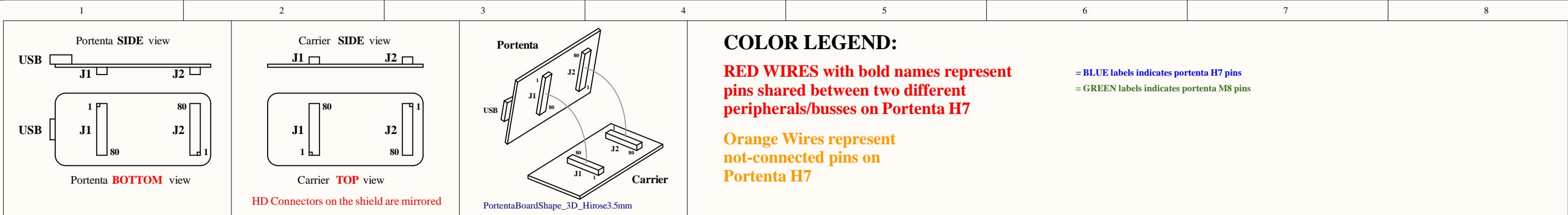


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Title: Portenta Breakout Carrier			
ID: ASX00031	Revision: V1.3		
Date: 05/06/2024	Time: 14:46:55	Sheet: 1 of 6	
File: TOP.SchDoc		Author: Ernesto Lopez	RevAuthor: Silvio Navaretti

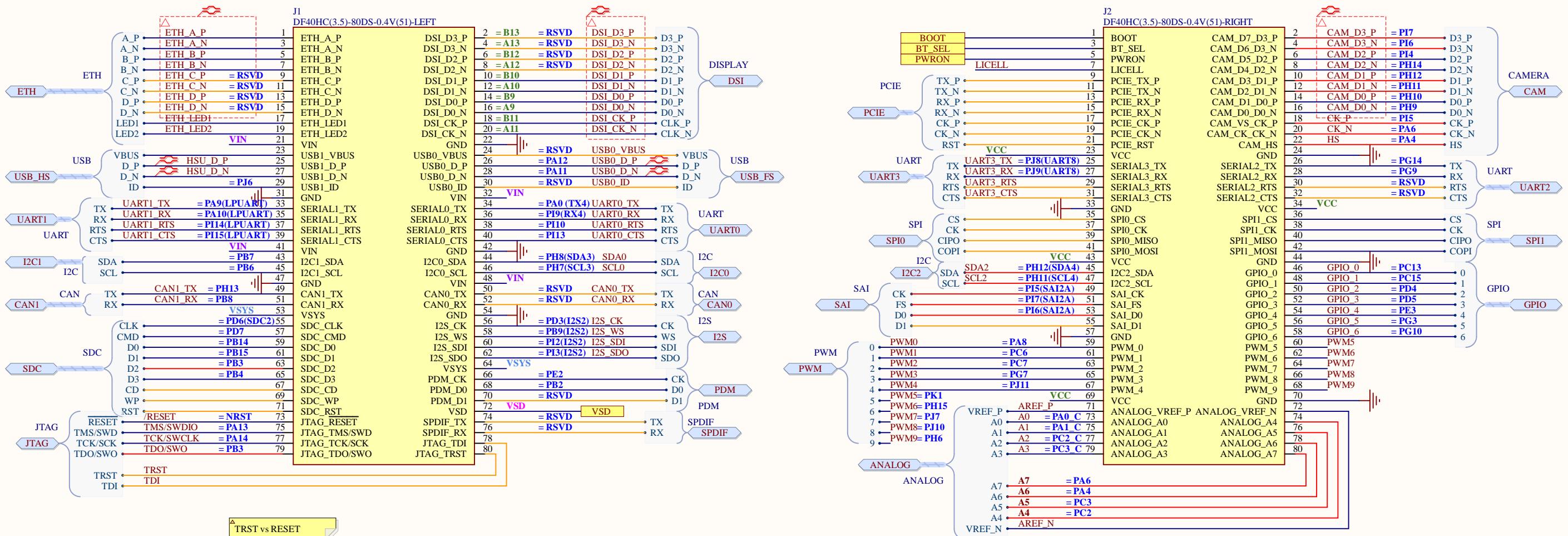


COLOR LEGEND:

