

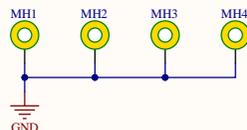
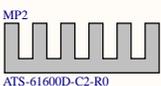
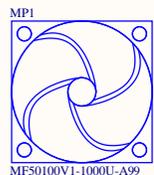
V2HBERRY 1.2 -- Baseboard for Renesas RZ/V2H OSM-L Module

Table of Content

Sheet #	Description
1	Title page and Revision History
2	USB Power Delivery Control
3	Main Power DC/DC Converter
4	Baseboard Power DC/DC Converters
5	OSM GPIO, Ethernet, I2C, SPI, I2S
6	OSM Power and JTAG
7	USB-UART Converters (Console, UART 0/1)
8	Micro-SD Card
9	RPi 5 PCIe Connector
10	MIPI DSI to Display Power and RGB Converter
11	RGB Display Interface (with backlit and touch screen)
12	MIPI CSI-2 Camera Connectors
13	USB 2.0 A and B (OTG and Host)
14	USB 3.2 C and D
15	CAN-FD Interfaces
16	1G Ethernet A
17	1G Ethernet B
18	Servo Control: Power and PWM

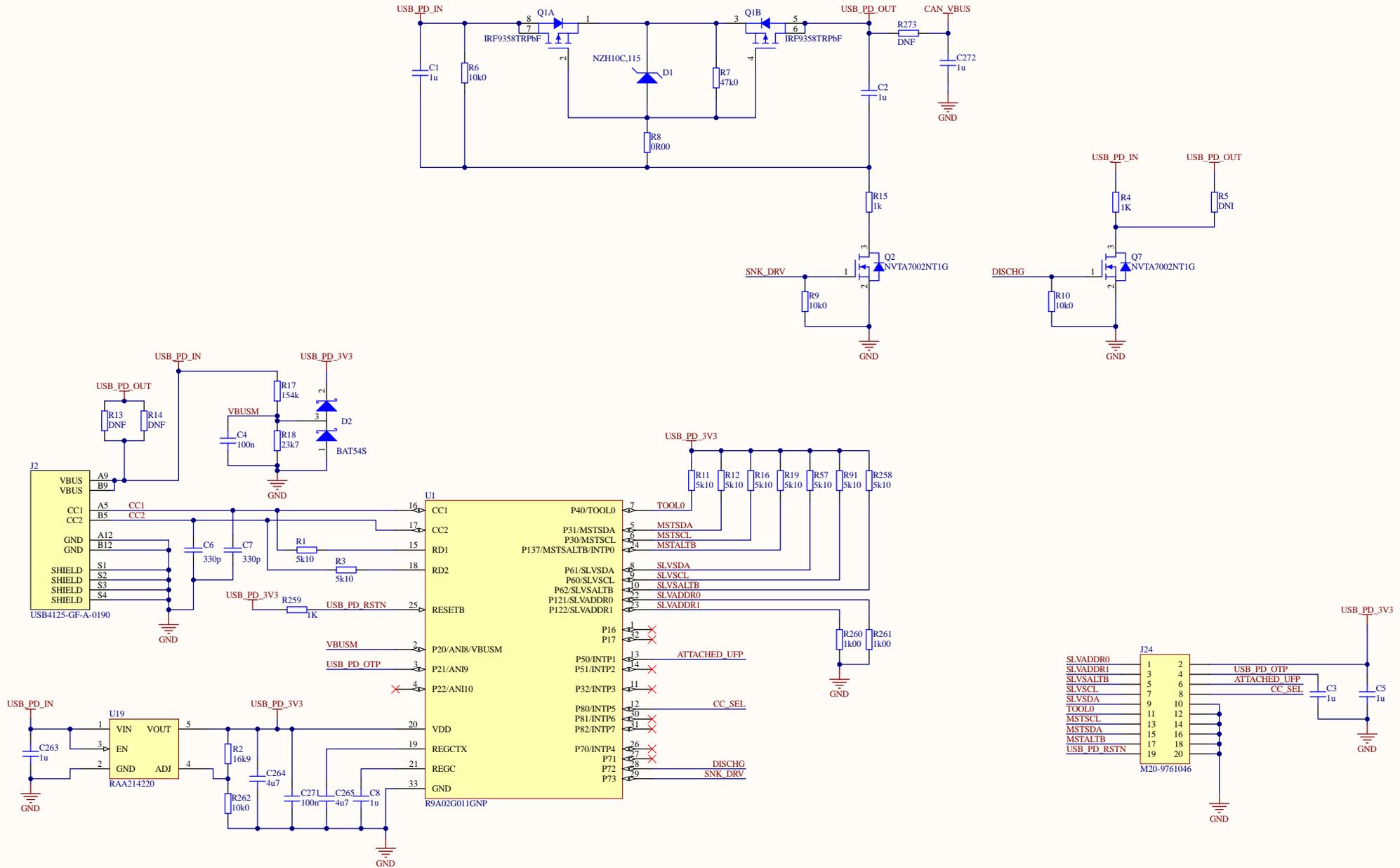
Revision History

Revision	Date	Changes
0.9	2025-04-23	Initial schematic release (pre-layout)
0.9.1	2025-05-14	USB 3 (C/D), BOM Cleanup, PCB placement
0.9.2	2025-05-28	Power tree redesign
0.9.5	2025-06-06	Layout for customer's review
1.0	2025-07-18	U6, U25, and J21 EOL and should be replaced
1.1	2025-08-08	Released to production
1.2	2025-09-29	Released to production



V2HBERRY		
Variant: [No Variations] Comment:		
Number: 1		aries embedded GmbH Schöngesinger Straße 84 D-82256 Fürstenfeldbruck Tel. +49 (0)8141 36367-0 web: www.aries-embedded.de
Revision: 1.2	Sheet 1 of 18	
Date: 2025-09-29 Time: 15:28:27		
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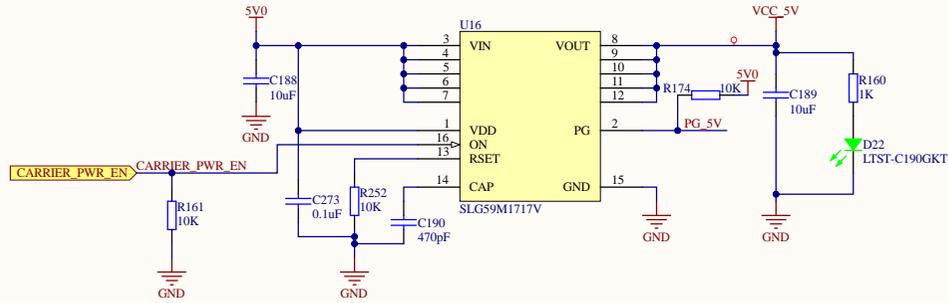
USB PD Control



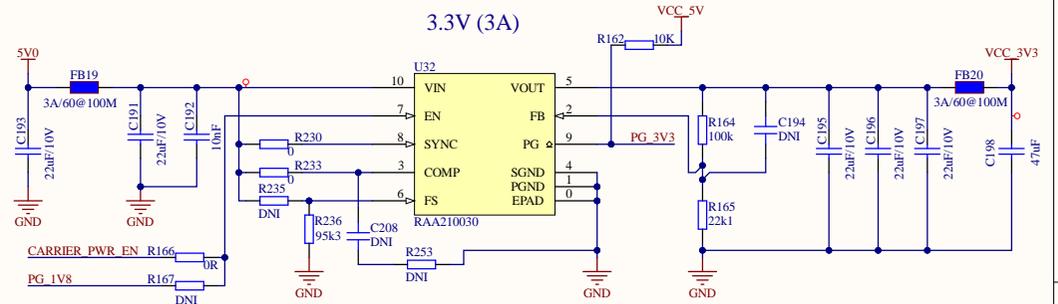
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Baseboard Power

