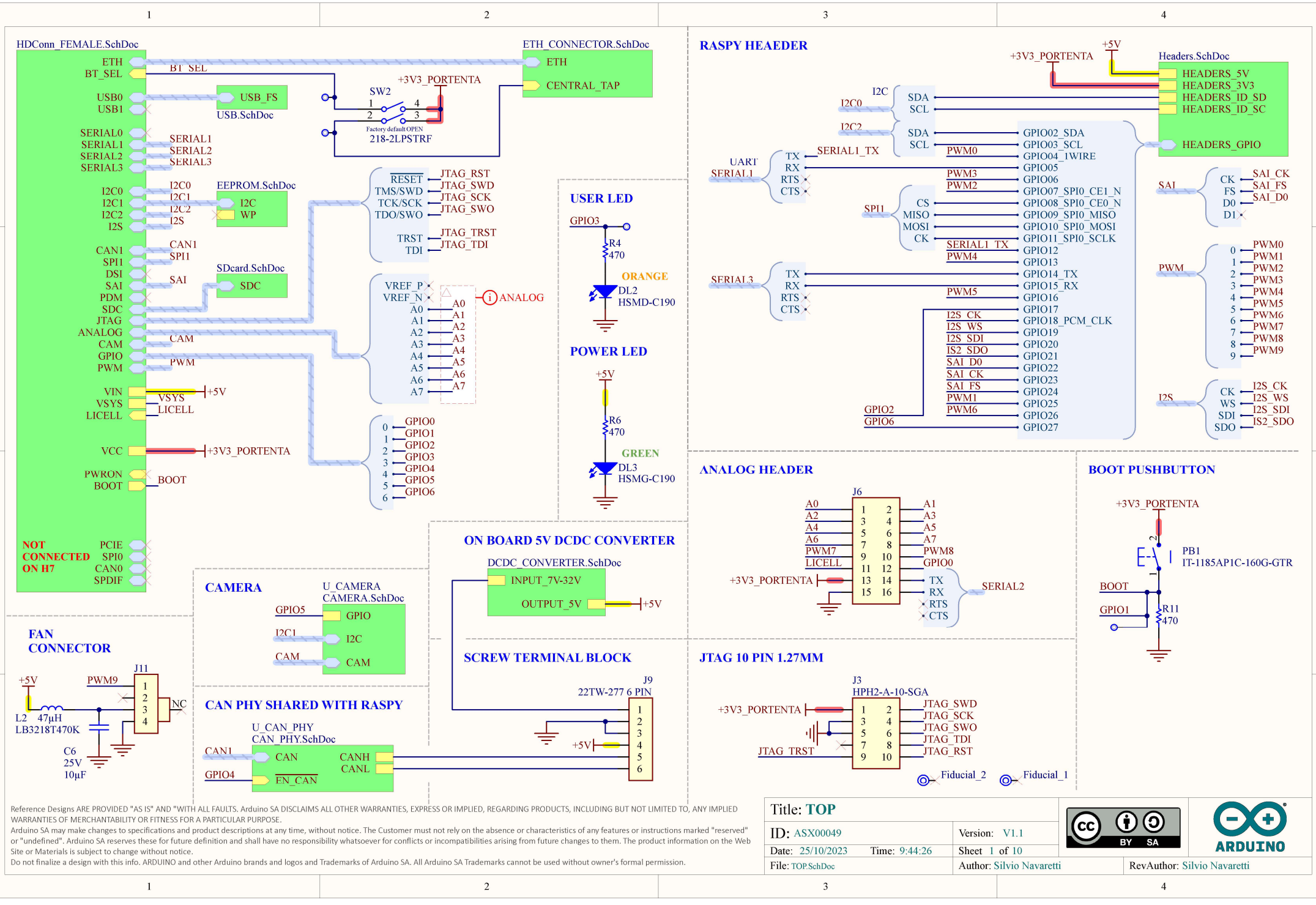

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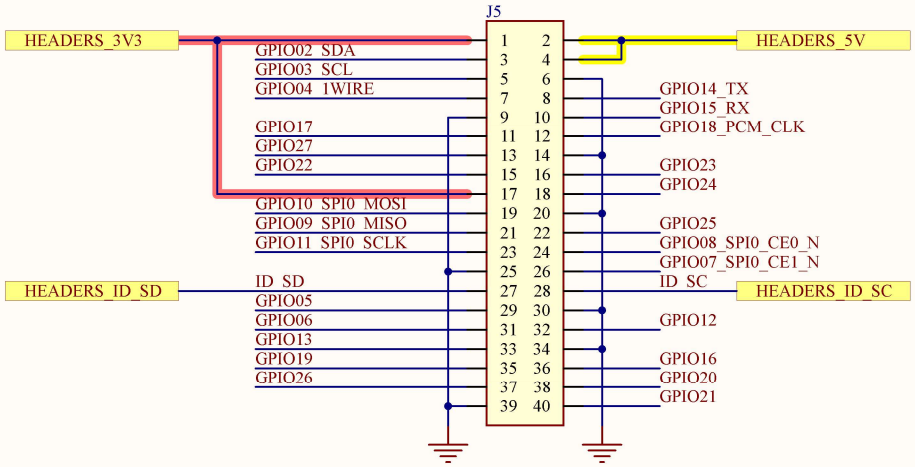
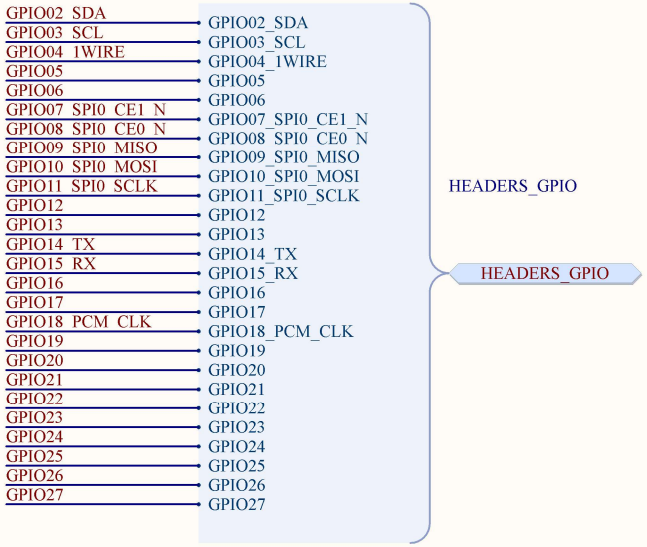
Title: TOP			
ID: ASX00049		Version: V1.1	
Date: 25/10/2023	Time: 9:44:26	Sheet 1 of 10	
File: TOP.SchDoc		Author: Silvio Navaretti	RevAuthor: Silvio Navaretti





