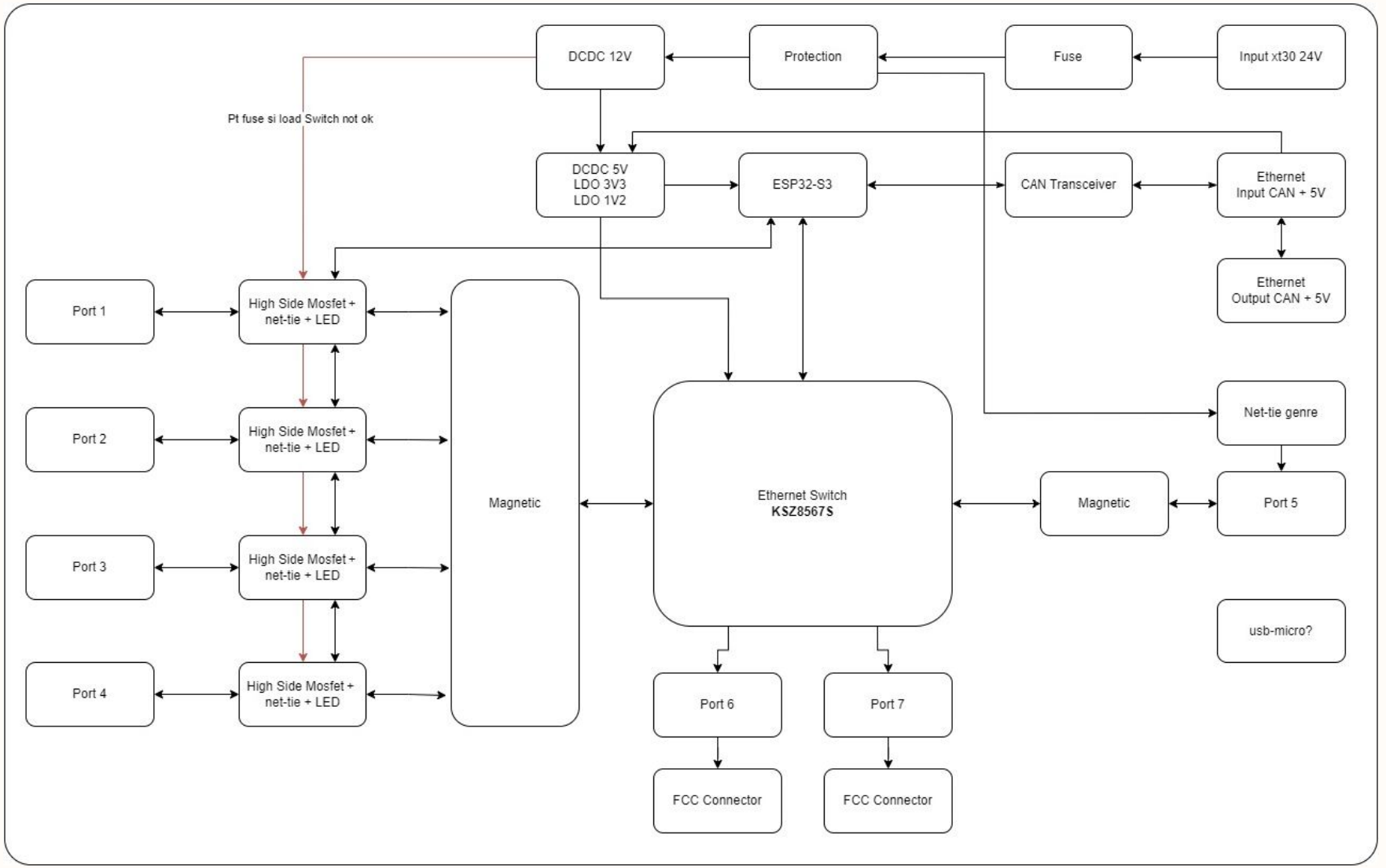
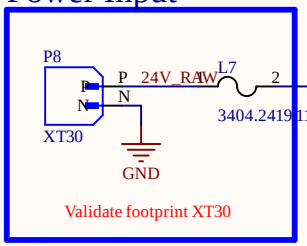
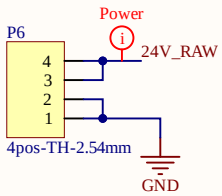


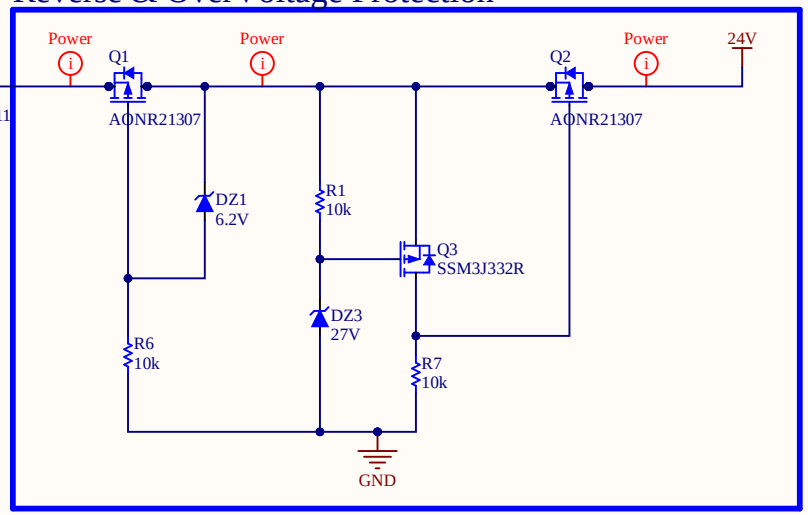
Title: roverSwitch.PrjPcb			
Size: B	Drawn by: Emile Renaud		
Date: 2024-10-28	Checked by: *		
Sheet 1 of 8	Revision: V1.0	File: Overview.SchDoc	