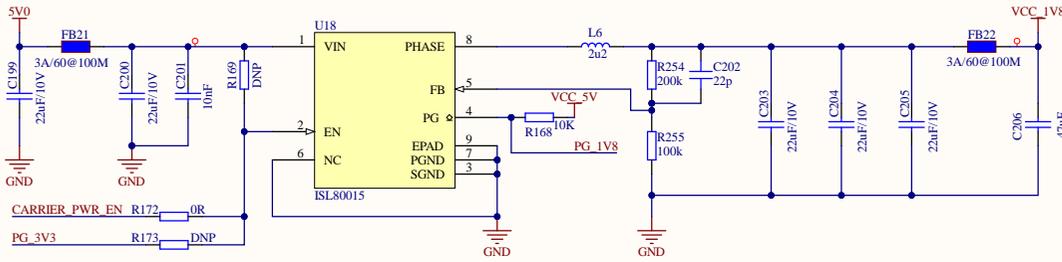
5V switch (5A)



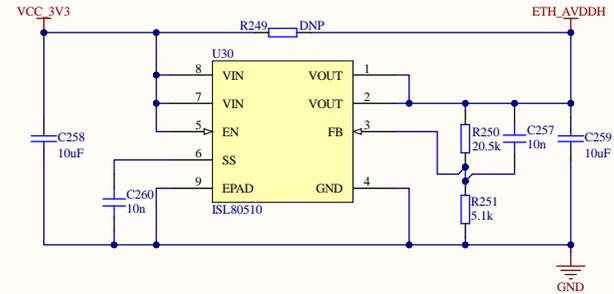
3.3V (3A)



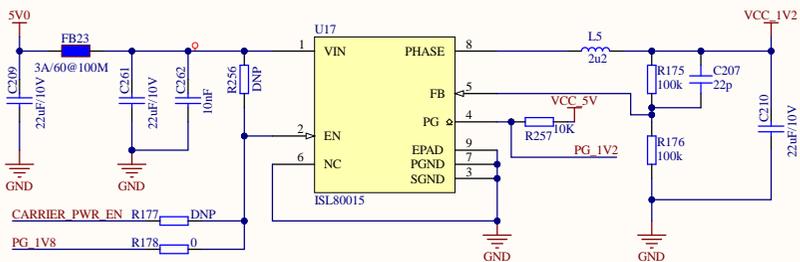
1.8V (1.5A)



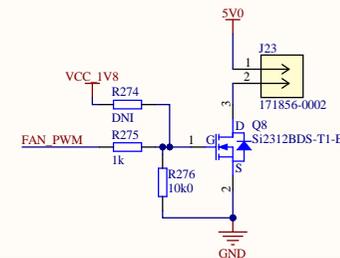
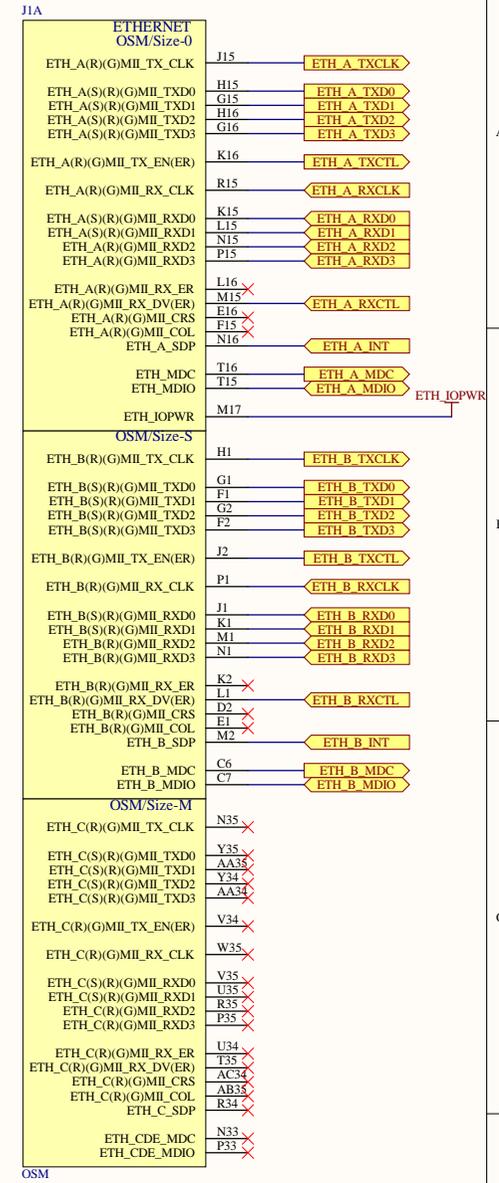
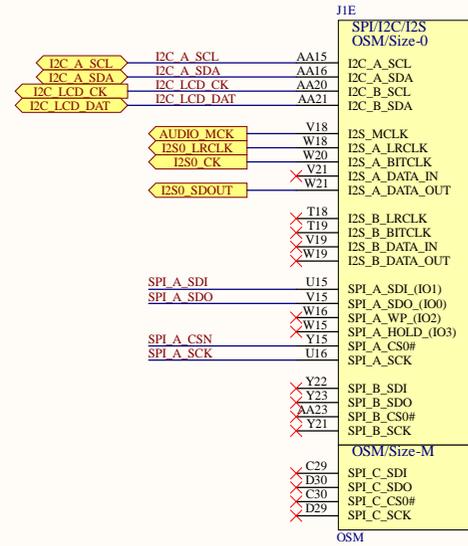
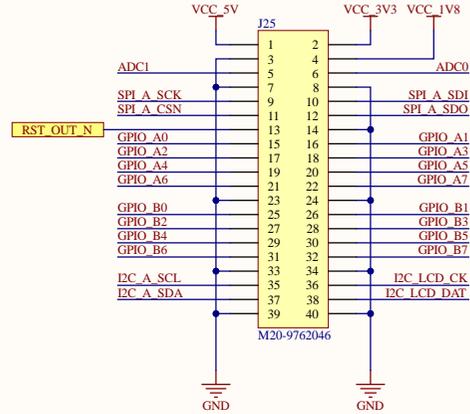
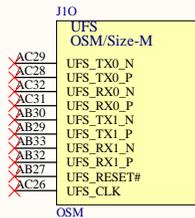
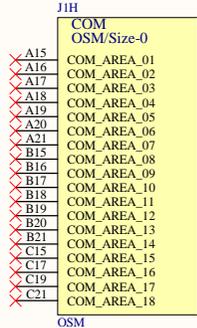
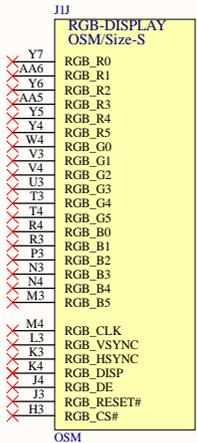
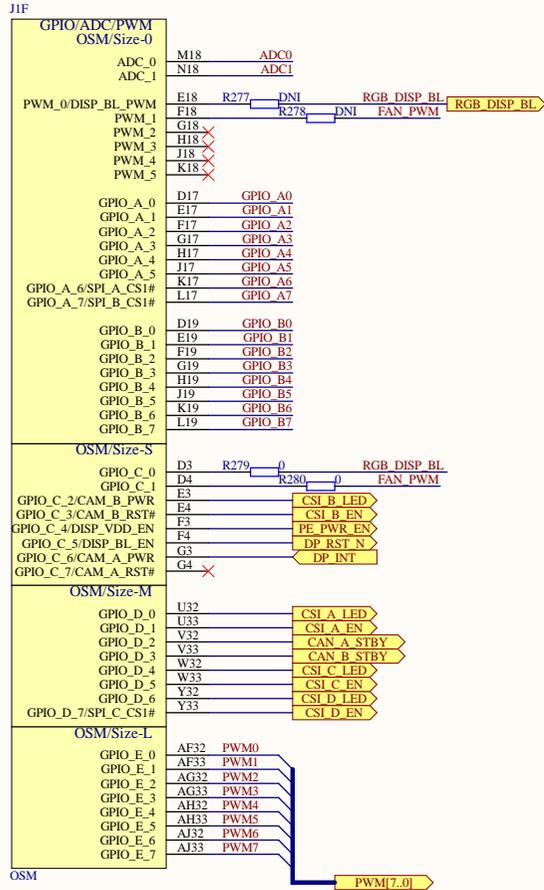
2.5V (1A, Ethernet AVDDH)