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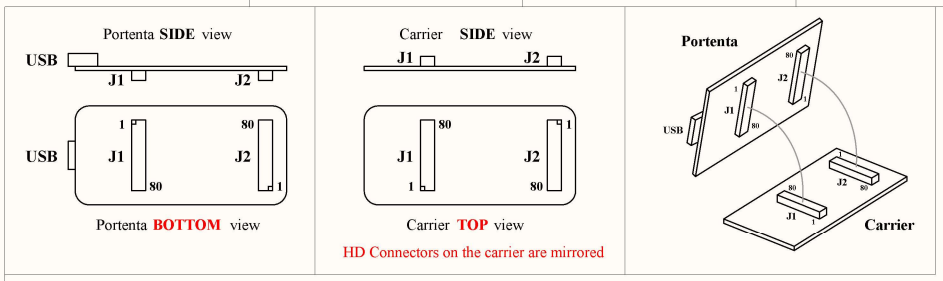
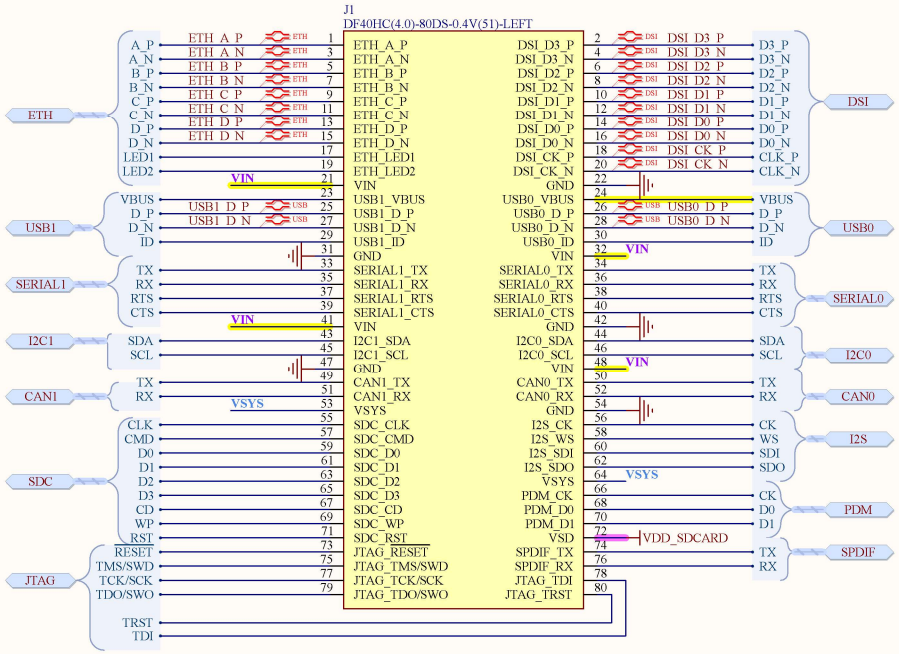
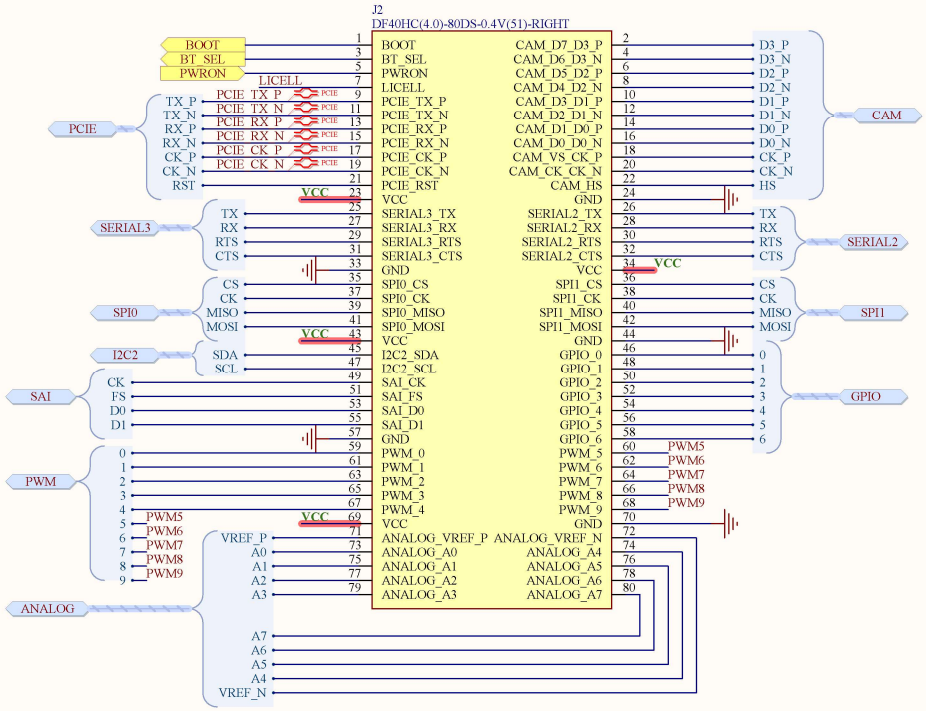
Title: **RASP HEADERS**			
ID: ASX00049		Version: V1.1	
Date: 25/10/2023	Time: 9:44:28	Sheet 2 of 10	
File: Headers.SchDoc		Author: Silvio Navaretti	RevAuthor: Silvio Navaretti







SHARED PINS TABLE

NET	BUS 1	BUS 2
PB3	JTAG	SDC2
PH11	CAM	I2C4
PH12	CAM	I2C4
PI5	CAM	SAI2A
PI6	CAM	SAI2A
PI7	CAM	SAI2A
PA4	CAM	ANALOG
PA6	CAM	ANALOG
PC2	ANALOG	SPI2
PC3	ANALOG	SPI2

POWER NETS TABLE

NET	TYPE	RANGES	DESCRIPTION
VIN	**PORTENTA INPUT**	4.1V to 6V.	Default 3.3V, PMIC (U10) programmable output.
VCC	***PORTENTA OUTPUT***	1.1V to 3.3V in steps, max 1A.	Default 3.3V, PMIC (U10) programmable output.
VSYS	***PORTENTA RESERVED OUTPUT***	**RESERVED, DO NOT USE** 3.5V to 4.2V, max 600mA.	Default 4.2V, PMIC (U10) programmable output which is also the input voltage of the bucks inside the PMIC itself.
LICELL	**PORTENTA INPUT**	Coine cell max 3.6V, max 46uA.	Max 4uA with PMIC (U10) in coin cell mode, max 46uA with PMIC in standby/suspend mode.