Power Input

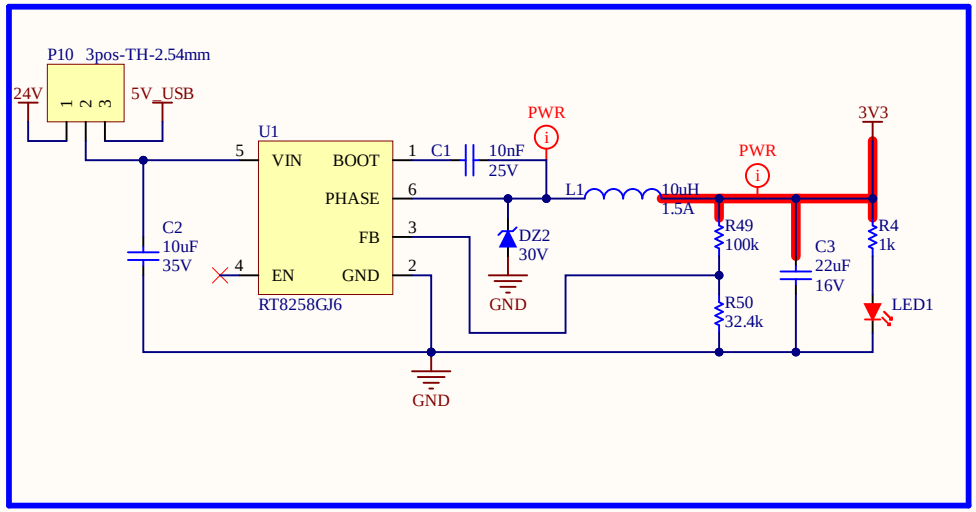




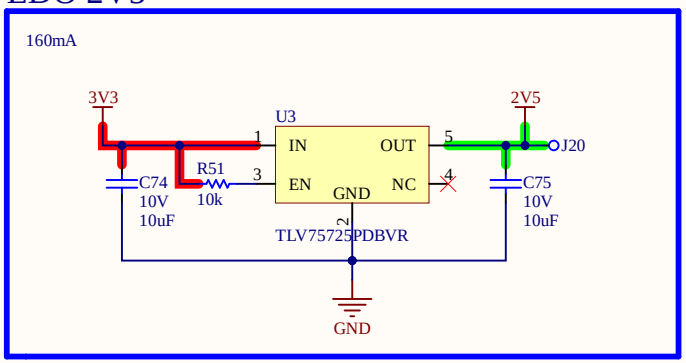
Reverse & OverVoltage Protection



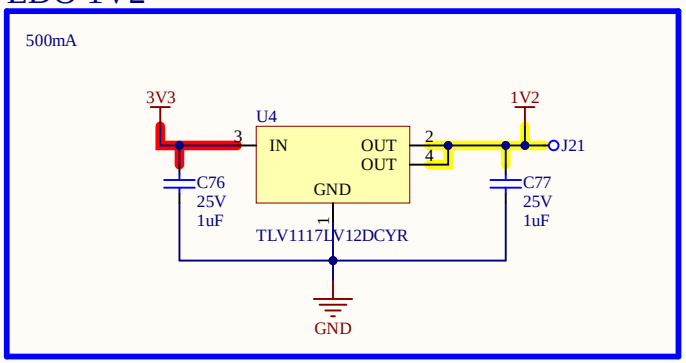
DCDC 5V



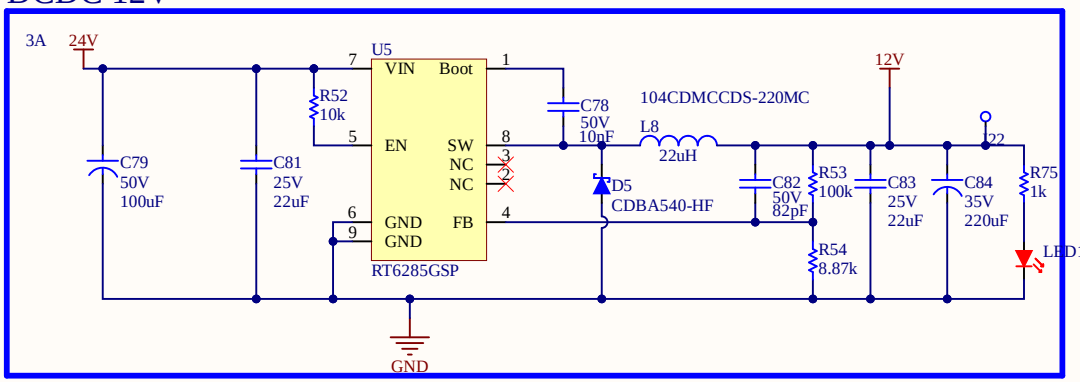
LDO 2V5

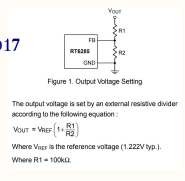


LDO 1V2



DCDC 12V





Title: roverSwitch.PrjPcb			
