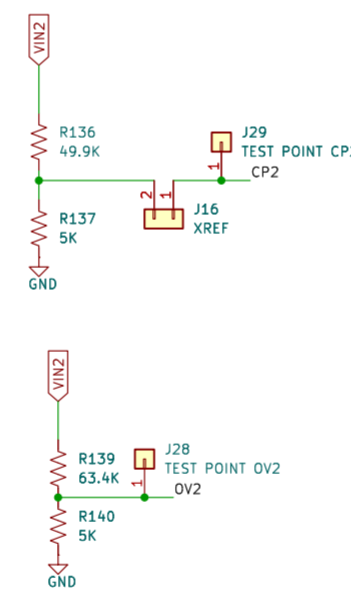
POWER SELECTION  
of 5V



Priority ckt for vin1



Priority ckt for vin2



Indicator

power mux out 12V



5V DC IN

