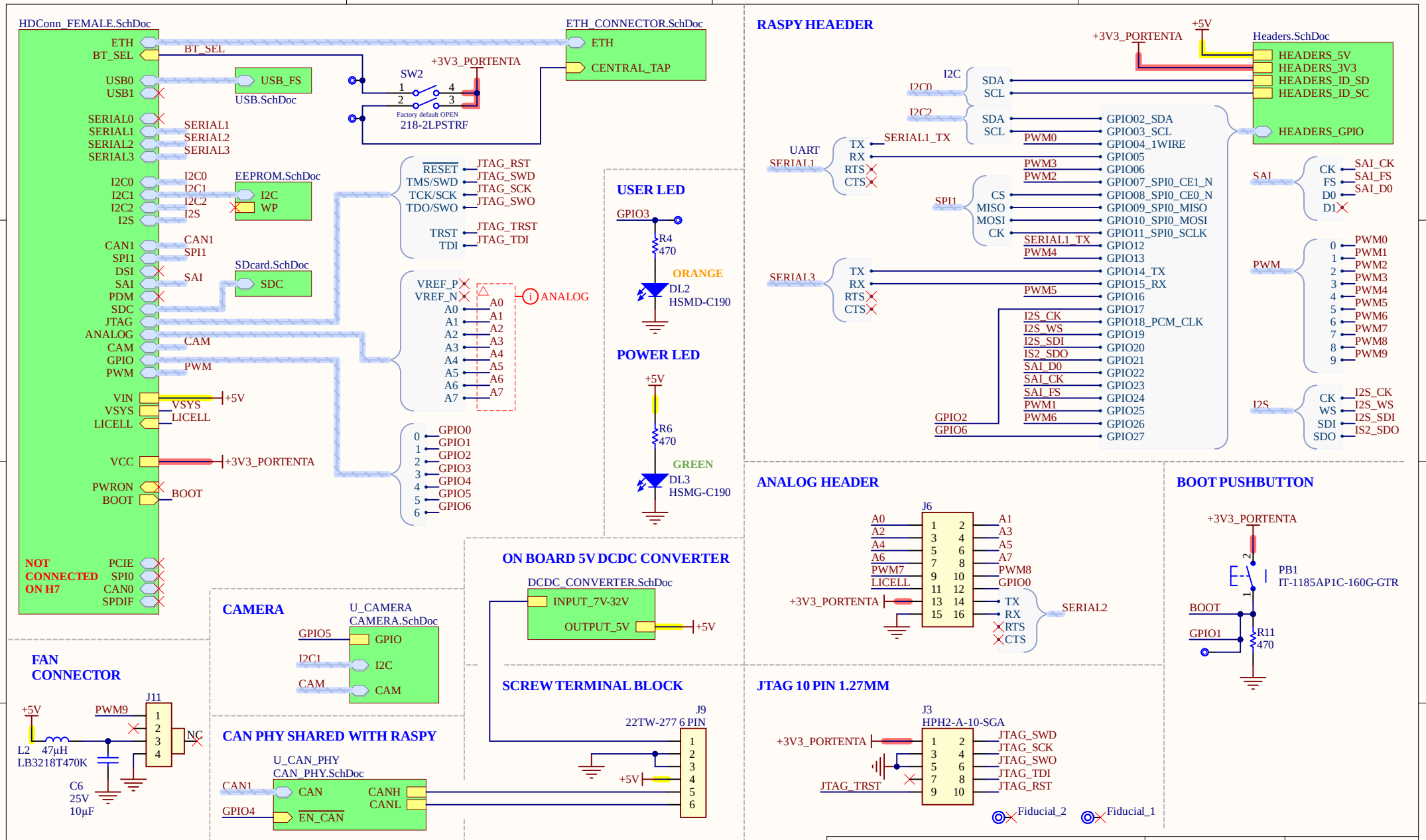


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| | | |
|---|---|---|
| Title: TOP | | |
| ID: ASX00049 | Version: V1.1 | |
| Date: 05/06/2024 Time: 14:49:26 | Sheet 1 of 10 | |
| File: TOP.SchDoc | Author: Silvio Navaretti | RevAuthor: Silvio Navaretti |

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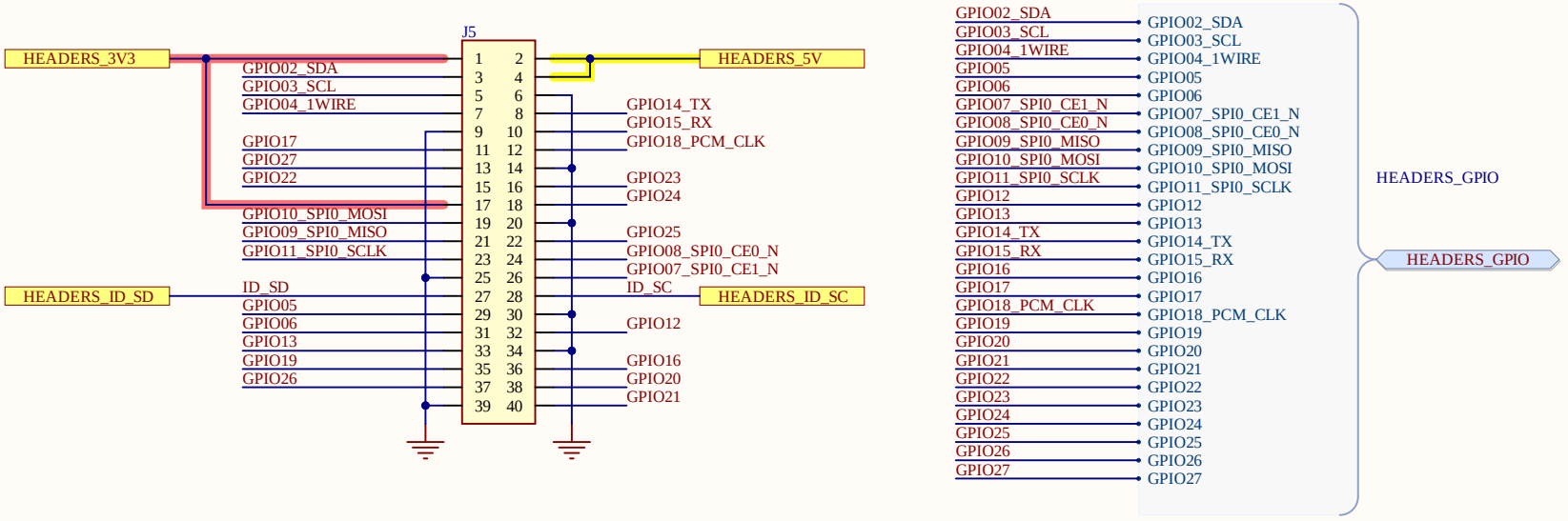
ARDUINO







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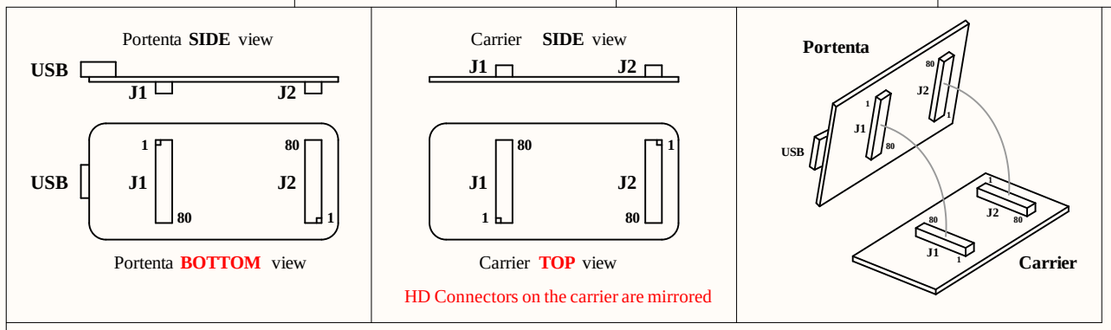