Size: B	Drawn by: Emile Renaud		
Date: 2024-11-03	Checked by: *		
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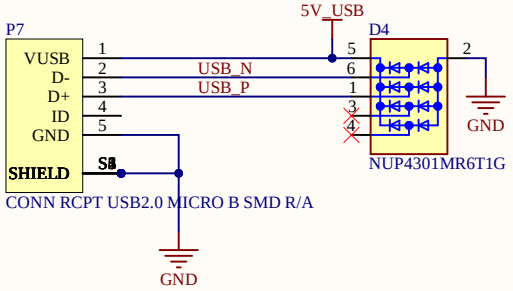
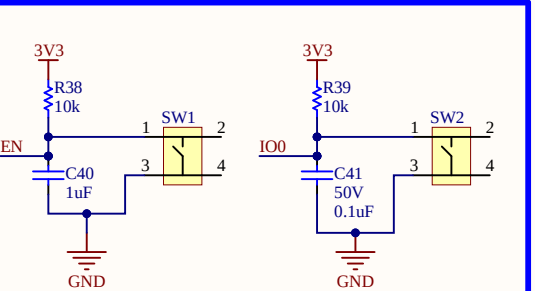
USB-micro

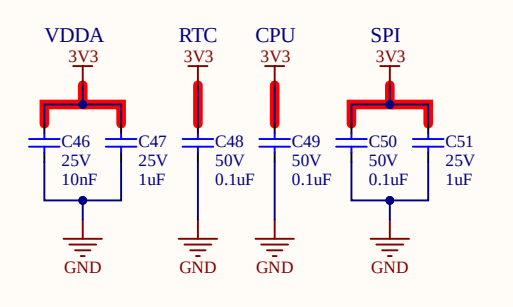


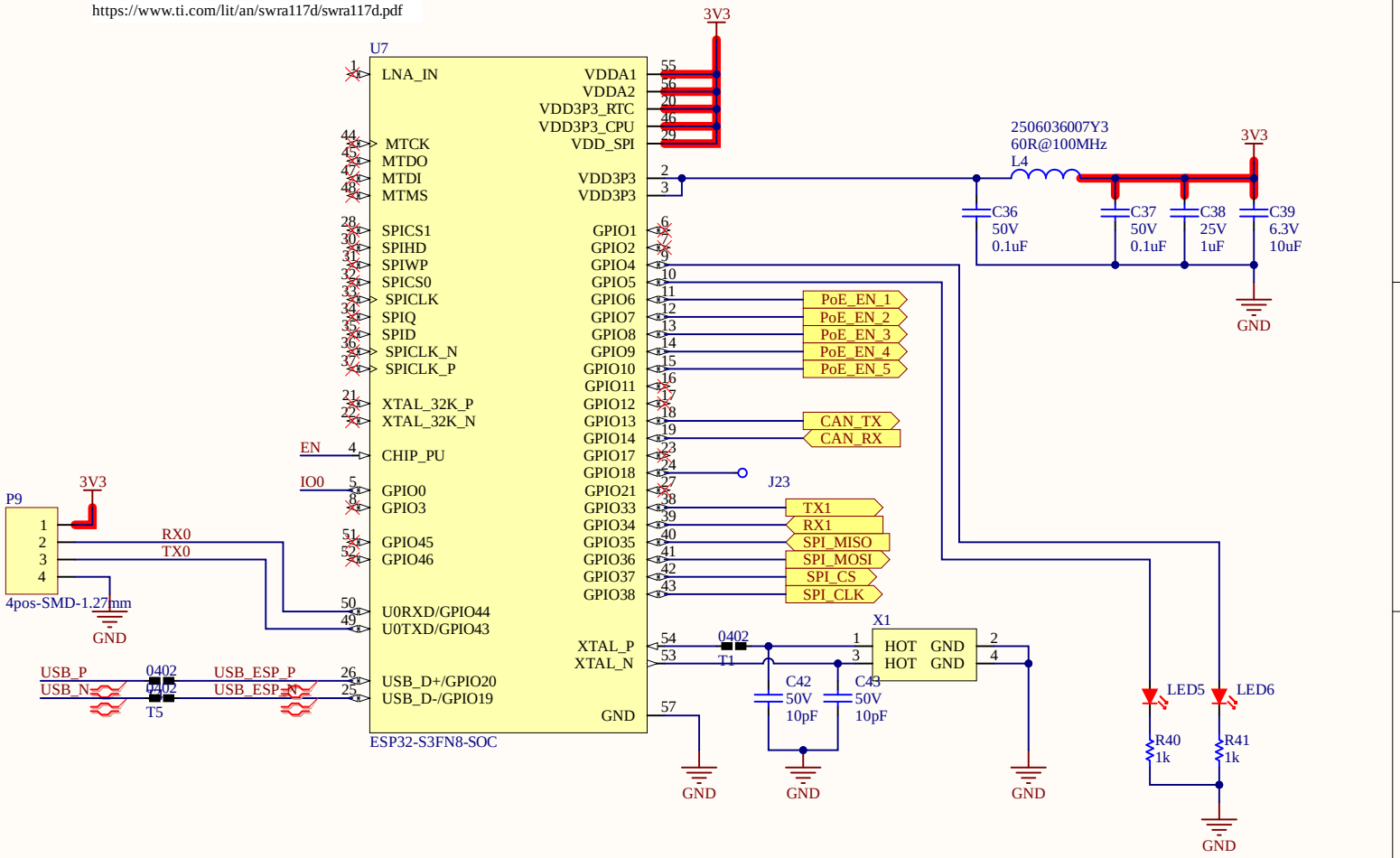
https://www.ti.com/lit/an/swra117d/swra117d.pdf