1.2V (1.5A)

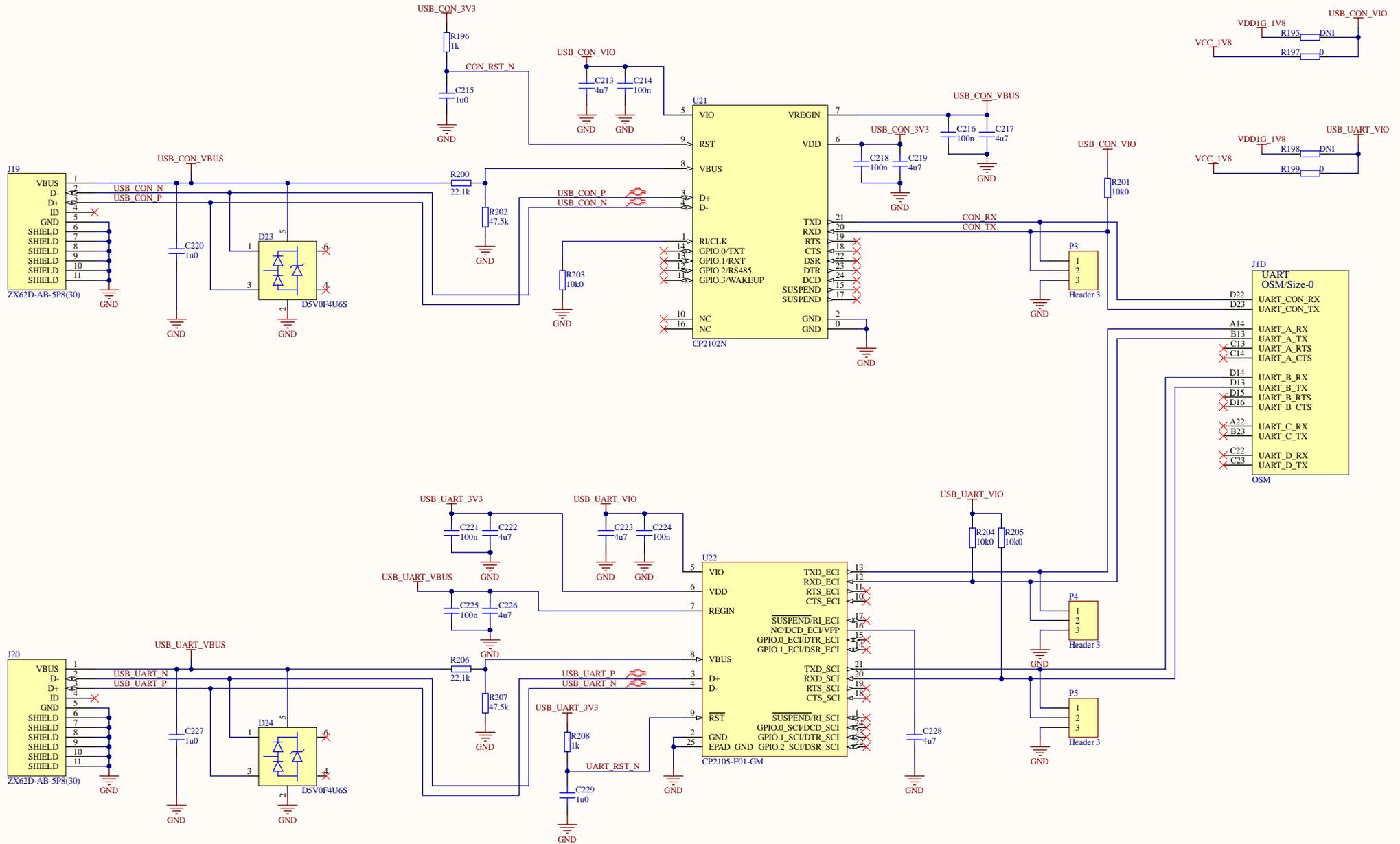


OSM GPIO, Ethernet, I2C, SPI, I2S



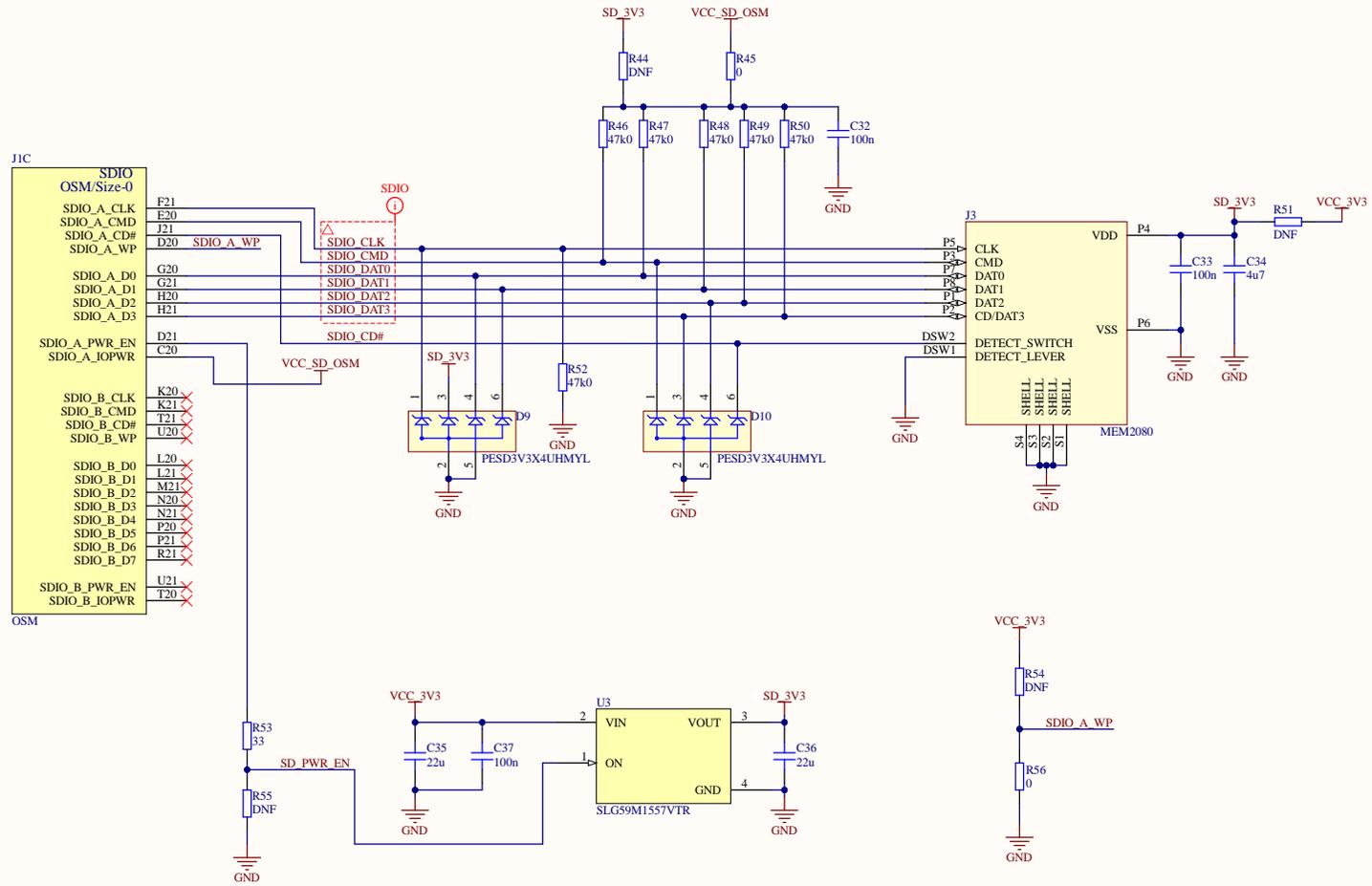
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ariases embedded GmbH Schöngesinger Straße 84 D-82256 Fürstenfeldbruck Tel. +49 (0)8141 36367-0 web: www.ariases-embedded.de	