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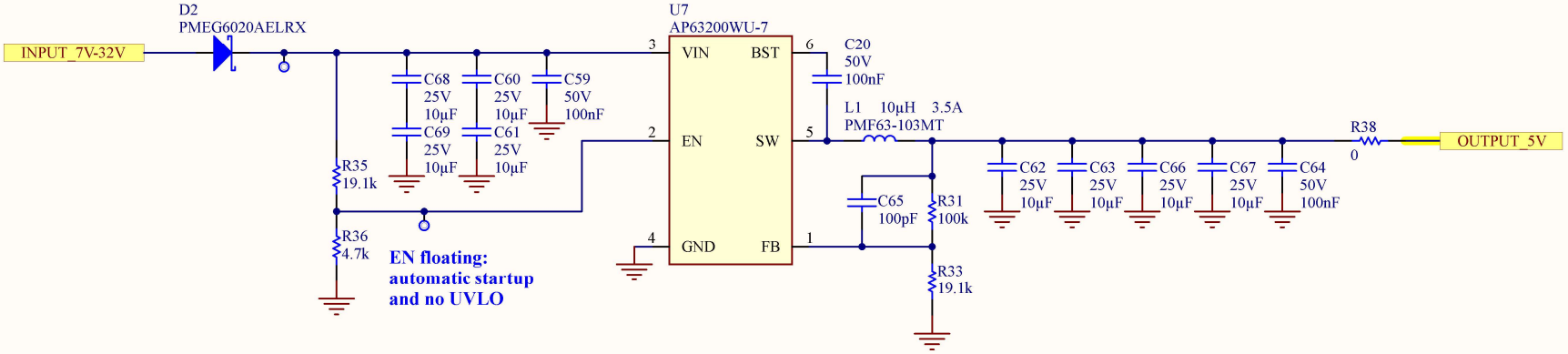
Title: HD Connectors female			
ID: ASX00049	Version: V1.1		
Date: 25/10/2023 Time: 9:44:29	Sheet 3 of 10		
File: HDConn_FEMALE.SchDoc	Author: Silvio Navaretti	RevAuthor:	