Buttons & Strapping



Decoupling





Title: roverSwitch.PrjPcb			
Size: B	Drawn by: Emile Renaud		
Date: 2024-11-04	Checked by: *		
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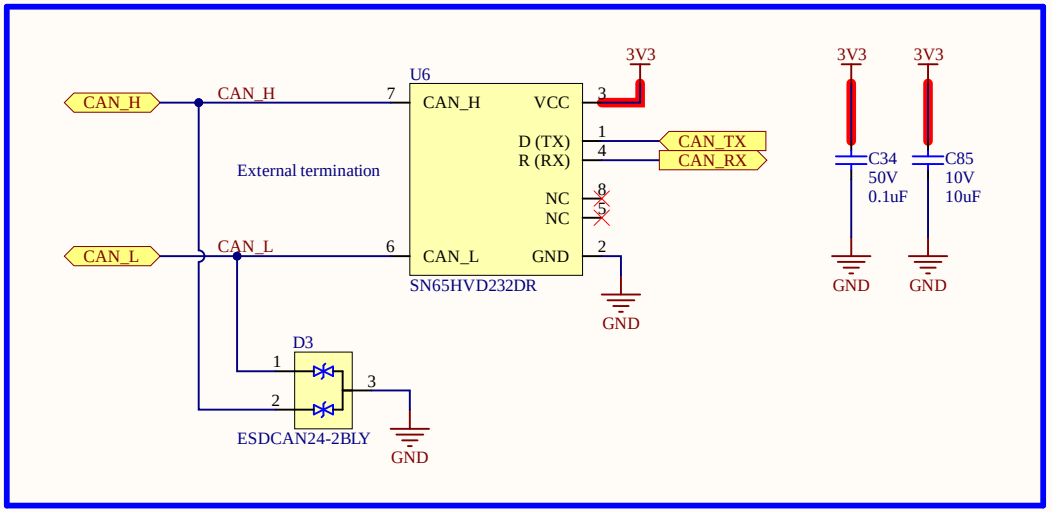
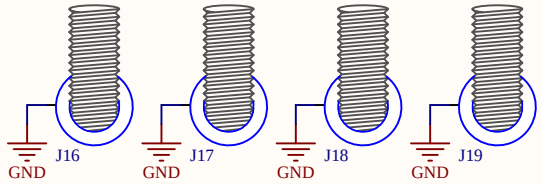
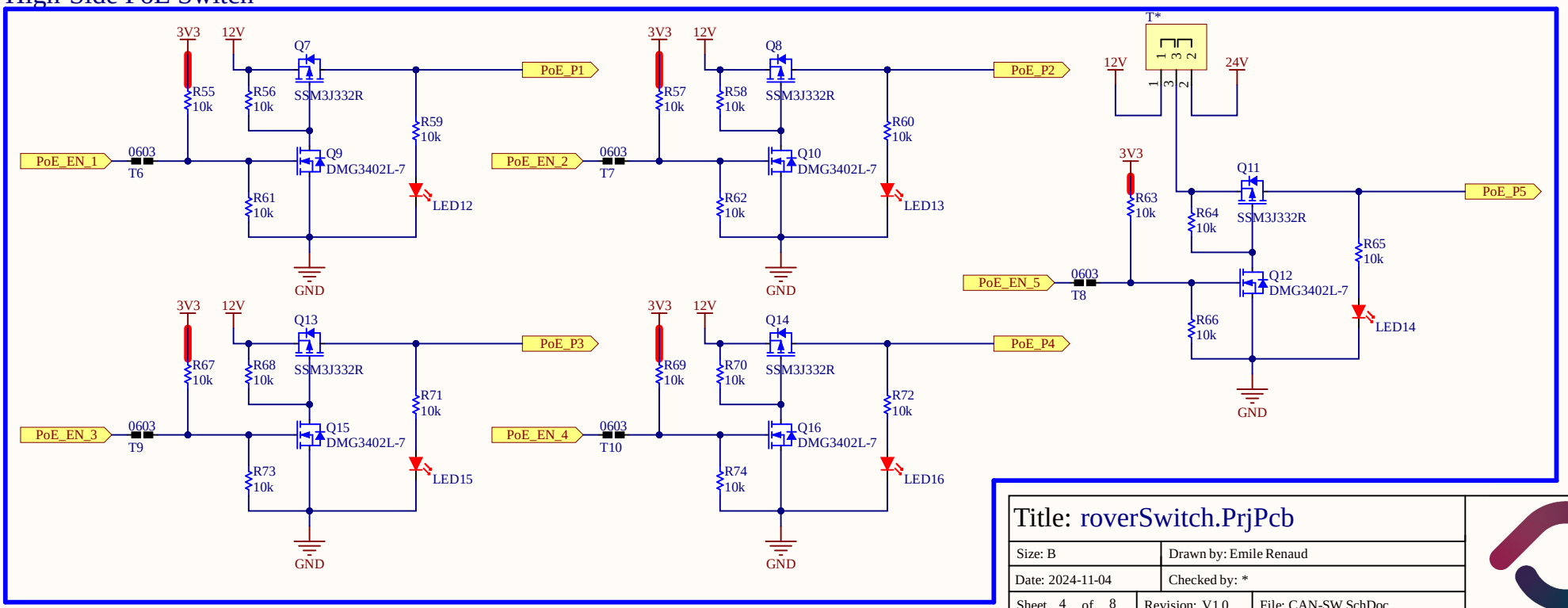
CAN



