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Title: TOP

ID: ASX00049

Version: V1.1

Date: 10/23/2023

Time: 10:48:08 PM

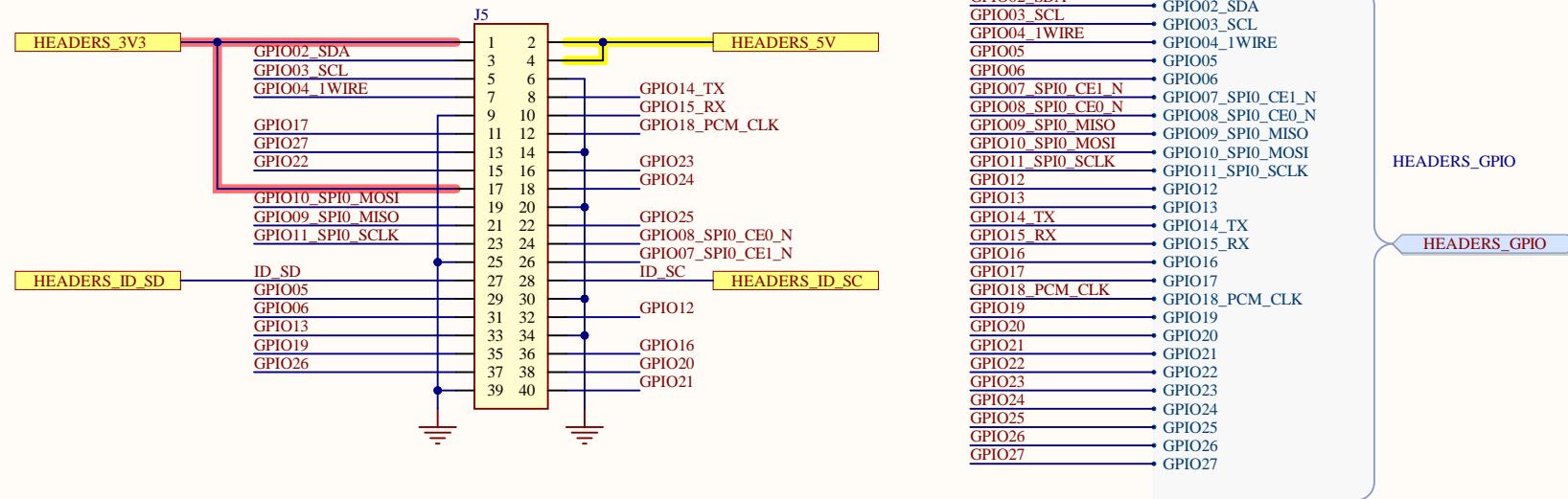
Sheet 1 of 10

File: TOP.SchDoc

Author: Silvio Navaretti



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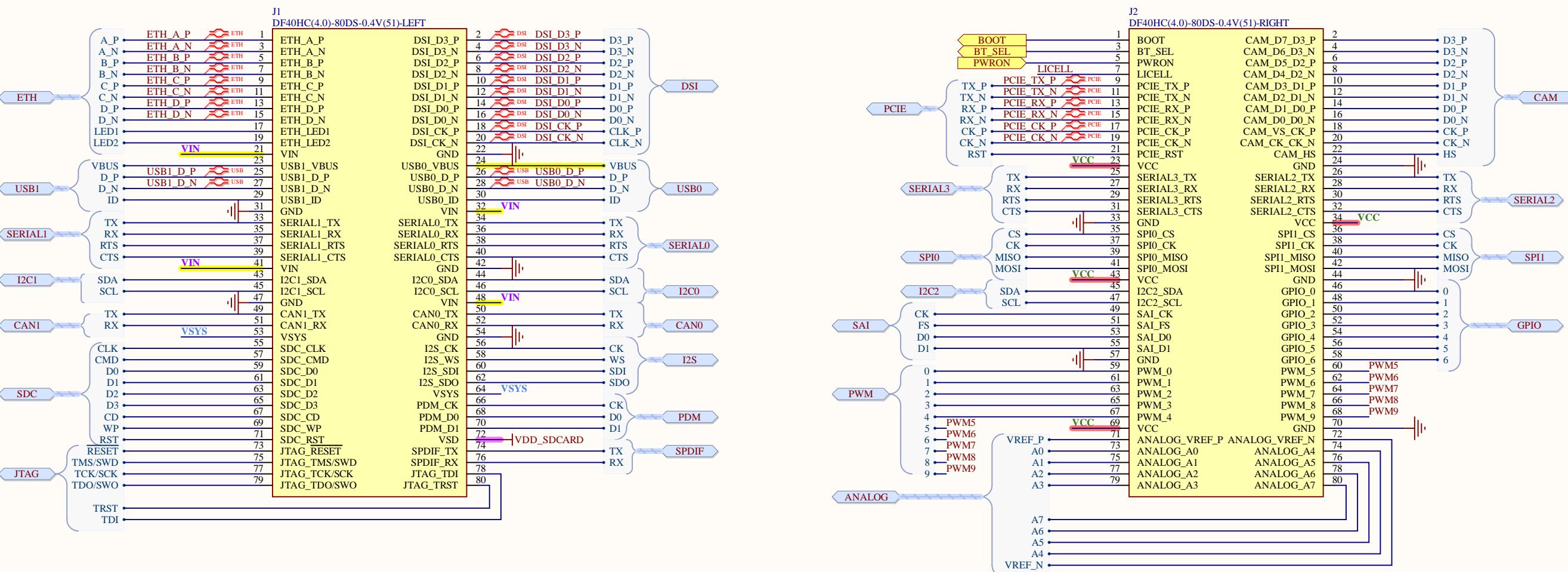