RED WIRES with bold names represent pins shared between two different peripherals/busses on Portenta H7

= BLUE labels indicates portenta H7 pins
= GREEN labels indicates portenta M8 pins

Orange Wires represent not-connected pins on Portenta H7



SHARED PINS TABLE (RED WIRES)

NET	BUS 1	BUS 2
PB3	JTAG	SDC2
PH11	CAM	I2C4
PH12	CAM	I2C4
P15	CAM D3_N	SAI2A
P16	CAM D3_P	SAI2A
P17	CAM	ANALOG
PA4	CAM	ANALOG
PA6	ANALOG (A4)	SPI2 (D10/MISO)
PC2	ANALOG (A4)	SPI2 (D8/MOSI)
PC3	ANALOG (A5)	

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	Default 4.2V, PMIC (U10) programmable output which is also the input voltage of the bucks inside the PMIC itself.
LICELL	PORTENTA INPUT	3.5V to 4.2V, max 600mA.	Max 4uA with PMIC (U10) in coin cell mode, max 46uA with PMIC in standby/suspend mode.

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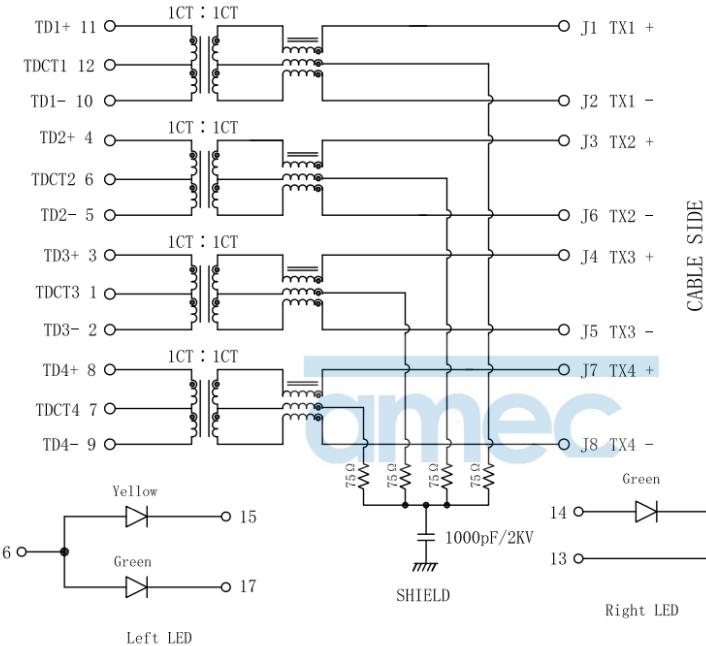
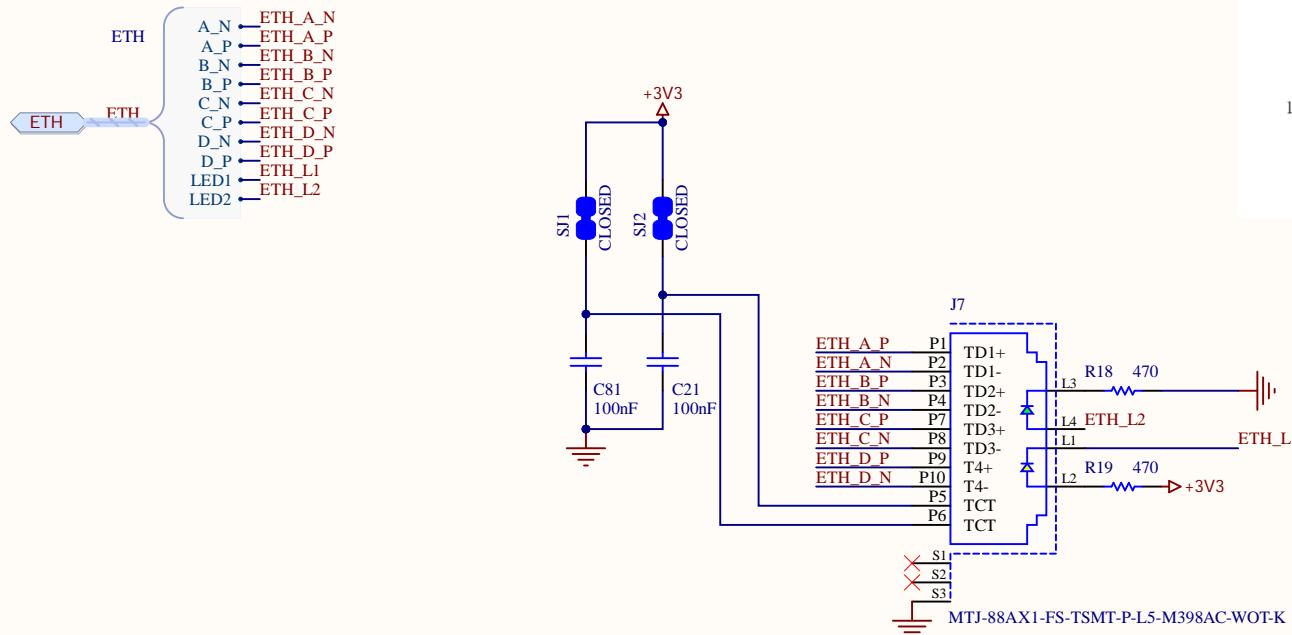
Title: Portenta Breakout Carrier