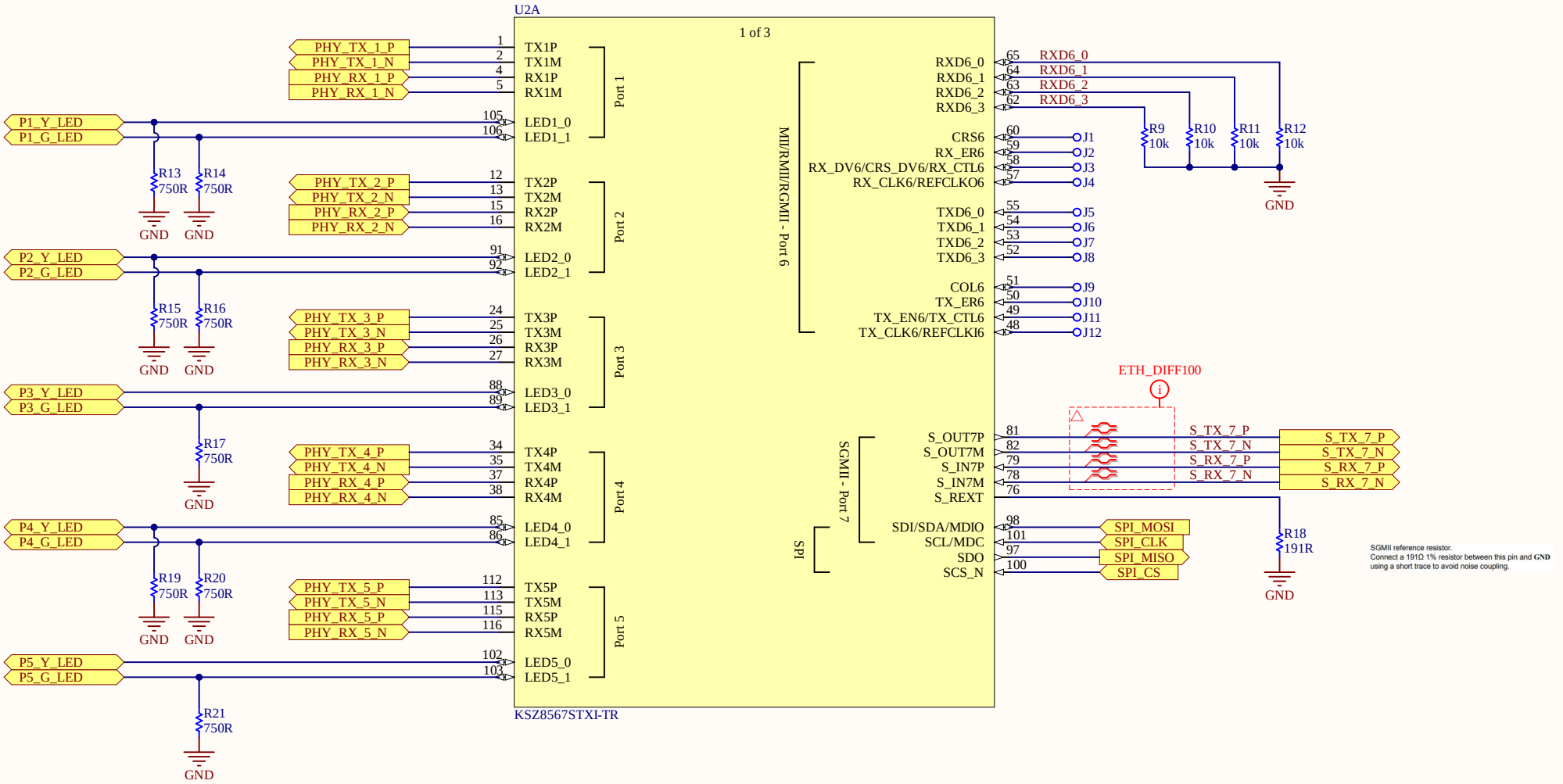


High-Side PoE Switch



Title: roverSwitch.PrjPcb			
Size: B	Drawn by: Emile Renaud		
Date: 2024-11-04	Checked by: *		
Sheet 4 of 8	Revision: V1.0	File: CAN-SW.SchDoc	