5V STEP DOWN
VIN MAX 32V
MAX OUT CURRENT 1.5A
REVERSE POLARITY PROTECTION



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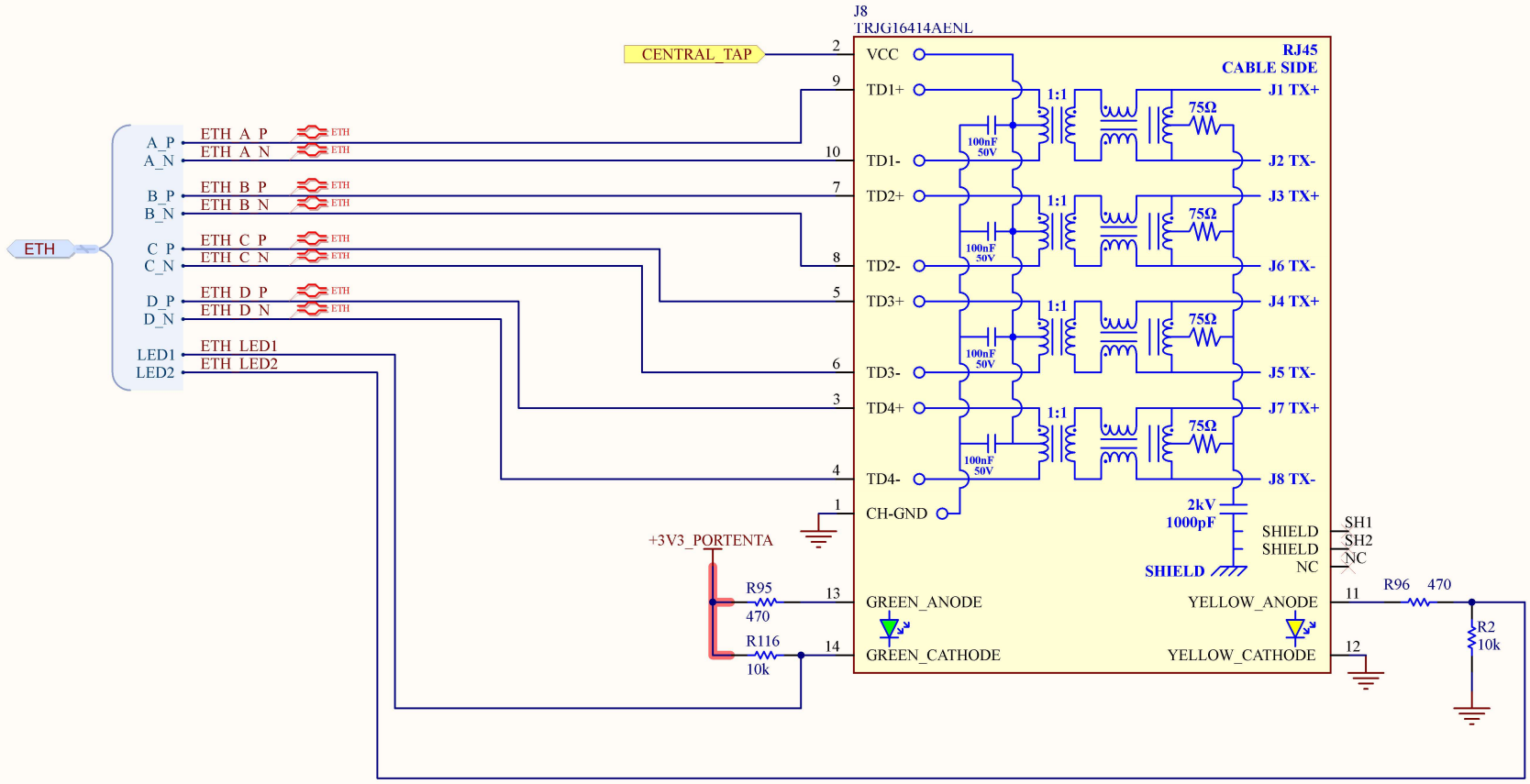
Title: **POWER EXTERNAL**			
ID: ASX00049	Version: V1.1		
Date: 25/10/2023 Time: 9:44:31	Sheet 4 of 10		
File: DCDC_CONVERTER.SchDoc	Author: Silvio Navaretti	RevAuthor: Silvio Navaretti	



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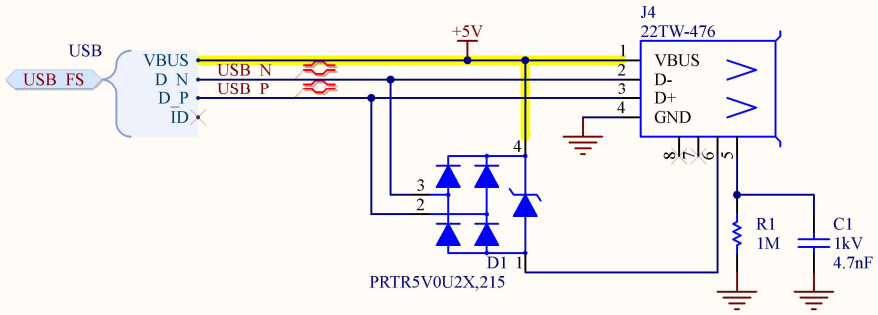