USB-UART

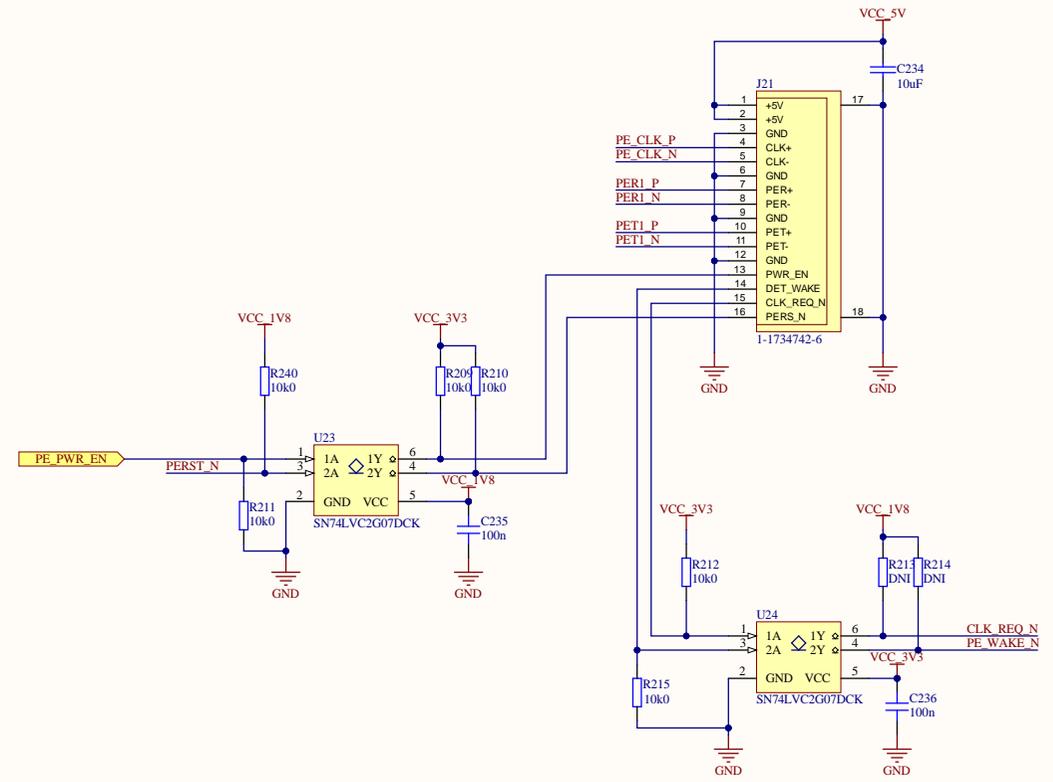
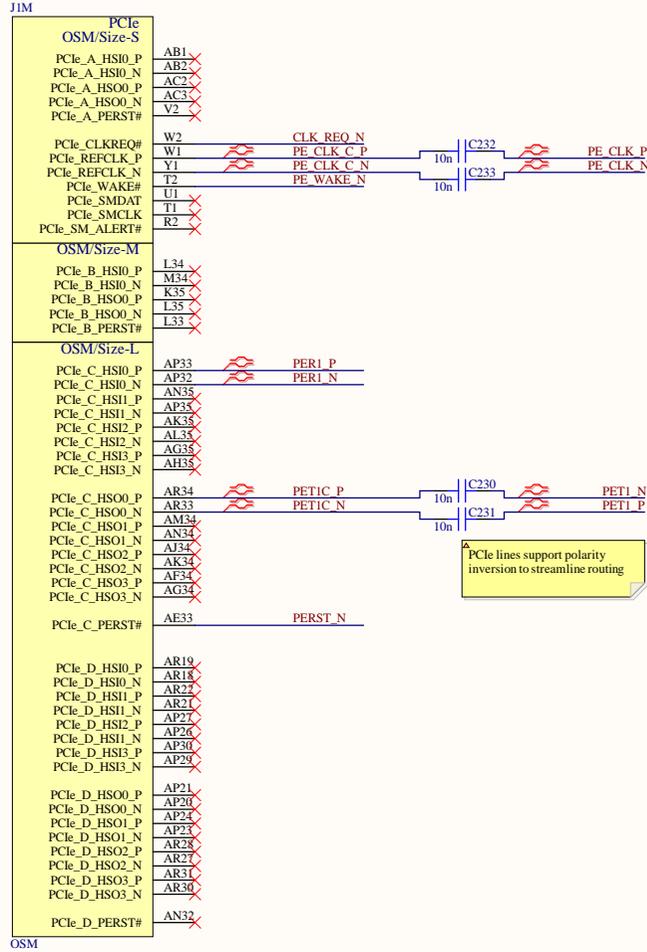