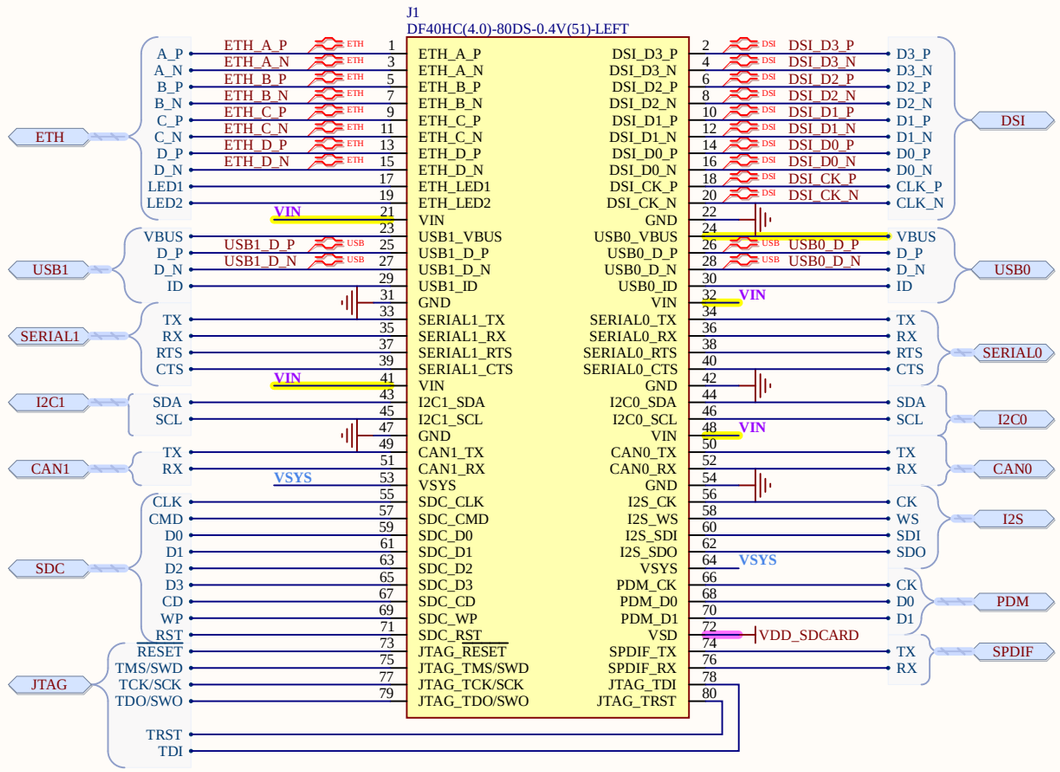
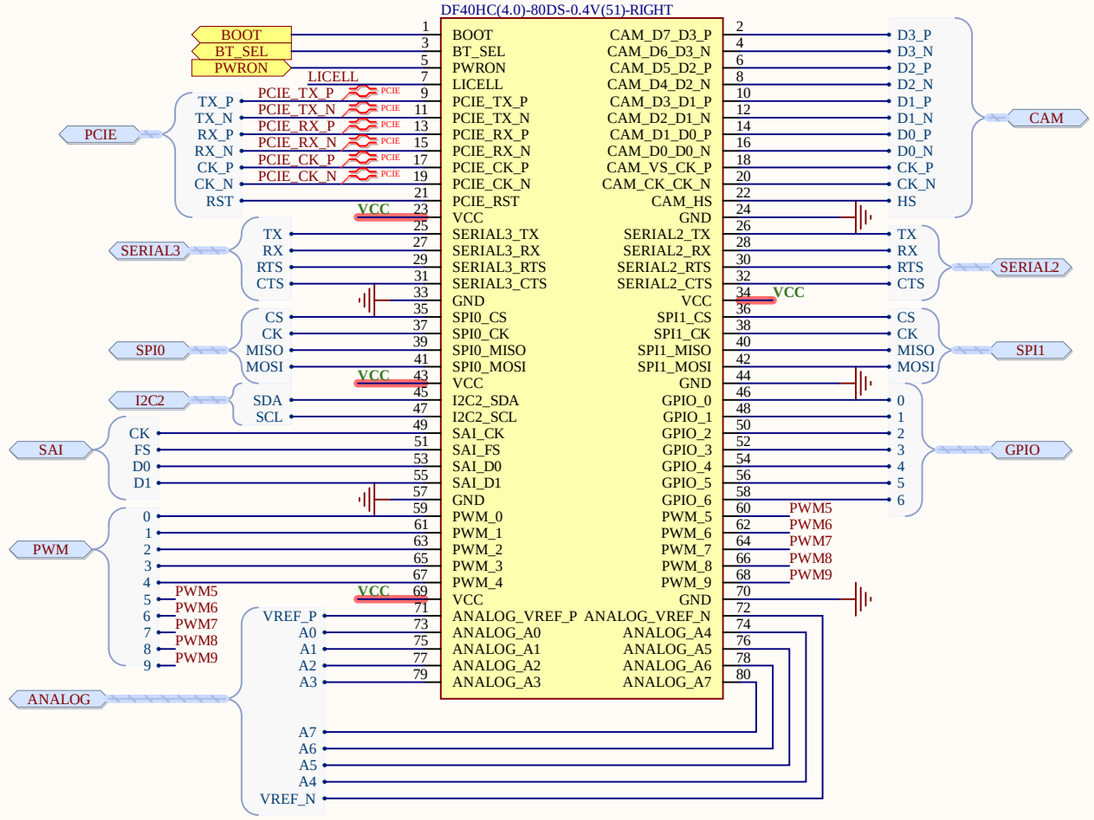
| | | | |
|---|---|---|---|
| Title: **RASP HEADERS** | | | |
| ID: ASX00049 | | Version: V1.1 | |
| Date: 05/06/2024 | Time: 14:49:27 | Sheet 2 of 10 | |
| File: Headers.SchDoc | | Author: Silvio Navaretti | RevAuthor: Silvio Navaretti |




## 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** | Coinc 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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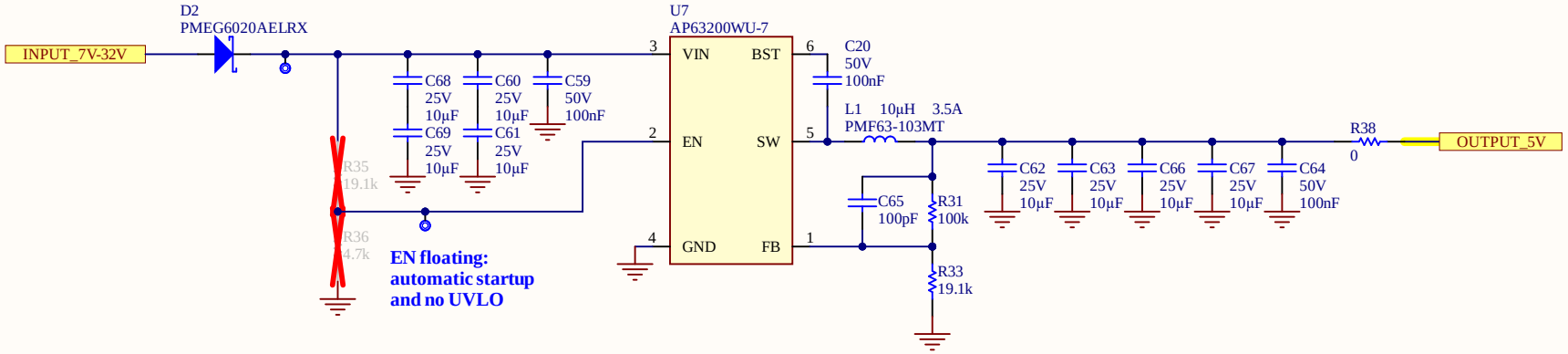
| | | |