ID: ASX00031 Revision: V1.3

Date: 05/06/2024 Time: 14:46:55 Sheet 2 of 6

File: HDConn_FEMALE.SchDoc Author: S. Navaretti





Cannot open file F:\ARDUINO\ETH2.png. File does not exist.

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Title: Portenta Breakout Carrier

ID: ASX00031

Revision: V1.3

Date: 05/06/2024 Time: 14:46:56

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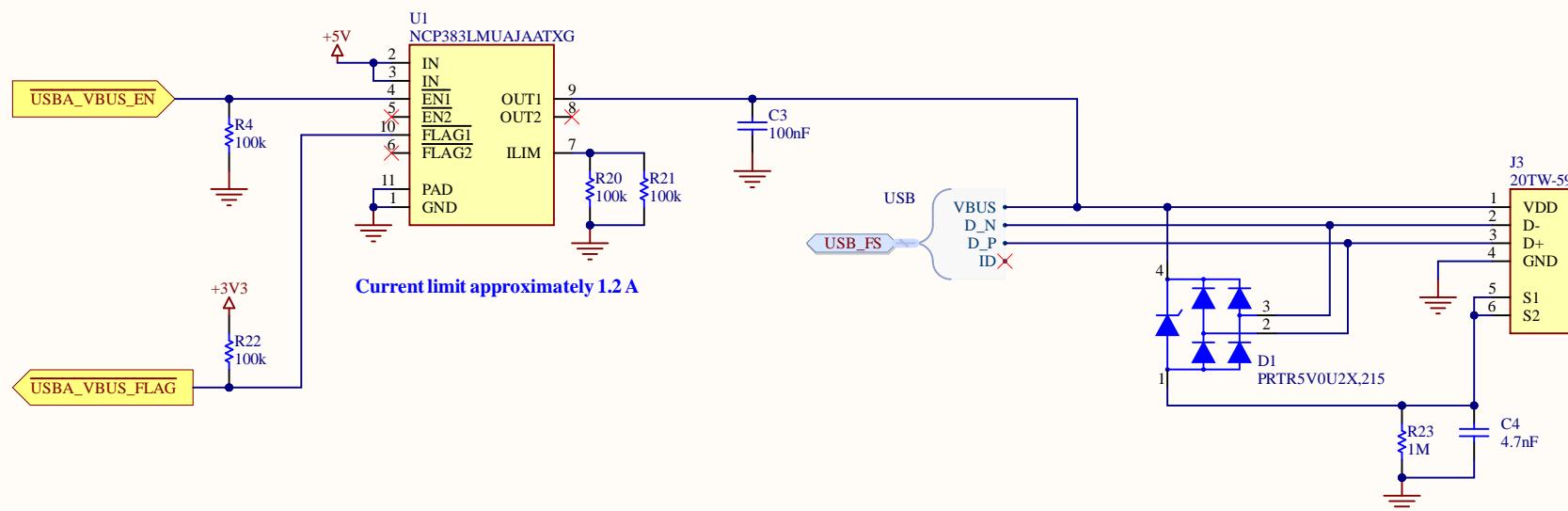
File: ETHERNET.SchDoc