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SD-card

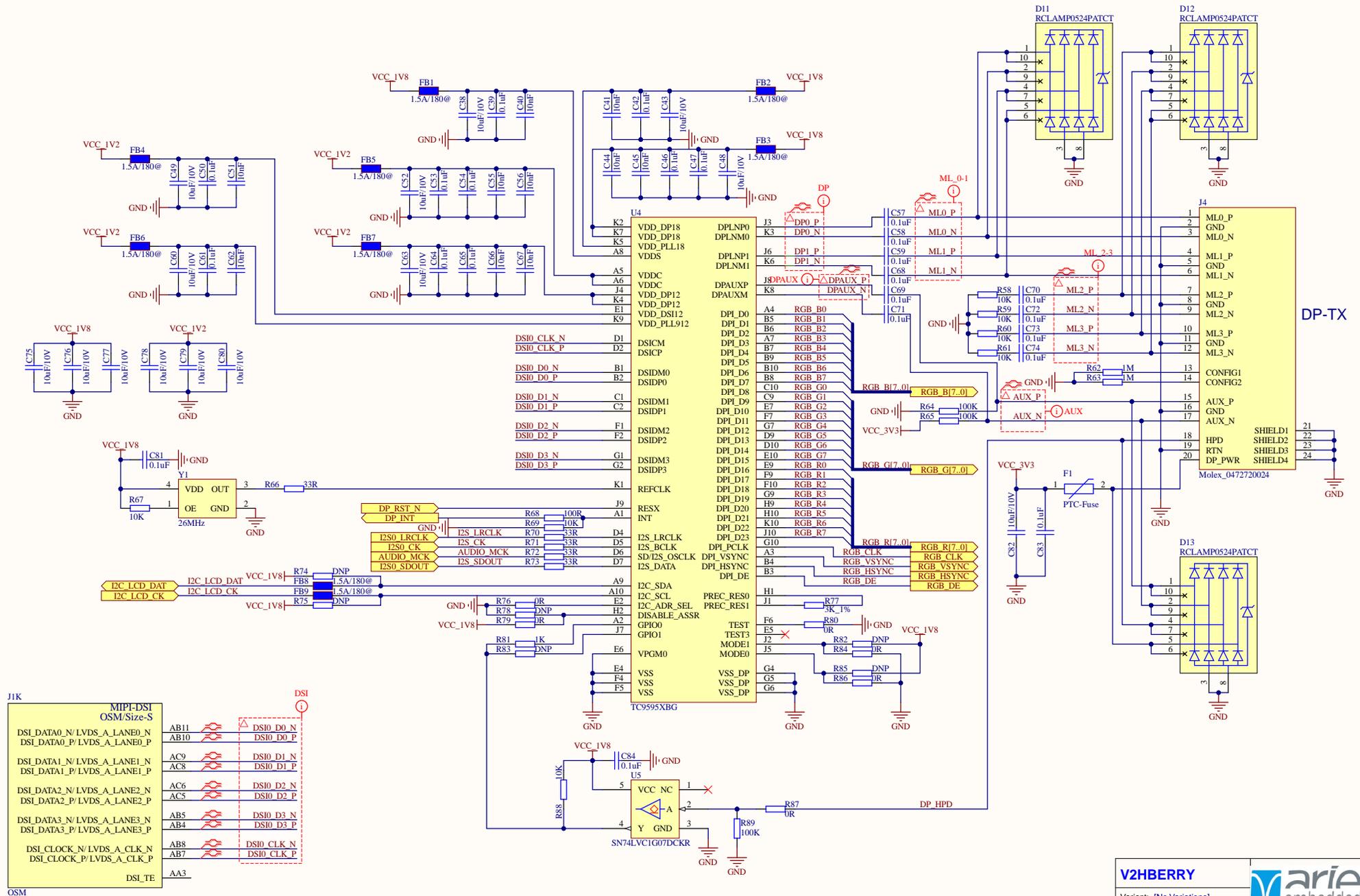


PCIe



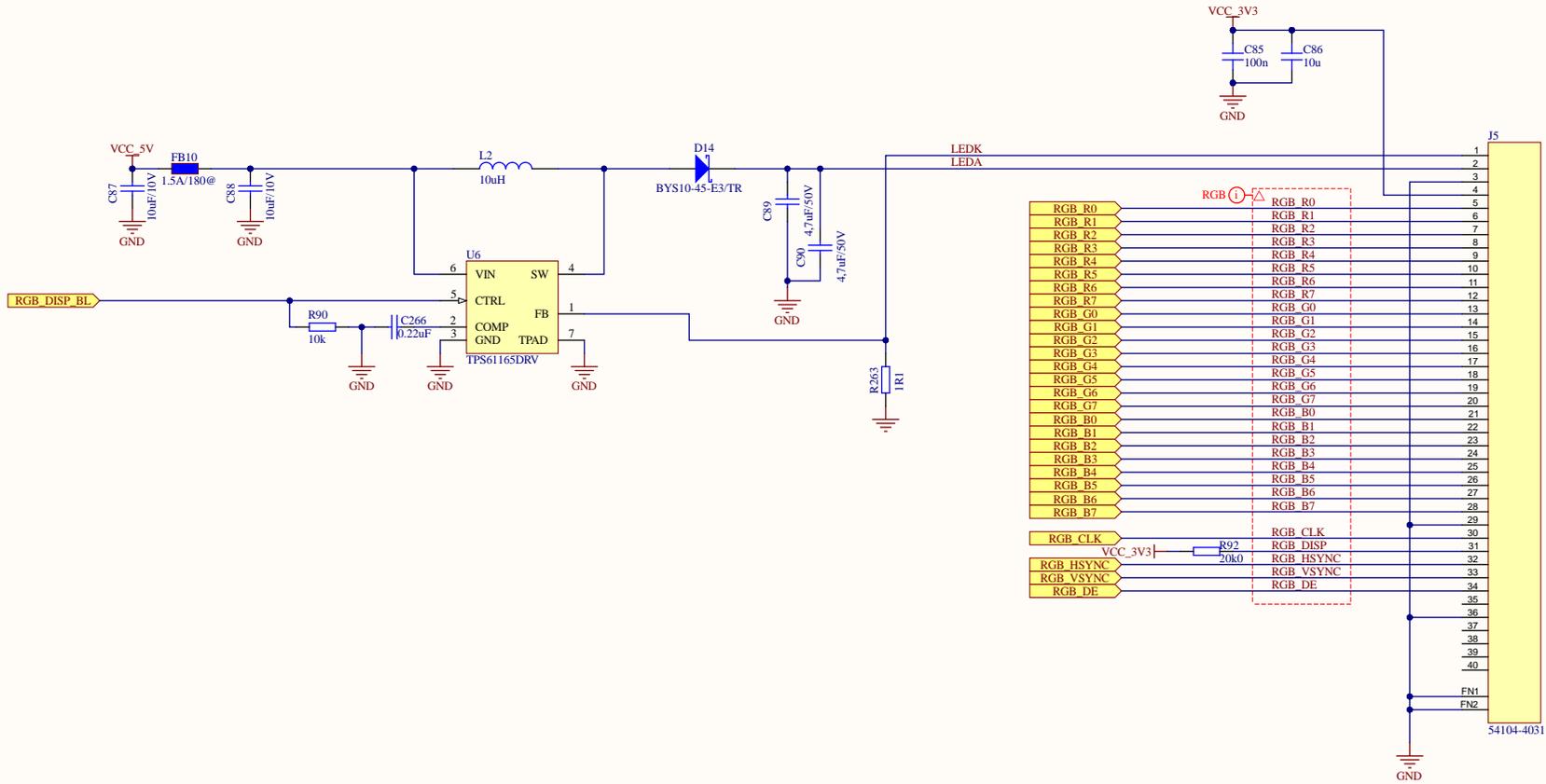
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MIPI DSI to Display Port and RGB Converter



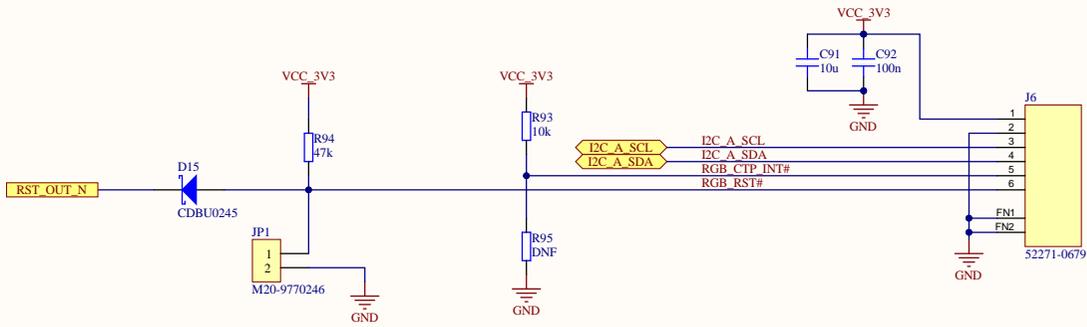
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Revision 1.2	Sheet 10 of 18	arias embedded GmbH Schöngesinger Straße 84 D-82256 Fürstenfeldbruck Tel. +49 (0)8141 36367-0 web: www.arias-embedded.de