|---|---|---|
| Title: **HD Connectors female** | | |
| ID: ASX00049 | Version: V1.1 | |
| Date: 05/06/2024 Time: 14:49:28 | Sheet 3 of 10 | |
| File: HDConn_FEMALE.SchDoc | Author: Silvio Navaretti | RevAuthor: |

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

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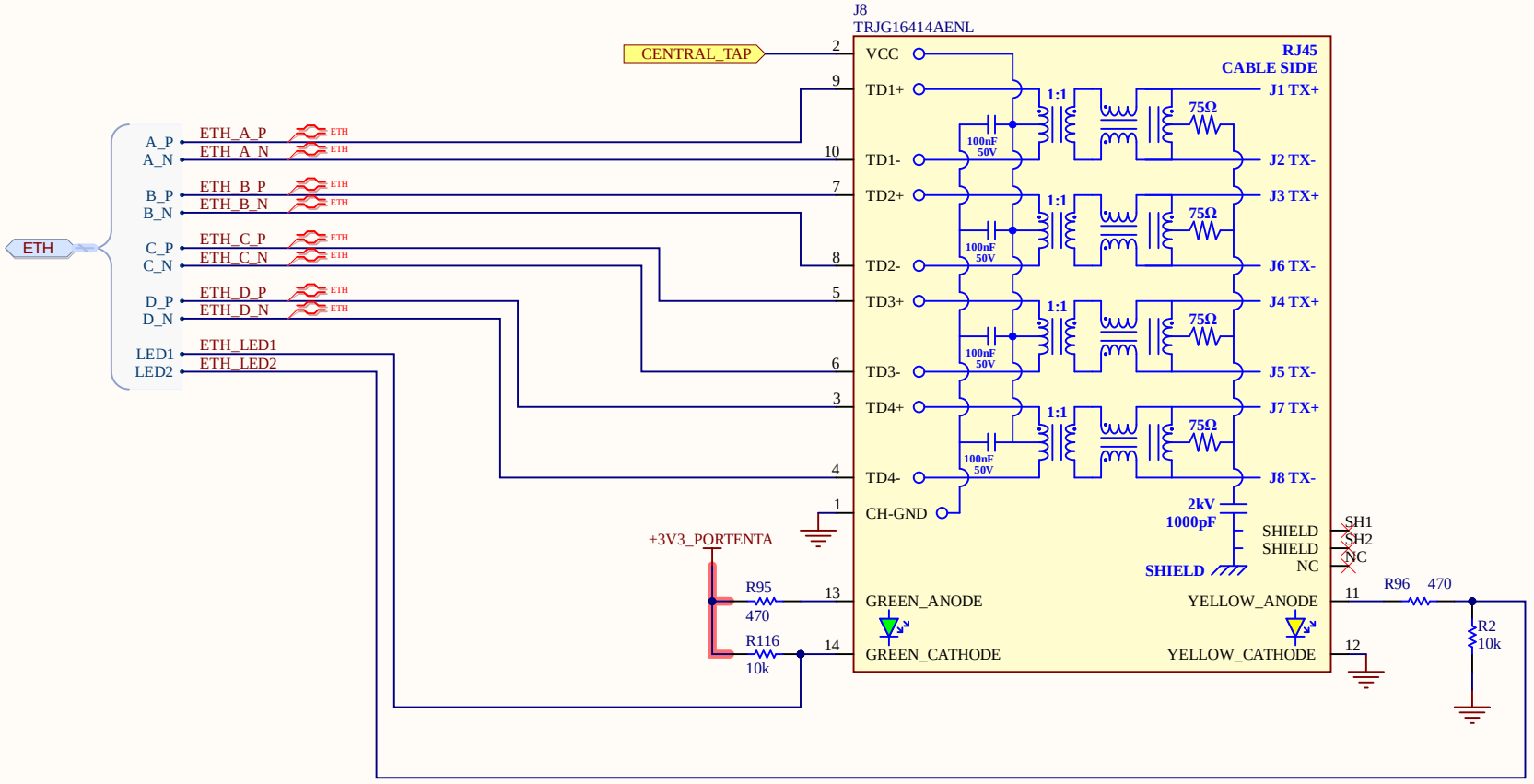
| | | | |
|---|---|---|---|
| Title: **POWER EXTERNAL** | | | |