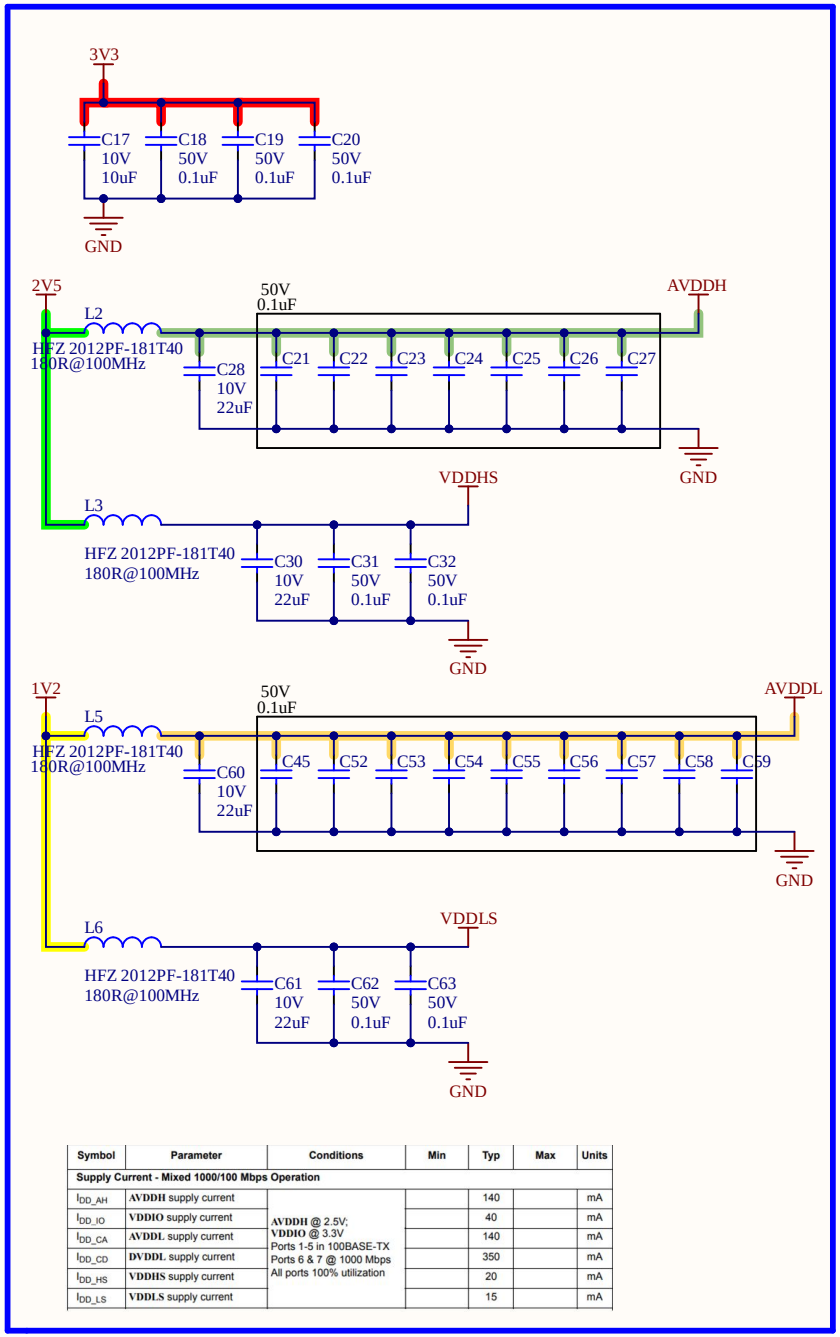
Ethernet IC - Ports



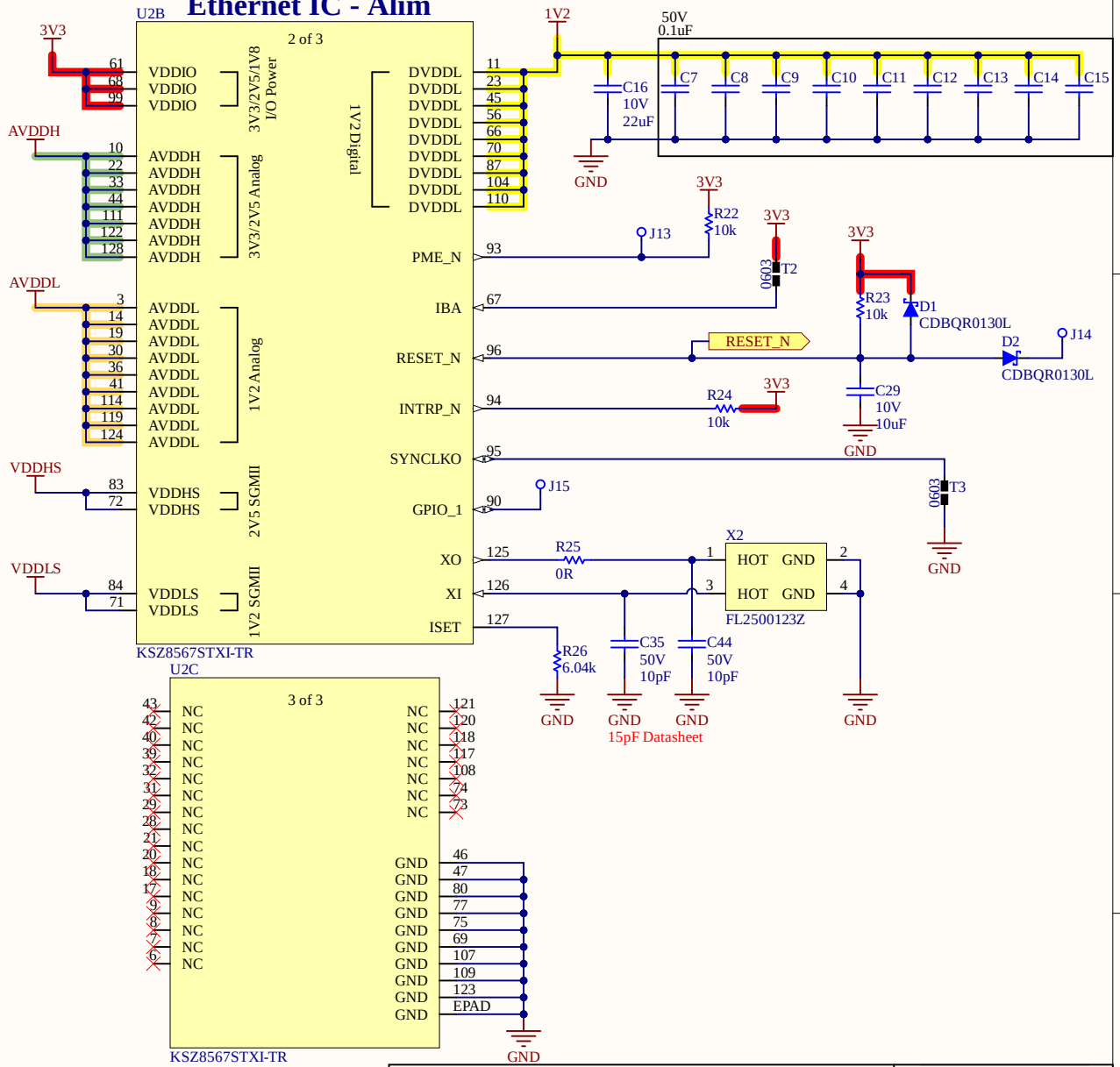
Title: roverSwitch.PrjPcb			
Size: B	Drawn by: Emile Renaud		
Date: 2024-10-31	Checked by: *		
Sheet 5 of 8	Revision: V1.0	File: KSZ_Switch.SchDoc	