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RGB Display



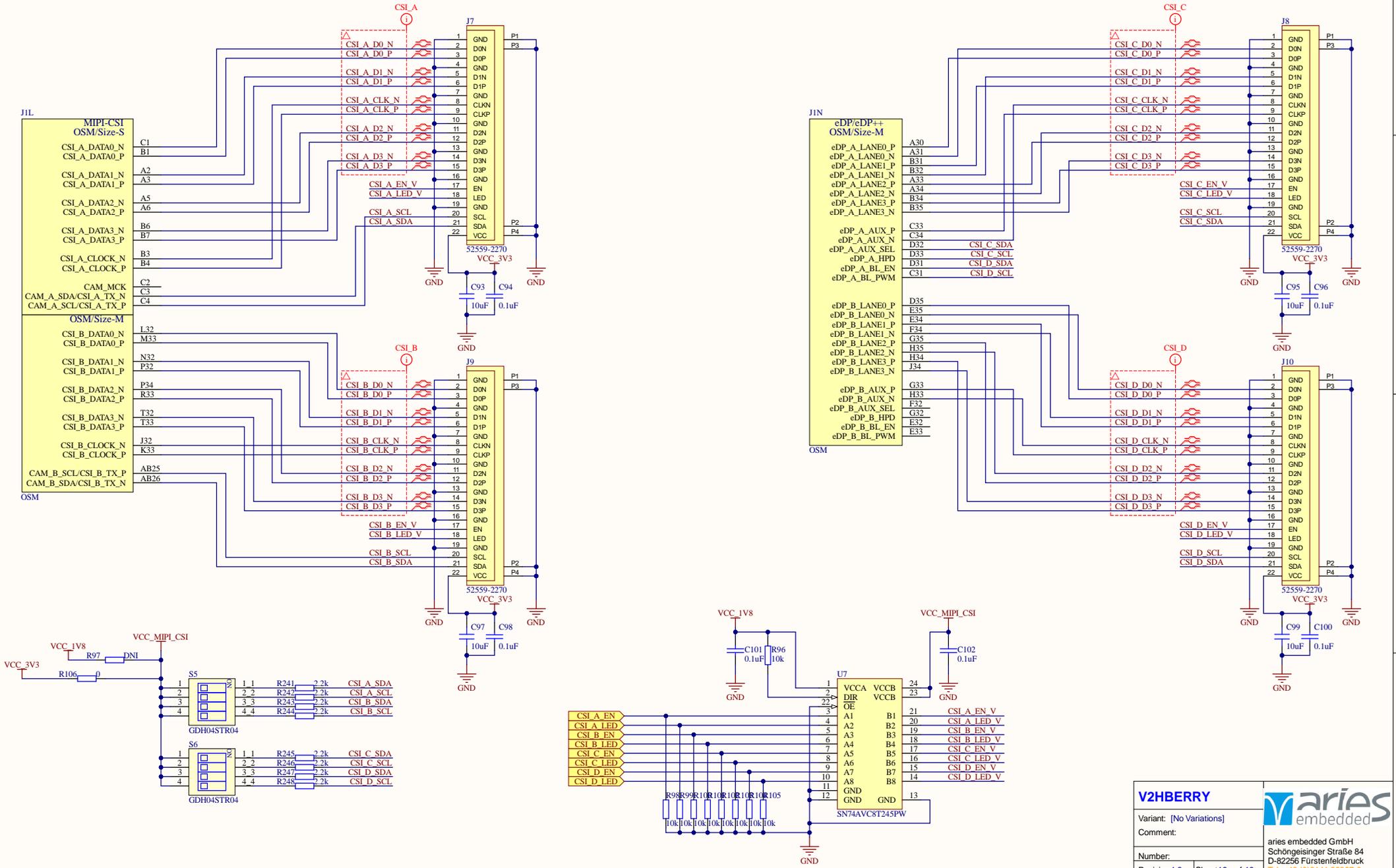
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1	LED-K
2	LED-A
3	GND
4	VDD
5	R0
6	R1
7	R2
8	R3
9	R4
10	R5
11	R6
12	R7
13	G0
14	G1
15	G2
16	G3
17	G4
18	G5
19	G6
20	G7
21	B0
22	B1
23	B2
24	B3
25	B4
26	B5
27	B6
28	B7
29	GND
30	DCLK
31	DISP
32	HSYNC
33	VSYNC
34	DEN
35	VCC
36	GND
37	NC(XR)
38	NC(YD)
39	NC(XL)
40	NC(YU)