Title: **ETHERNET**			
ID: ASX00049	Version: V1.1		
Date: 25/10/2023 Time: 9:44:32	Sheet 5 of 10		
File: ETH_CONNECTOR.SchDoc	Author: Silvio Navaretti	RevAuthor: Silvio Navaretti	



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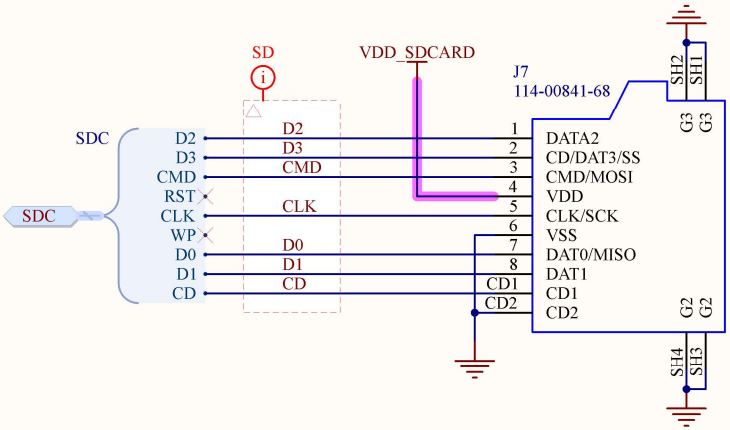
Title: **USB**			
ID: ASX00049		Version: V1.1	
Date: 25/10/2023	Time: 9:44:34	Sheet 6 of 10	
File: USB.SchDoc		Author: Silvio Navaretti	RevAuthor: Silvio Navaretti