Author: Ernesto Lopez

RevAuthor: Silvio Navaretti



A



B

C

D

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Title: Portenta Breakout Carrier

ID: ASX00031

Revision: V1.3

Date: 05/06/2024 Time: 14:46:57

Sheet 4 of 6

File: USB.SchDoc

Author: Ernesto Lopez



A

B

C

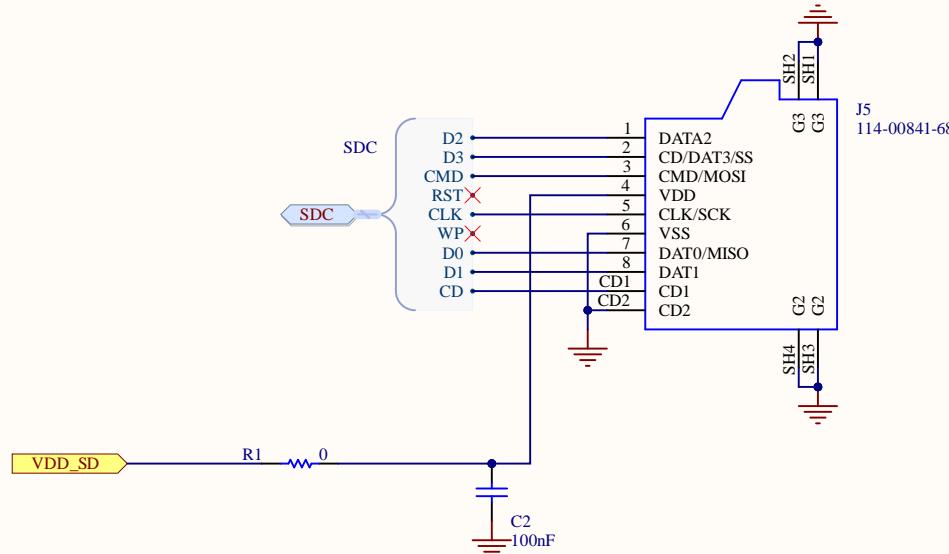
D

A

B

C

D



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Title: Portenta Breakout Carrier