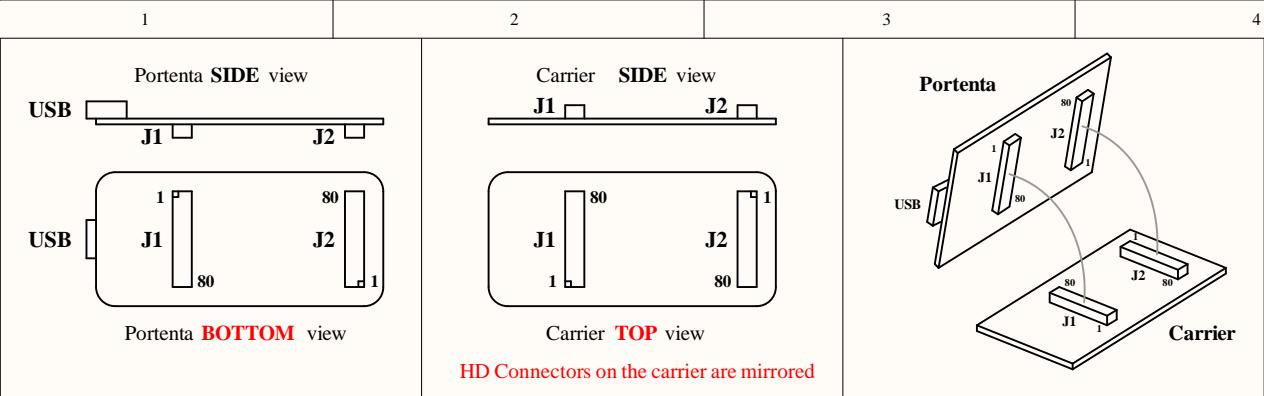
Title: RASP HEADERS

ID: ASX0049 Version: V1.1

Date: 10/23/2023 Time: 10:48:30 PM Sheet 2 of 10

File: Headers.SchDoc Author: 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	Coin 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: ASX00040