Ethernet IC - Alim

Decoupling Capacitors

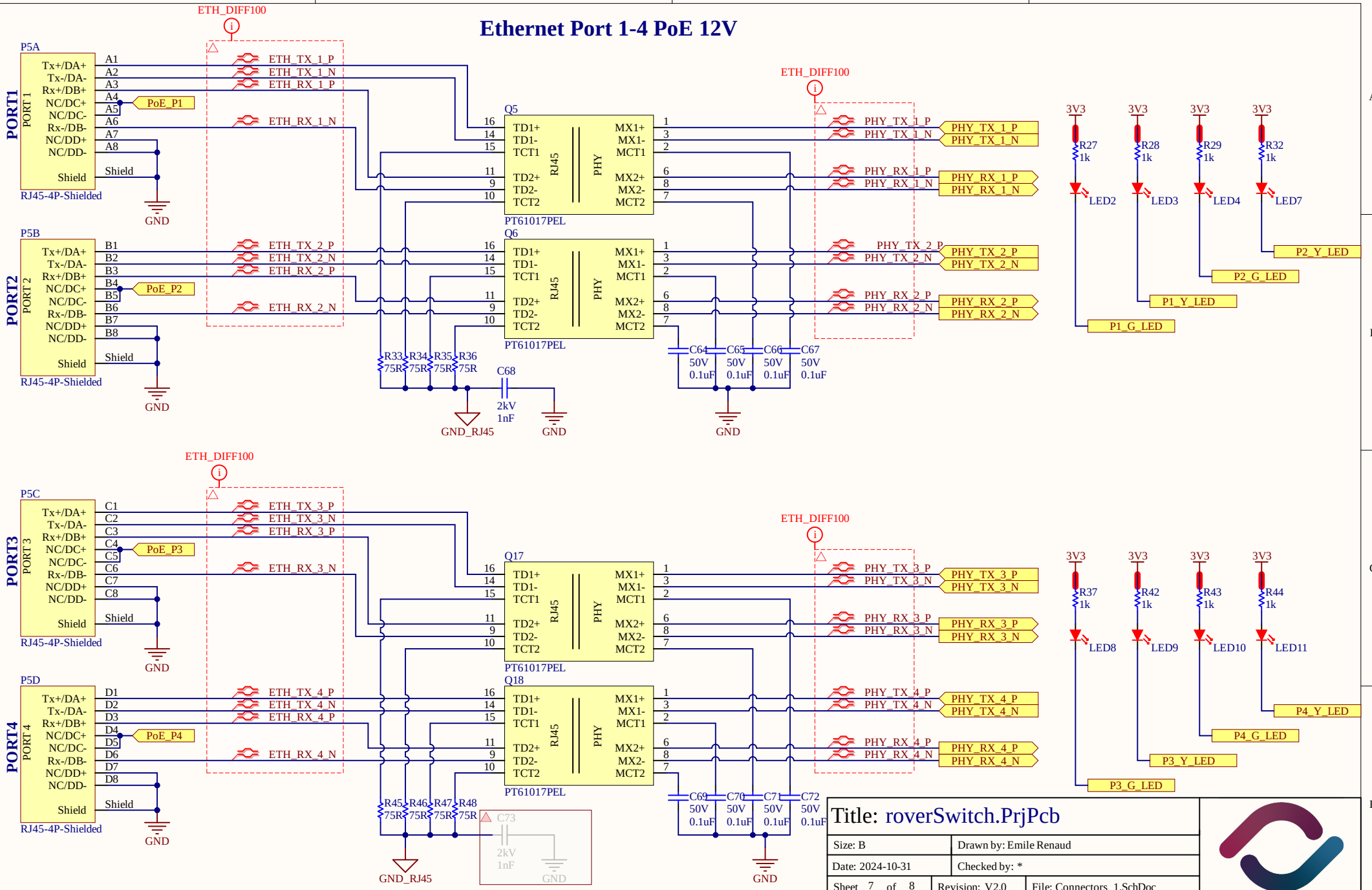


Symbol	Parameter	Conditions	Min	Typ	Max	Units
Supply Current - Mixed 1000/100 Mbps Operation						
I_{DD_AH}	**AVDDH** supply current	**AVDDH** @ 2.5V; **VDDIO** @ 3.3V Ports 1-5 in 100BASE-TX Ports 6 & 7 @ 1000 Mbps All ports 100% utilization		140		mA
I_{DD_IO}	**VDDIO** supply current			40		mA
I_{DD_CA}	**AVDDL** supply current			140		mA
I_{DD_CD}	**DVDDL** supply current			350		mA
I_{DD_HS}	**VDDHS** supply current			20		mA
I_{DD_LS}	**VDDLS** supply current			15		mA