| ID: ASX00049 | Version: V1.1 | | |
| Date: 05/06/2024 Time: 14:49:29 | Sheet 4 of 10 | | |
| File: DCDC_CONVERTER.SchDoc | Author: Silvio Navaretti | RevAuthor: Silvio Navaretti | |

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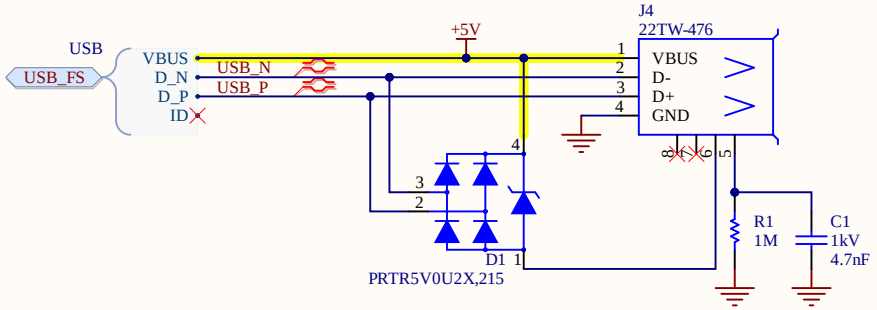
| | | | |
|---|---|---|---|
| Title: **ETHERNET** | | | |
| ID: ASX00049 | Version: V1.1 | | |
| Date: 05/06/2024 Time: 14:49:31 | Sheet 5 of 10 | | |
| File: ETH_CONNECTOR.SchDoc | Author: Silvio Navaretti | RevAuthor: Silvio Navaretti | |