ID: ASX00049 version: V1.1 Date: 10/02/2023 Time: 10:49:50 PM Page: 2 of 10

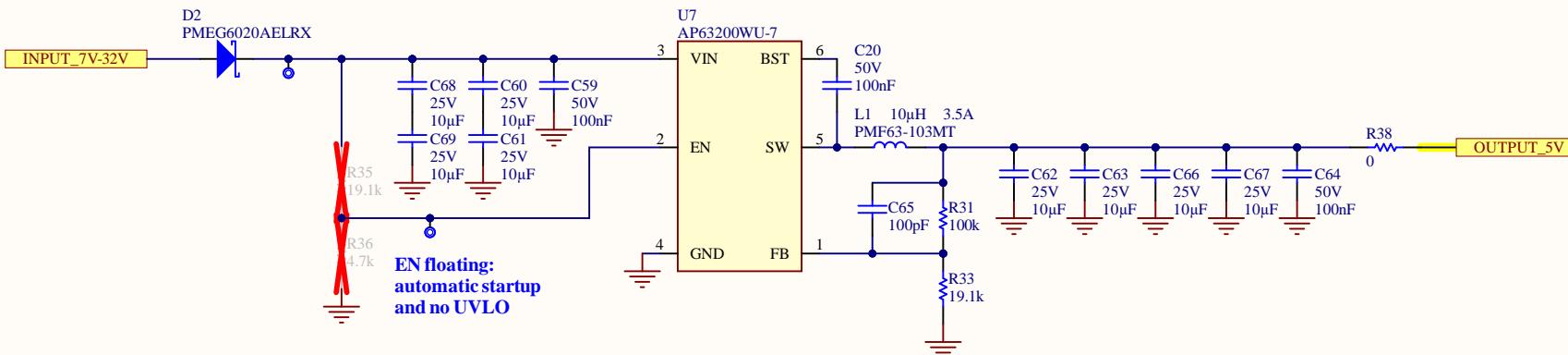
Date: 10/23/2023 Time: 10:48:52 PM Sheet 3 of 10