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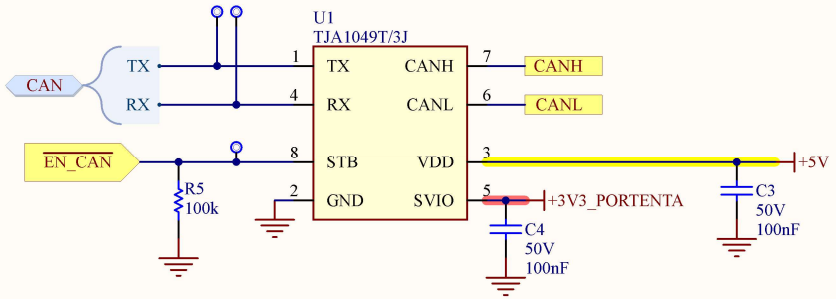
Title: **SD card**			
ID: ASX00049		Version: V1.1	
Date: 25/10/2023	Time: 9:44:35	Sheet 7 of 10	
File: SDcard.SchDoc		Author: Silvio Navaretti	RevAuthor: Silvio Navaretti



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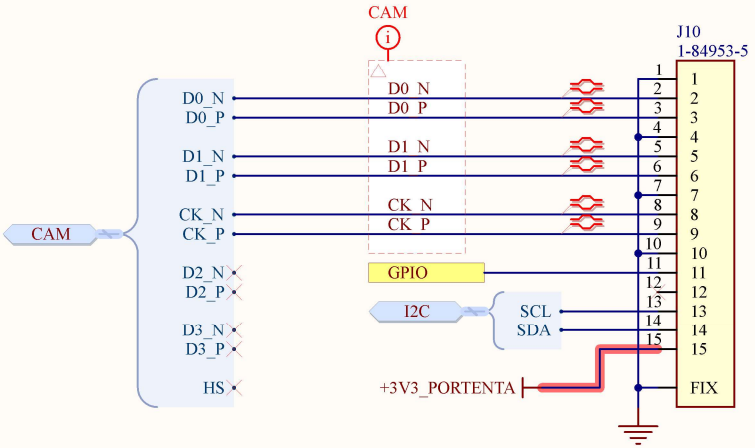
Title: **CAN PHY**			
ID: ASX00049	Version: V1.1		
Date: 25/10/2023 Time: 9:44:37	Sheet 8 of 10		
File: CAN_PHY.SchDoc	Author: Silvio Navaretti	RevAuthor: Silvio Navaretti	



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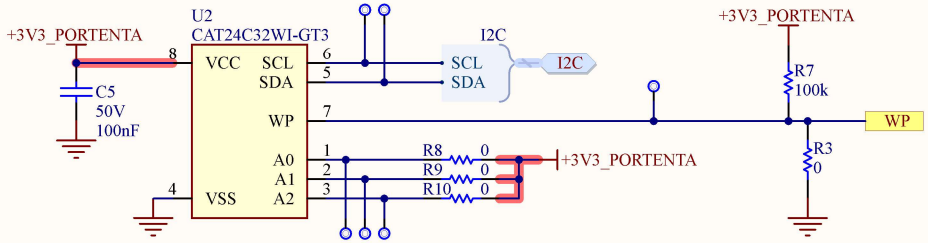
Title: **CAMERA**			
ID: ASX00049		Version: V1.1	
Date: 25/10/2023	Time: 9:44:38	Sheet 9 of 10	
File: CAMERA.SchDoc		Author: Silvio Navaretti	RevAuthor: Silvio Navaretti



CAT24C32WI-GT3 address bits

1	0	1	0	A2	A1	A0	R/W

A2, A1, A0 can be pulled HIGH or LOW.
They have an internal pulldown.

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Title: **EEPROM**			
ID: ASX00049		Version: V1.1	
Date: 25/10/2023	Time: 9:44:40	Sheet 10 of 10	
File: EEPROM.SchDoc		Author: Silvio Navaretti	RevAuthor: Silvio Navaretti