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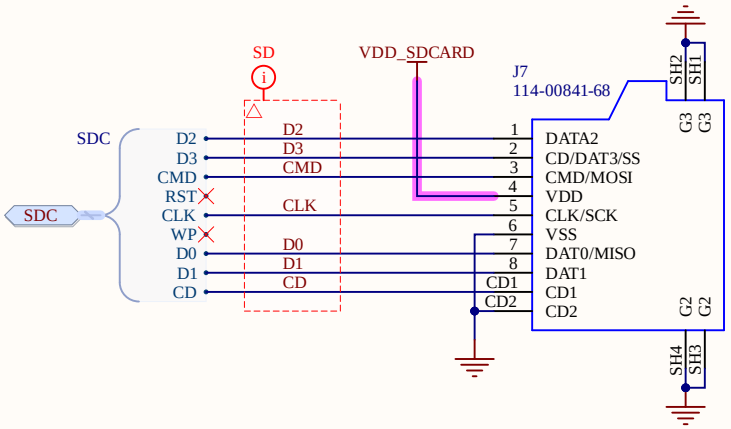
| | | | |
|---|---|---|---|
| Title: **USB** | | | |
| ID: ASX00049 | | Version: V1.1 | |
| Date: 05/06/2024 | Time: 14:49:32 | Sheet 6 of 10 | |
| File: USB.SchDoc | | Author: Silvio Navaretti | RevAuthor: Silvio Navaretti |

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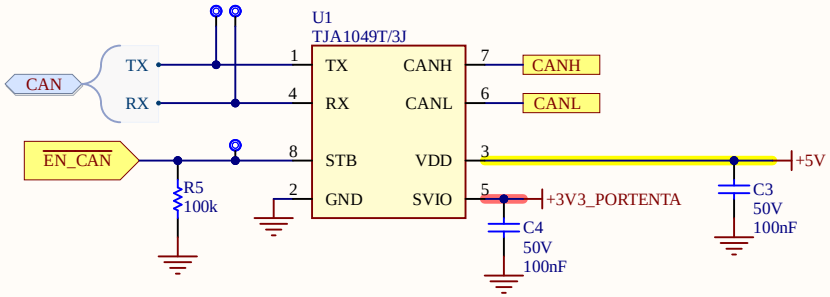
| | | | |
|---|---|---|---|
| Title: **SD card** | | | |
| ID: ASX00049 | | Version: V1.1 | |