PIN	SYMBOL
1	VDD
2	GND
3	SCL
4	SDA
5	INT
6	RESET



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Sheet:	RGB DISPLAY	
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Number:	11	
Revision:	1.2	
Date:	2025-09-29	Sheet 11 of 18

MIPI CSI-2 Camera Connectors

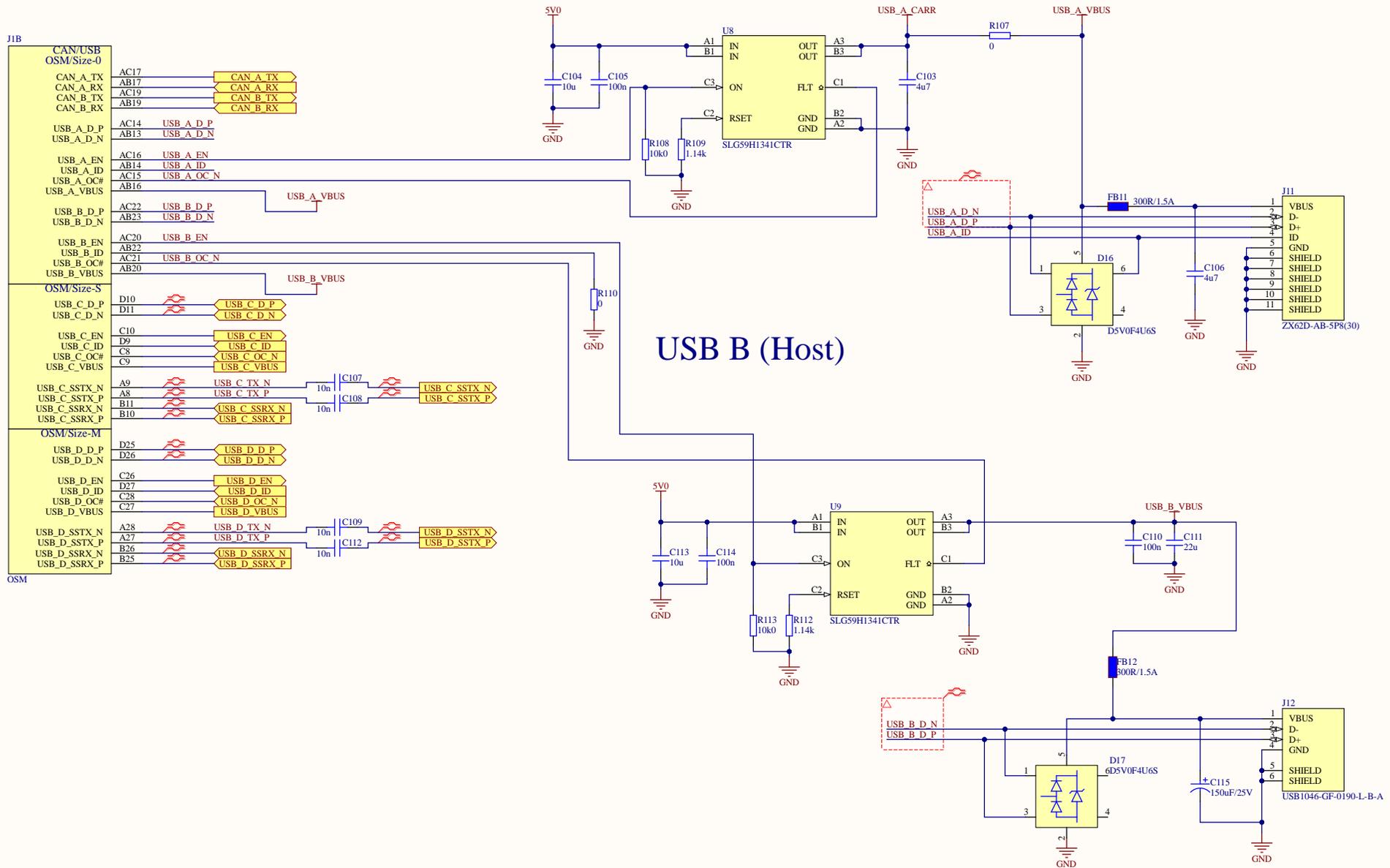


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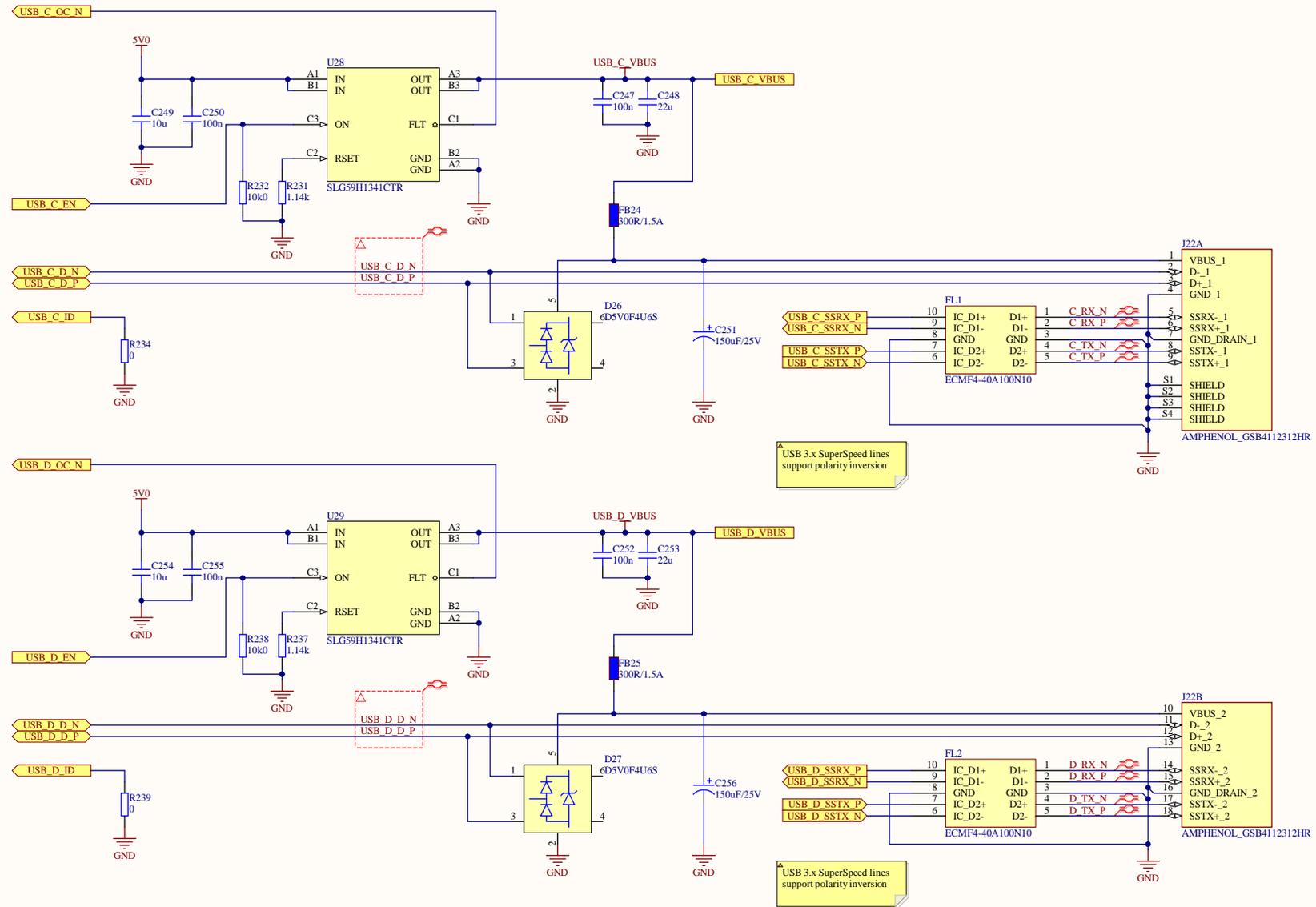
USB Interfaces A and B (USB 2.0)

USB A (OTG)

USB B (Host)

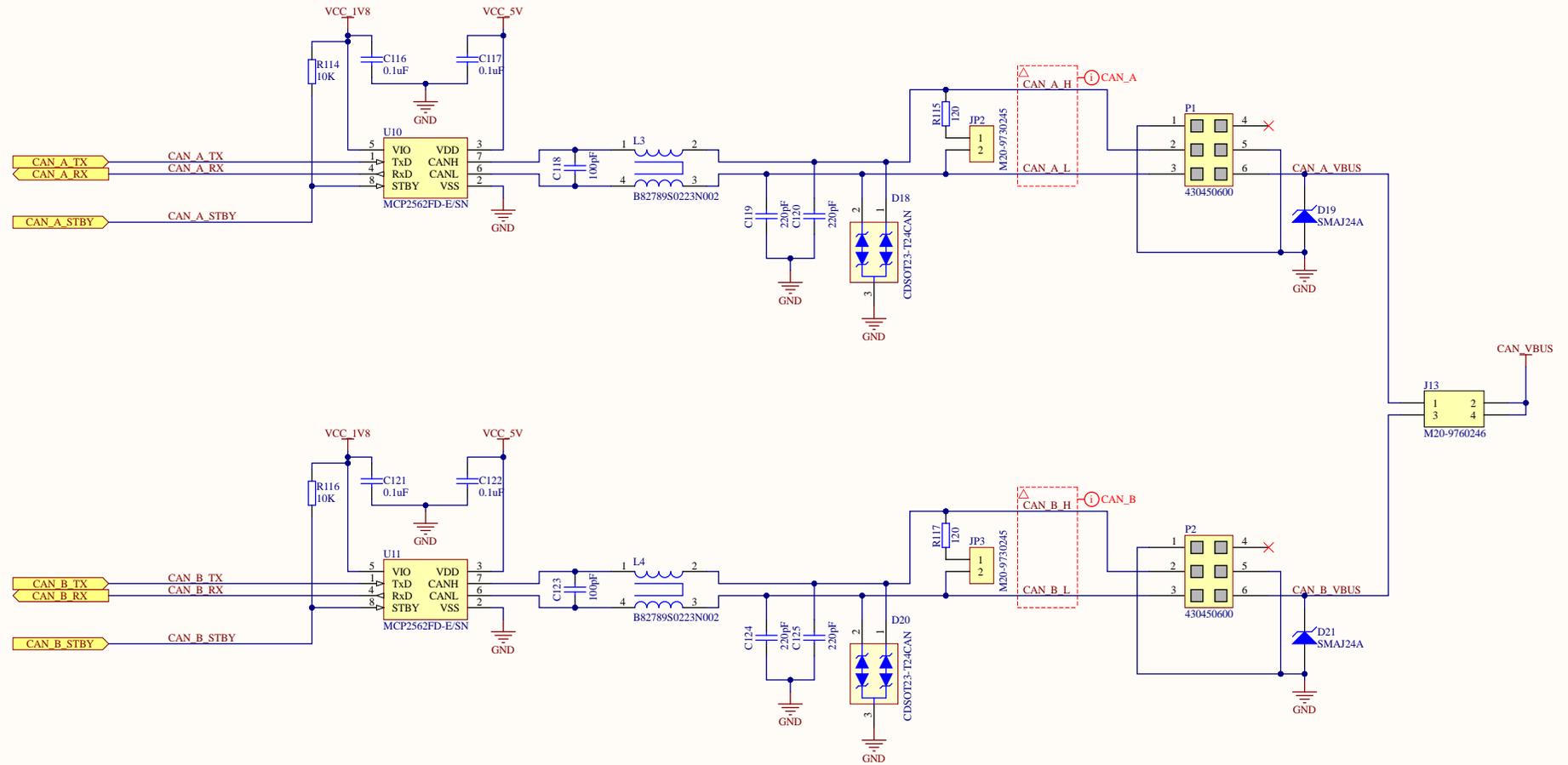


USB Interfaces C and D (USB 3.2)