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



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Title: POWER EXTERNAL

ID: ASX0049 Version: V1.1

Date: 10/23/2023 Time: 10:49:13 PM Sheet 4 of 10

File: DCDC_CONVERTER.SchDoc Author: Silvio Navaretti RevAuthor: Silvio Navaretti



A

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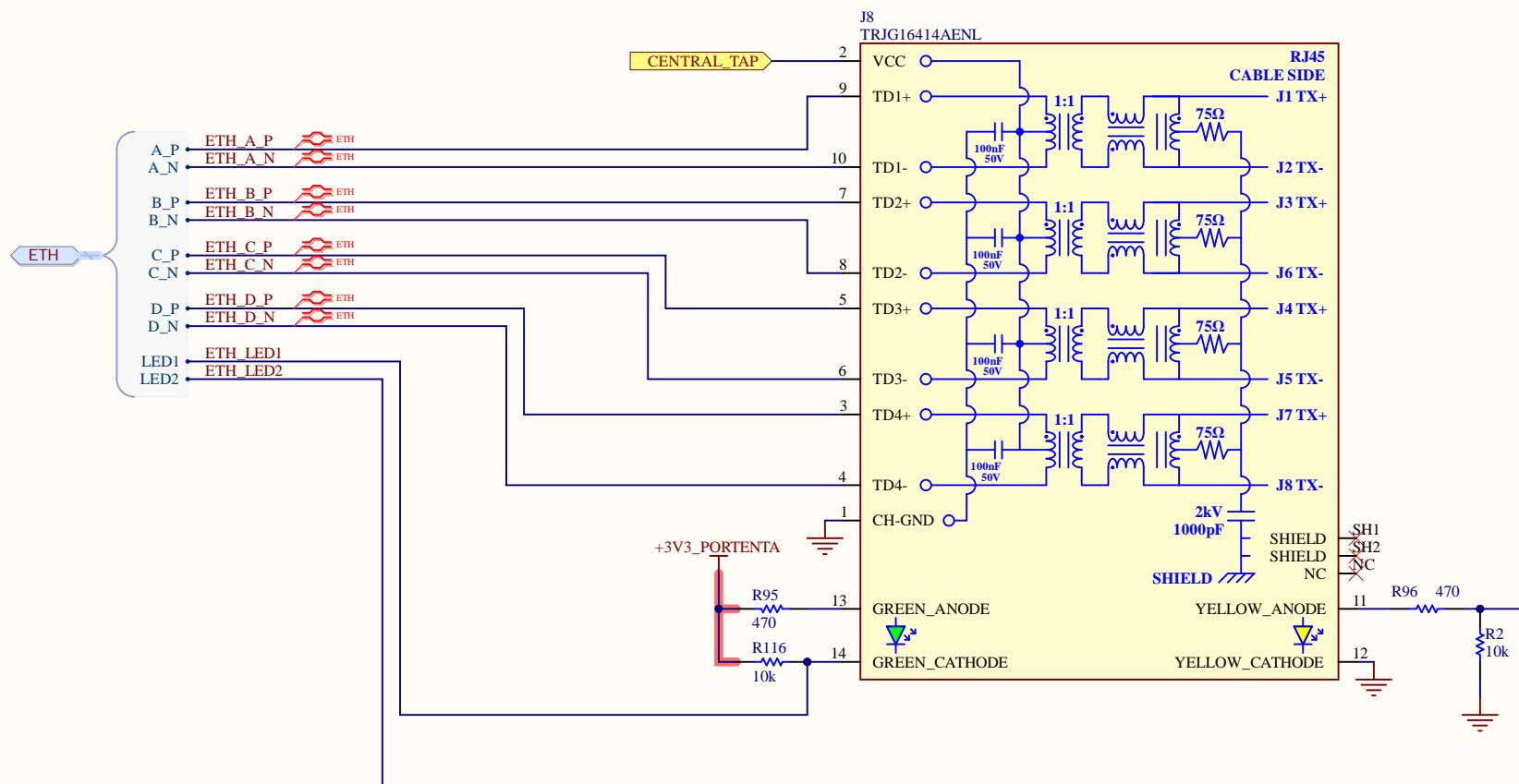
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Title: ETHERNET			
ID: ASX0049	Version: V1.1		
Date: 10/23/2023	Time: 10:49:36 PM	Sheet 5 of 10	
File: ETH_CONNECTOR.SchDoc	Author: Silvio Navaretti	RevAuthor:	Silvio Navaretti

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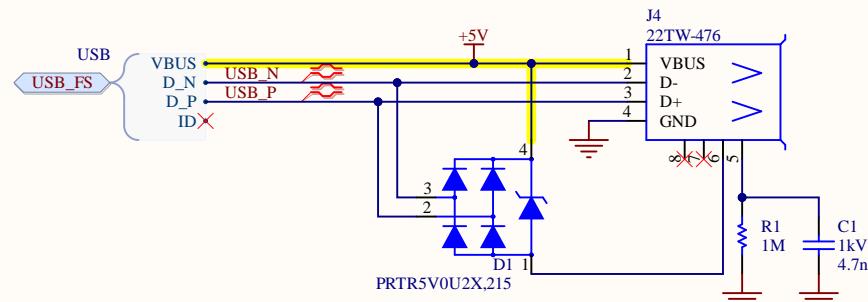
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Title: USB

ID: ASX0049

Version: V1.1

Date: 10/23/2023 Time: 10:50:02 PM Sheet 6 of 10

File: USB.SchDoc

Author: Silvio Navaretti



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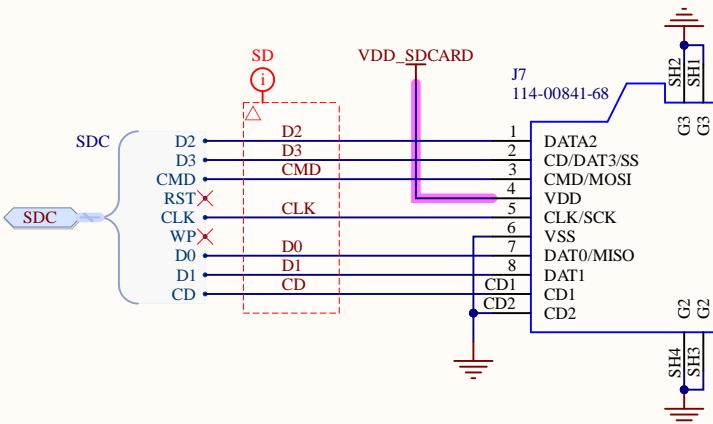
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Title: SD card