ID: ASX00031

Revision: V1.3

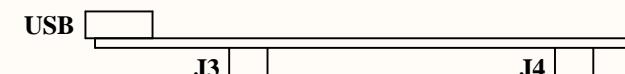
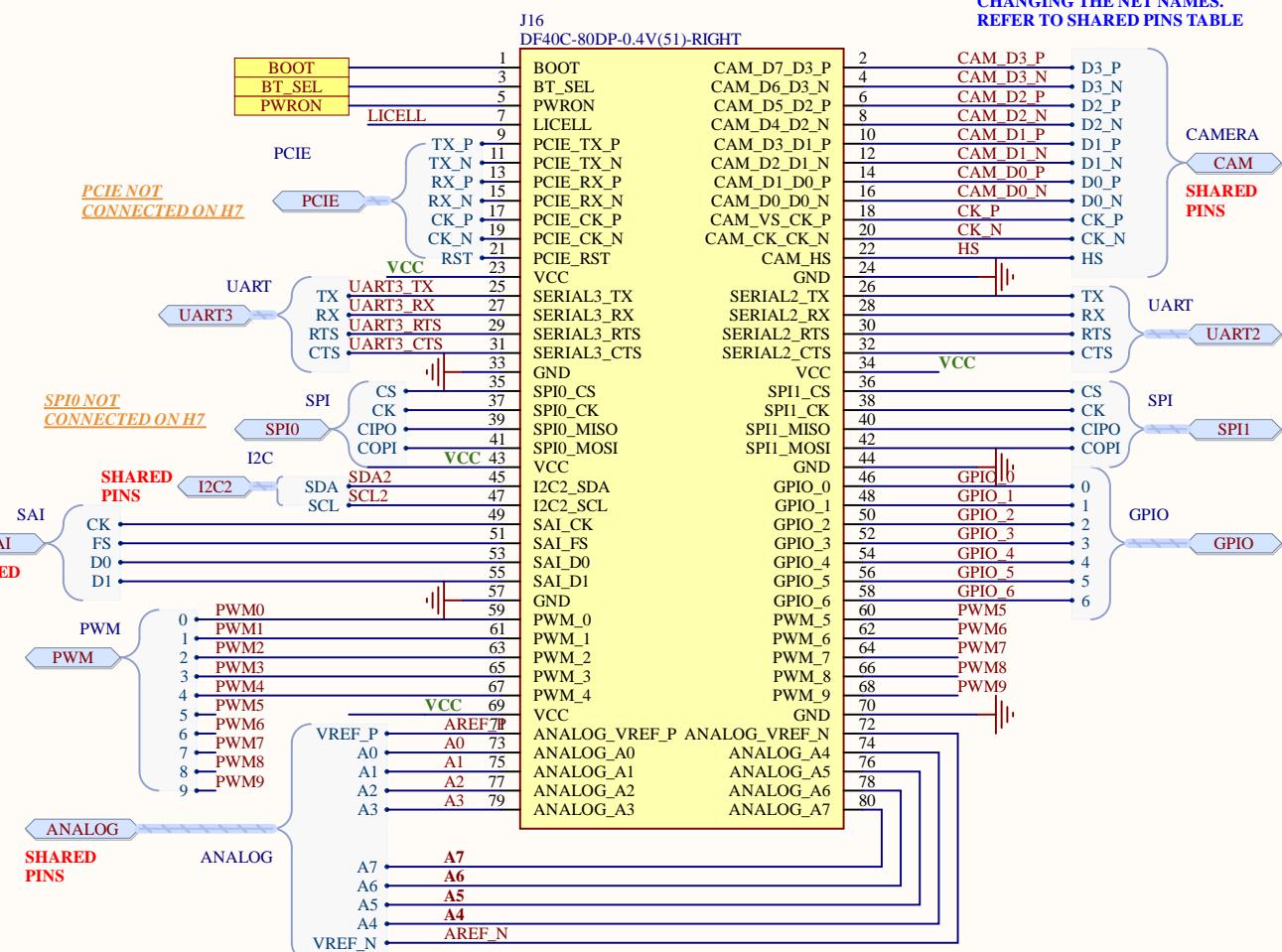
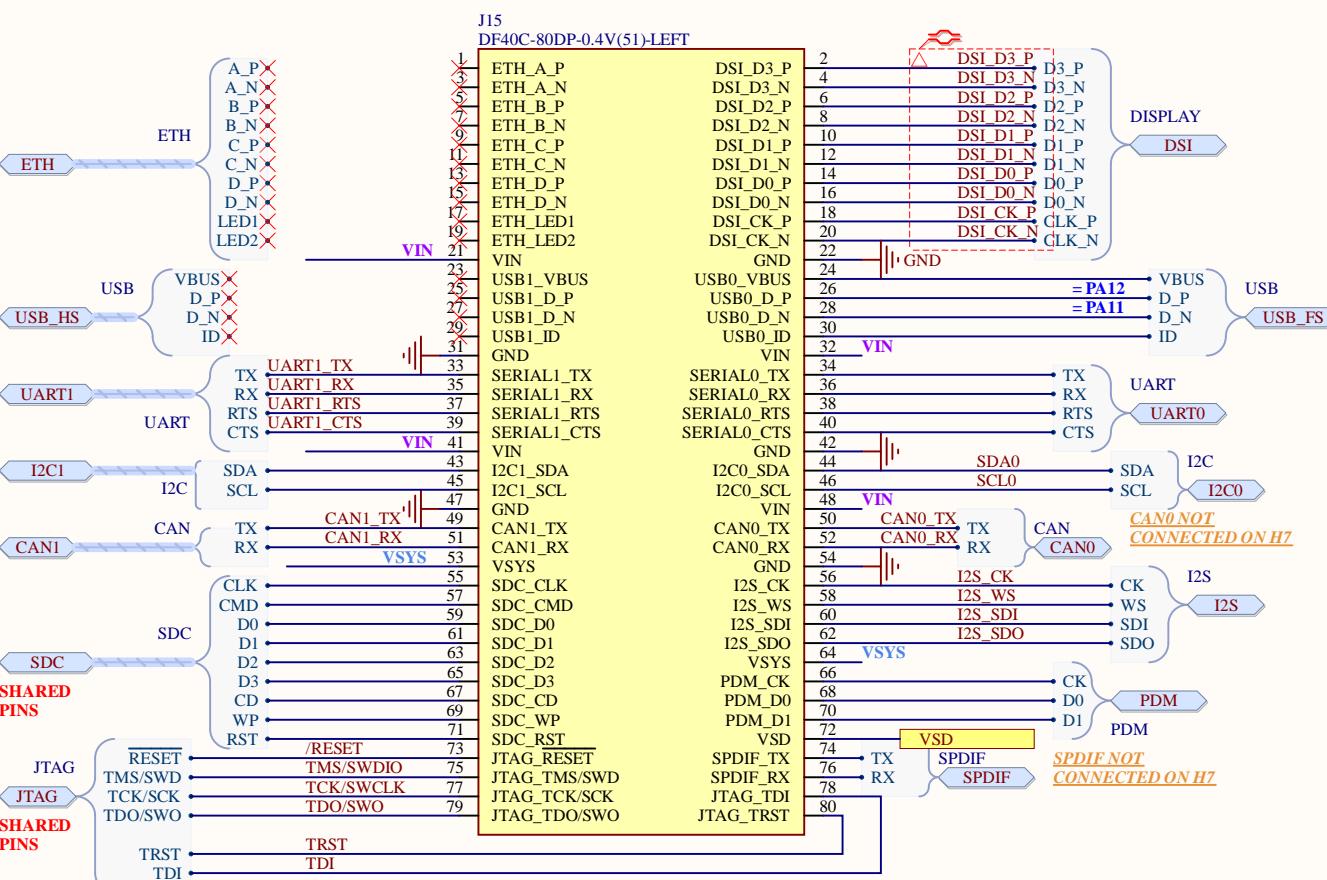
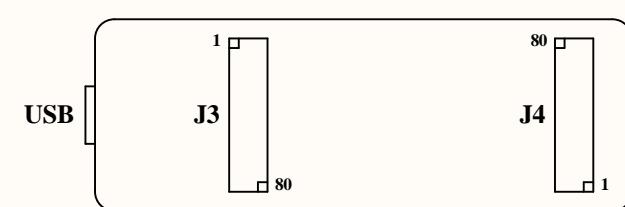
Date: 05/06/2024 Time: 14:46:57

Sheet 5 of 6

File: SD_CONNECTOR.SchDoc

Author: Ernesto Lopez



Board side view:**Board BOTTOM view:****SHARED PINS TABLE**

NET	BUS 1	BUS 2
JTAG	SDC2	
CAM	I2C4	
CAM	I2C4	
CAM	SAI2A	
CAM	SAI2A	
CAM	SAI2A	
CAM	ANALOG	
CAM	ANALOG	
ANALOG	ANALOG	
ANALOG	ANALOG	
SPI2	SPI2	
SPI2	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.
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LICELL	PORTENTA INPUT	3.5V to 4.2V, max 600mA.	Max 4uA with PMIC (U10) in coin cell mode, max 46uA with PMIC in standby/suspend mode.

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Title: Portenta Breakout Carrier

ID: ASX00031 Revision: V1.3

Date: 05/06/2024 Time: 14:46:58 Sheet: 6 of 6

File: HDConn_MALE.SchDoc Author: S. Navaretti



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