| Date: 05/06/2024 | Time: 14:49:34 | Sheet 7 of 10 | |
| File: SDcard.SchDoc | | Author: Silvio Navaretti | RevAuthor: Silvio Navaretti |

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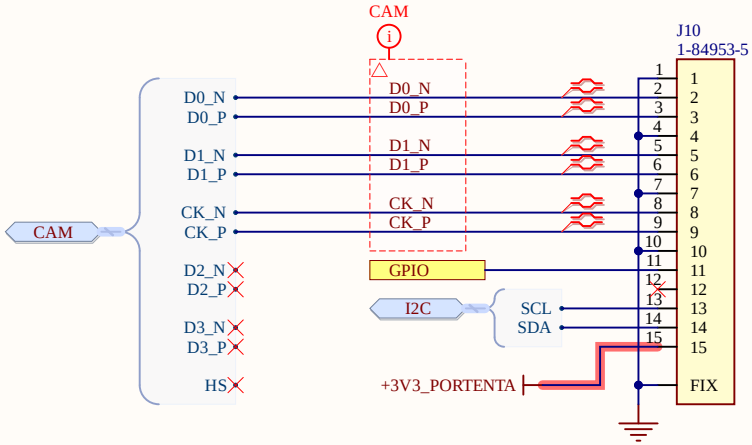
| | | | |
|---|---|---|---|
| Title: **CAN PHY** | | | |
| ID: ASX00049 | | Version: V1.1 | |
| Date: 05/06/2024 | Time: 14:49:35 | Sheet 8 of 10 | |
| File: CAN_PHY.SchDoc | | Author: Silvio Navaretti | RevAuthor: Silvio Navaretti |