ID: ASX00049

Version: V1.1



Date: 10/23/2023 Time: 10:50:29 PM Sheet 7 of 10

File: SDcard.SchDoc

Author: Silvio Navaretti

RevAuthor: Silvio Navaretti

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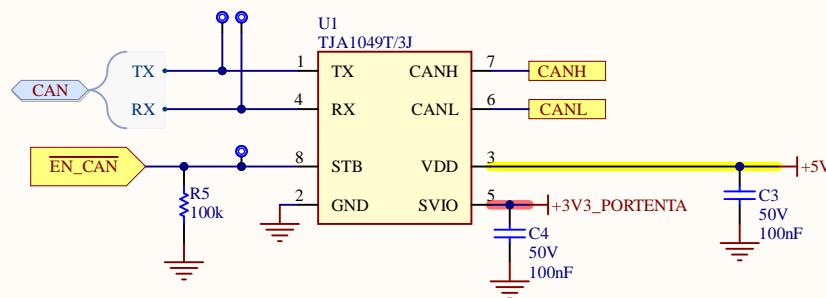
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Title: CAN PHY

ID: ASX0049 Version: V1.1

Date: 10/23/2023 Time: 10:50:35 PM Sheet 8 of 10

File: CAN_PHY.SchDoc Author: Silvio Navaretti RevAuthor: Silvio Navaretti



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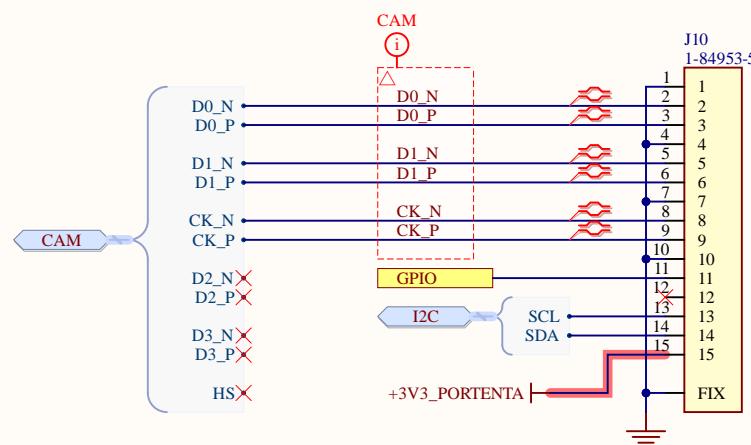
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Title: CAMERA

ID: ASX0049 Version: V1.1

Date: 10/23/2023 Time: 10:50:40 PM Sheet 9 of 10

File: CAMERA.SchDoc Author: Silvio Navaretti RevAuthor: Silvio Navaretti



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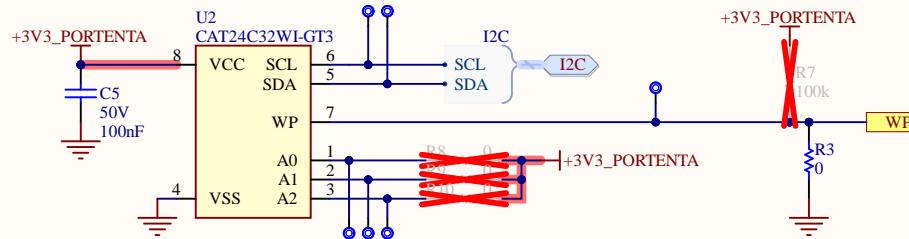
D

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B

C

D



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: ASX0049 Version: V1.1

Date: 10/23/2023 Time: 10:50:46 PM Sheet 10 of 10

File: EEPROM.SchDoc

Author: Silvio Navaretti