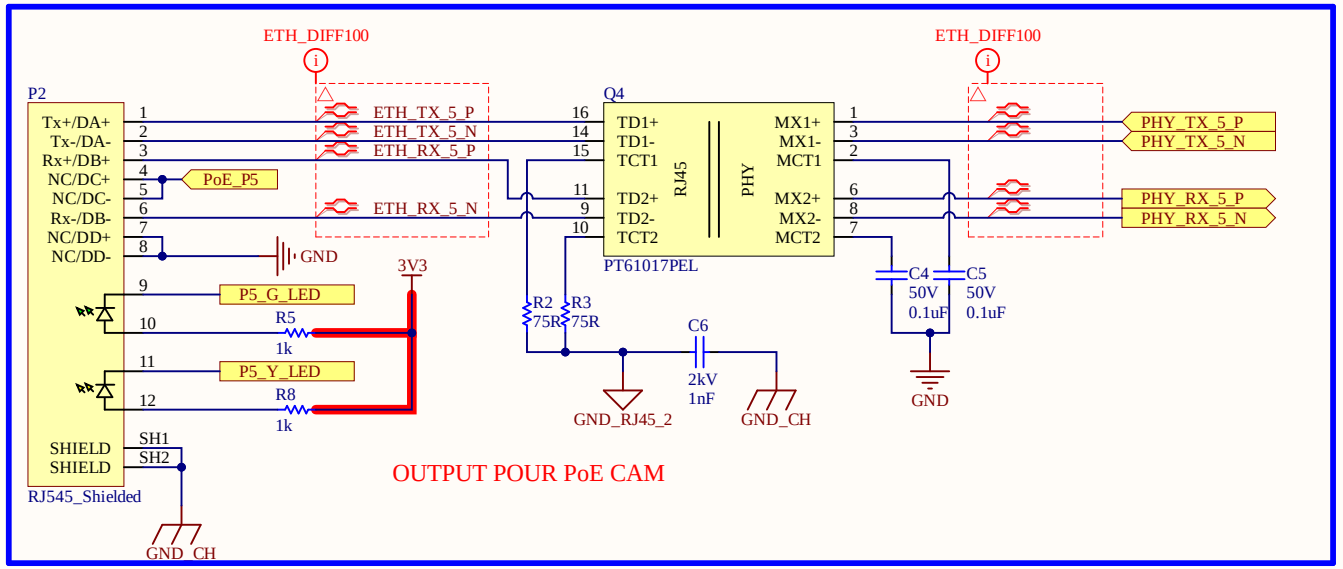
Title: roverSwitch.PrjPcb			
Size: B	Drawn by: Emile Renaud		
Date: 2024-11-02	Checked by: *		
Sheet 6 of 8	Revision: V1.0	File: KSZ_Switch_Control.SchDoc	

Ethernet Port 1-4 PoE 12V

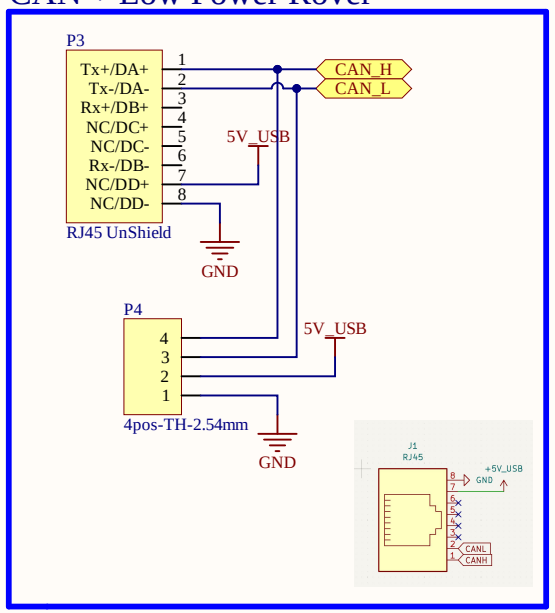


Title: roverSwitch.PrjPcb	
Size: B	Drawn by: Emile Renaud
Date: 2024-10-31	Checked by: *
Sheet 7 of 8	Revision: V2.0
File: Connectors_1.SchDoc	

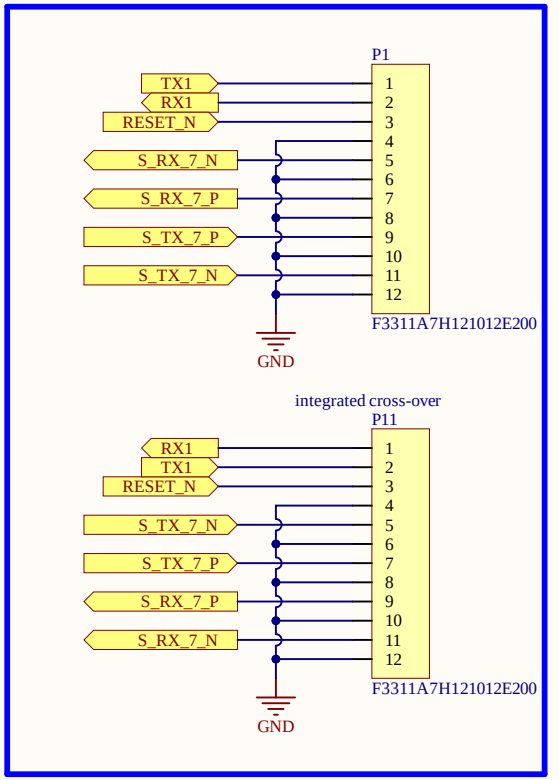
Port 5 - PoE 12/24



CAN + Low Power Rover



FFC Connector Ethernet



Title: roverSwitch.PrjPcb			
Size: B	Drawn by: Emile Renaud		
Date: 2024-11-04	Checked by: *		
Sheet 8 of 8	Revision: V1.0	File: Connectors_2.SchDoc	