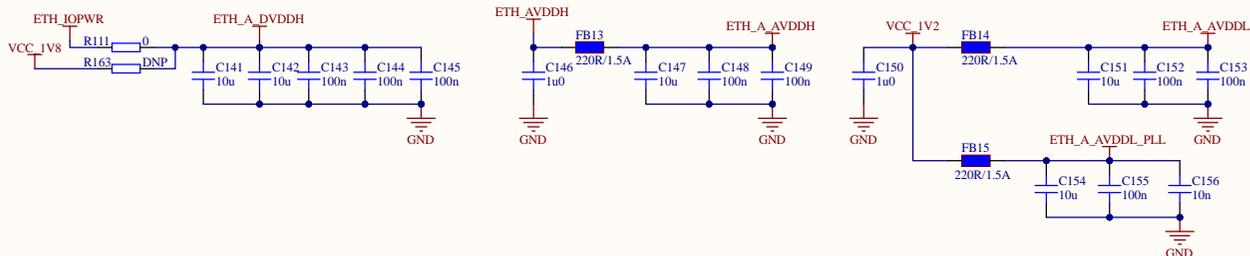
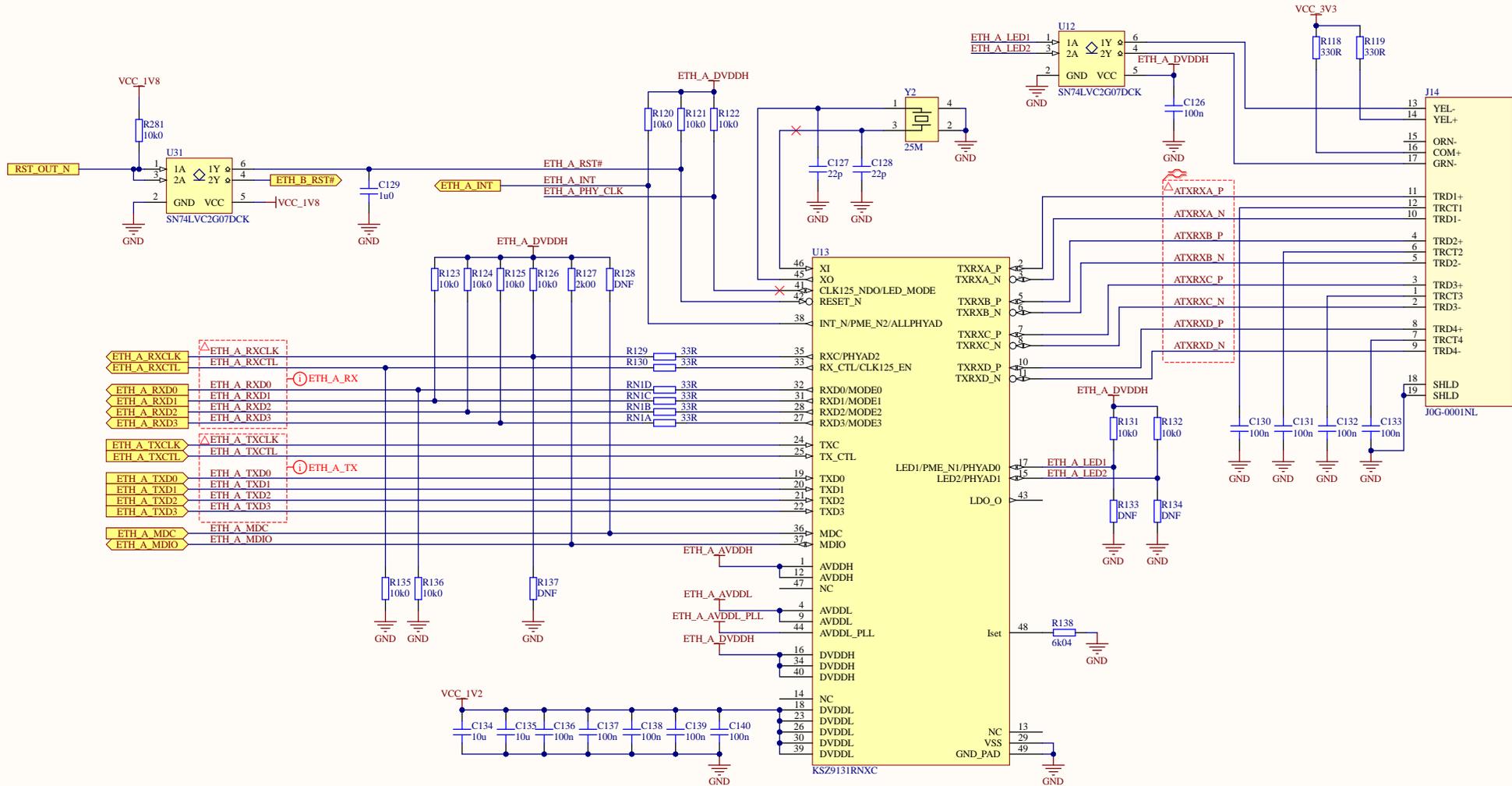


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CAN-FD Interfaces

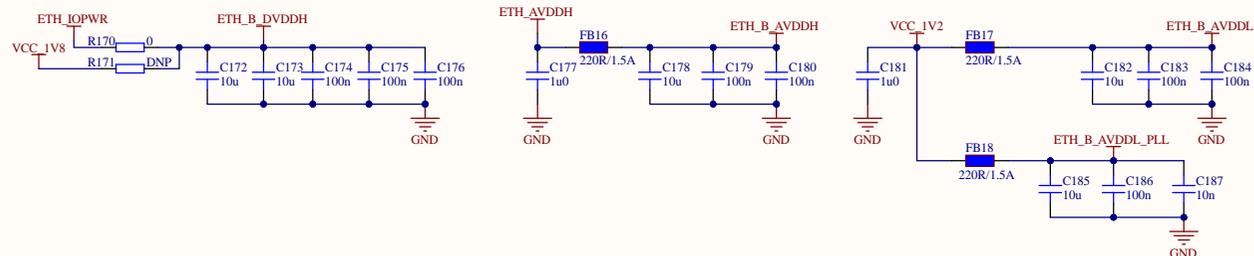
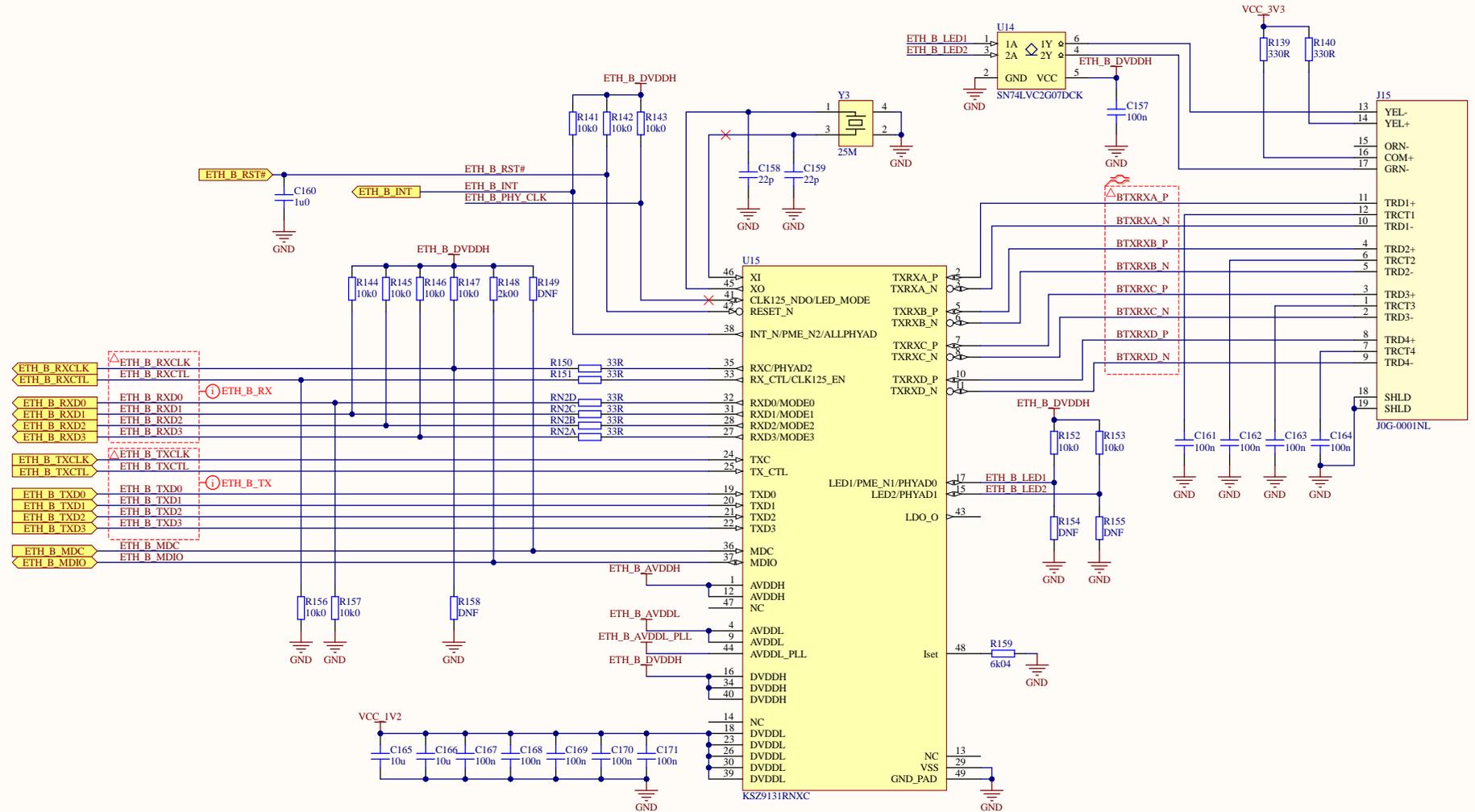


Ethernet A



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Ethernet B



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Number:		
Revision: 1.2	Sheet: 17 of 18	
Date: 2025-09-23 Time: 15:28:29		
File: EthernetB_SchDoc		

Servo Power and PWM