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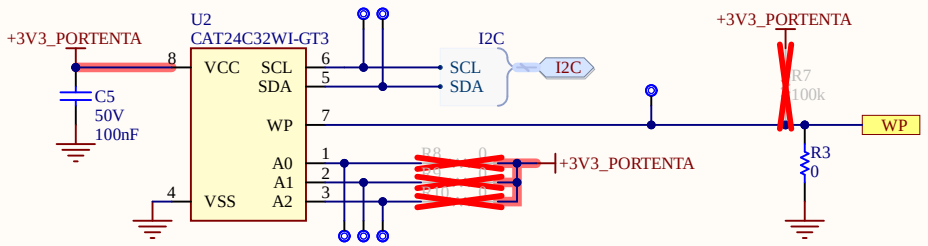
| | | | |
|---|---|---|---|
| Title: **CAMERA** | | | |
| ID: ASX00049 | | Version: V1.1 | |
| Date: 05/06/2024 | Time: 14:49:37 | Sheet 9 of 10 | |
| File: CAMERA.SchDoc | | Author: Silvio Navaretti | RevAuthor: Silvio Navaretti |




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: 05/06/2024 Time: 14:49:38 | Sheet 10 of 10 | | |
| File: EEPROM.SchDoc | Author: Silvio Navaretti | RevAuthor: Silvio Navaretti | |