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Title: Portenta Breakout Carrier

ID: ASX00031 Revision: V1.3

Date: 10/25/2021 Time: 9:42:24 AM Sheet 1 of 6

File: TOP.SchDoc Author: Ernesto Lopez

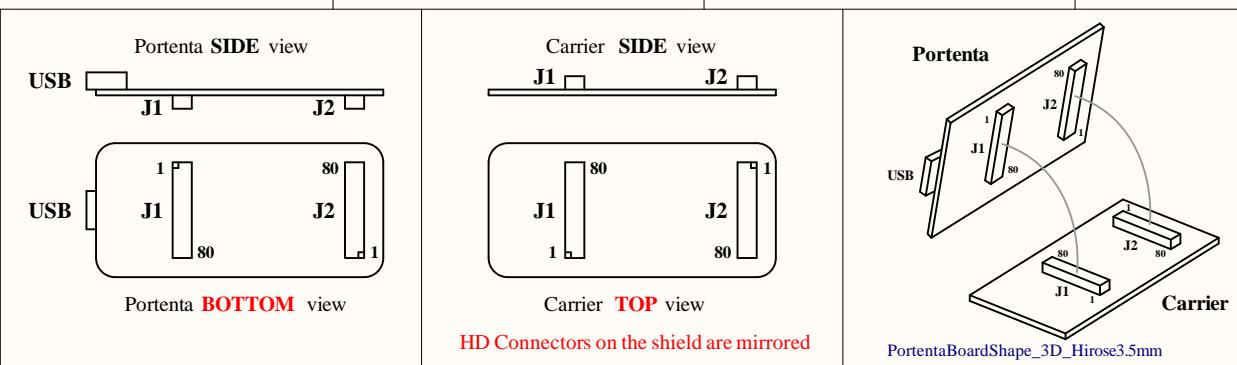


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RevAuthor: Silvio Navaretti

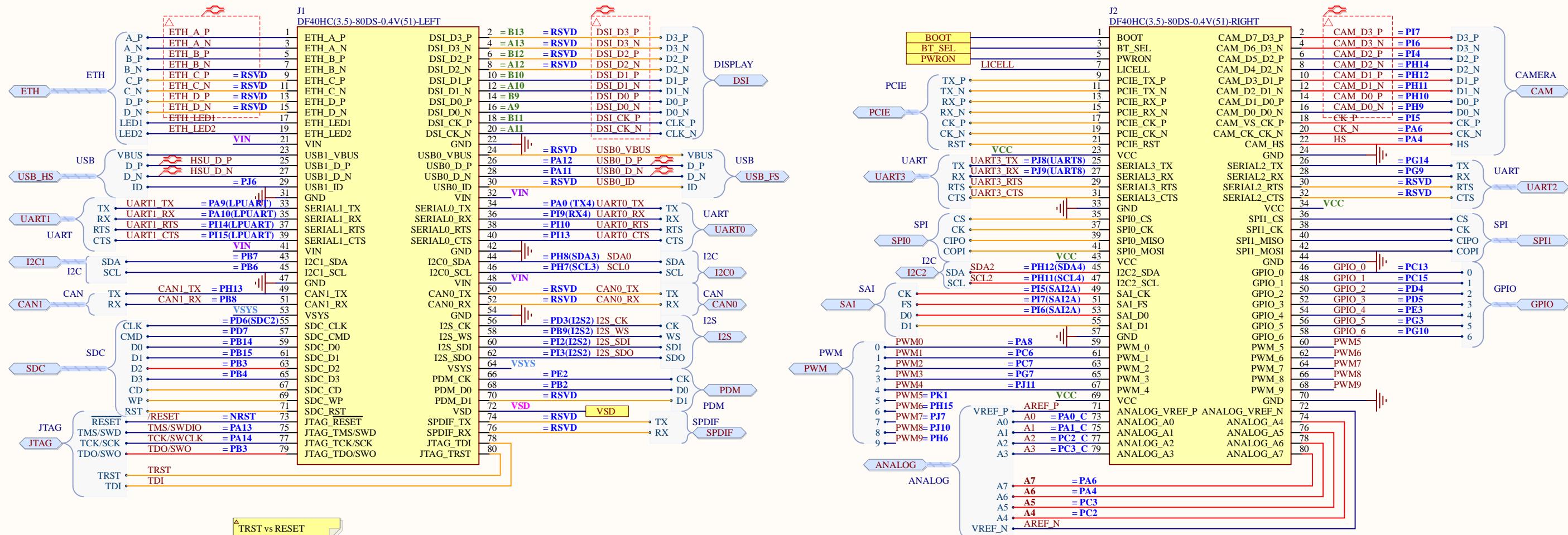


COLOR LEGEND:

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
PHI11	CAM	I2C4
PHI12	CAM	I2C4
P15	CAM	SAI2A
PI6	CAM D3_N	SAI2A
PI7	CAM D3_P	SAI2A
PA4	CAM	ANALOG
PA6	CAM	ANALOG
PC2	ANALOG (A4)	SPI2 (D10/MISO)
PC3	ANALOG (A5)	SPI2 (D8/MOSI)

POWER NETS TABLE

NET	TYPE	RANGES	DESCRIPTION
VIN	VIN	PORTENTA INPUT	4.1V to 6V.
VCC	VCC	PORTENTA OUTPUT	1.1V to 3.3V in steps, max 1A.
VSYS	VSYS	PORTENTA RESERVED OUTPUT	RESERVED, DO NOT USE 3.5V to 4.2V, max 600mA.
LICELL	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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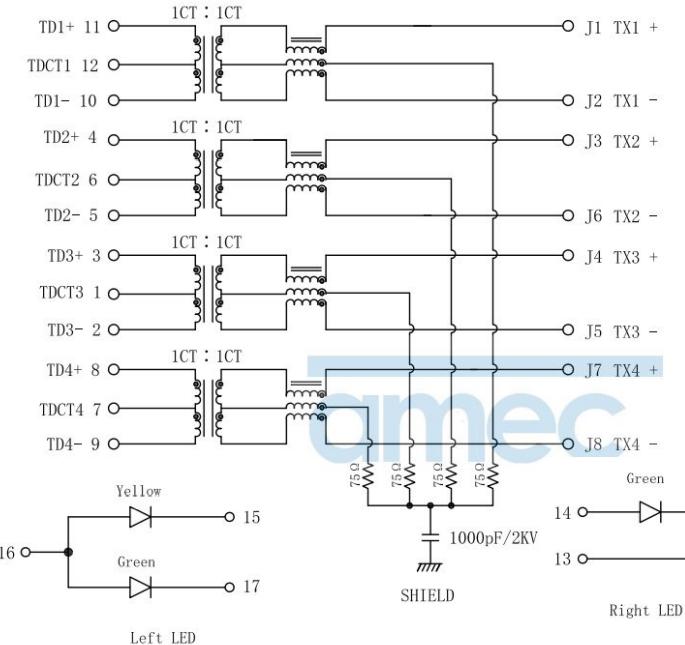
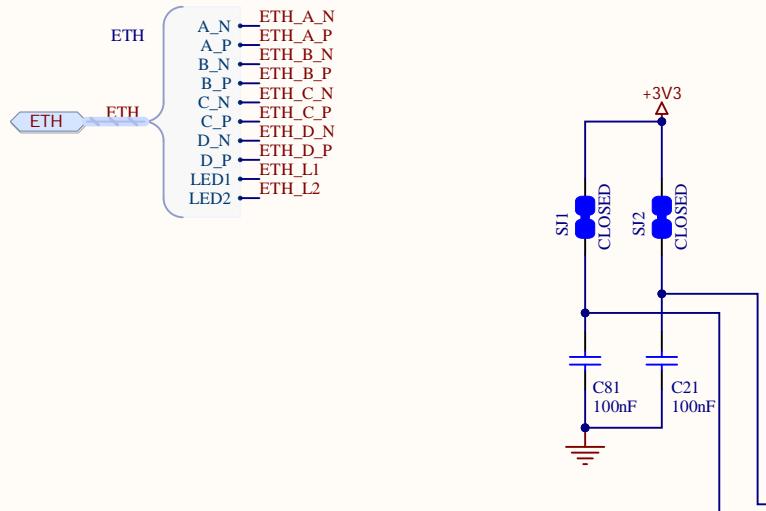
Title: Portenta Breakout Carrier

ID: ASX00031 Revision: V1.3

ID: ASX00031 Revision: V1.3

Date: 10/25/2021 Time: 9:





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

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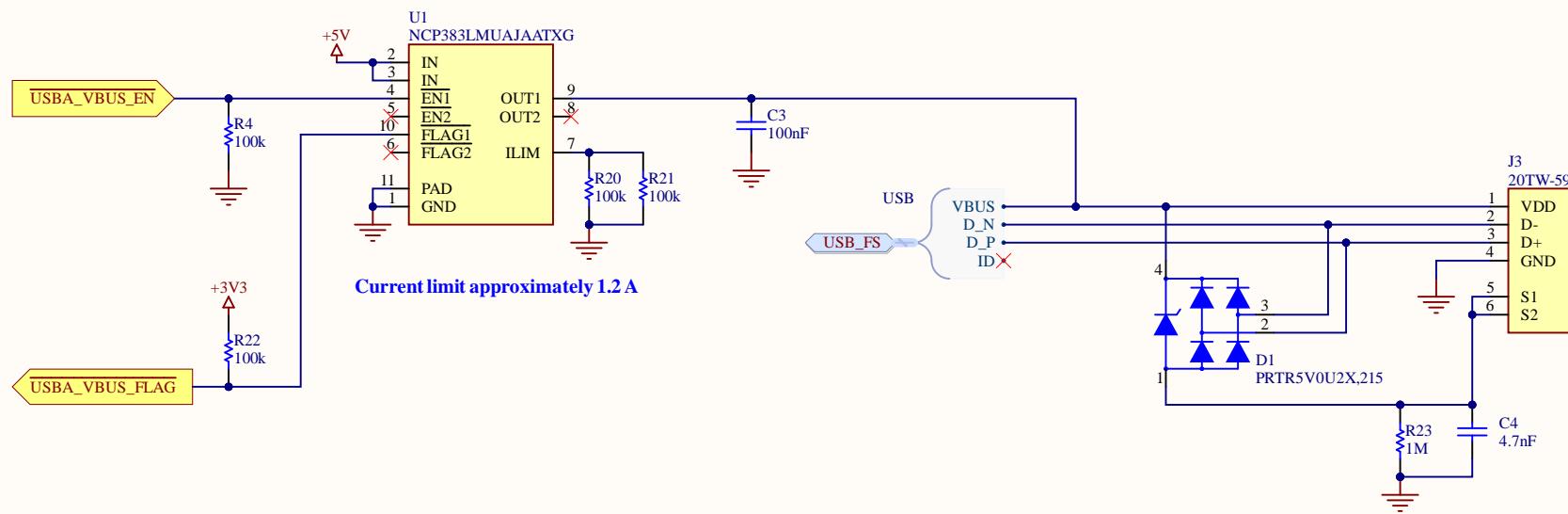
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Title: Portenta Breakout Carrier

ID: ASX00031	Revision: V1.3
Date: 10/25/2021	Time: 9:42:28 AM
File: ETHERNET.SchDoc	Sheet 3 of 6
Author: Ernesto Lopez	RevAuthor: Silvio Navaretti



A



B

C

D

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Title: Portenta Breakout Carrier

ID: ASX00031	Revision: V1.3
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Date: 10/25/2021	Time: 9:42:31 AM	Sheet 4 of 6
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File: USB.SchDoc	Author: Ernesto Lopez	RevAuthor: Silvio Navaretti
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A

A

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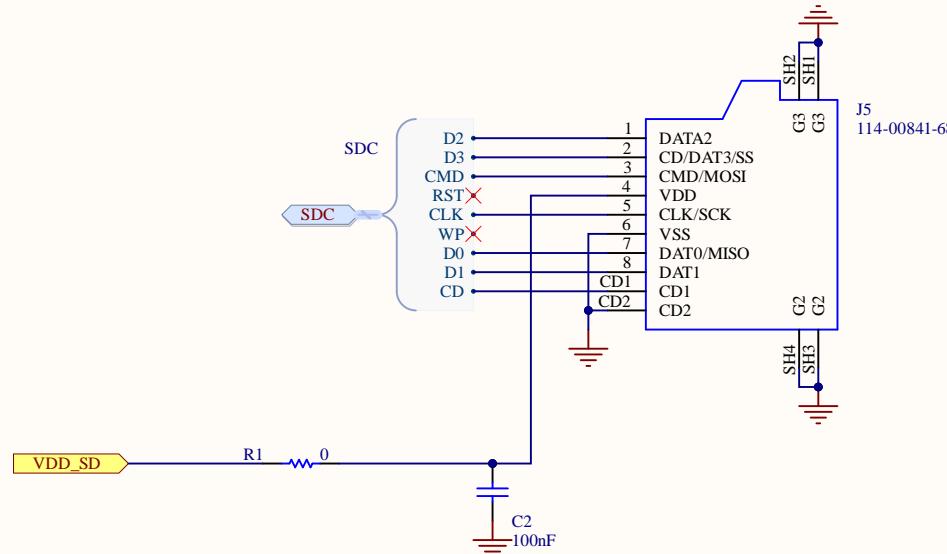
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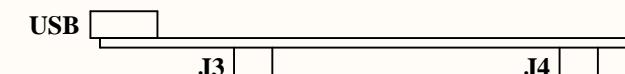
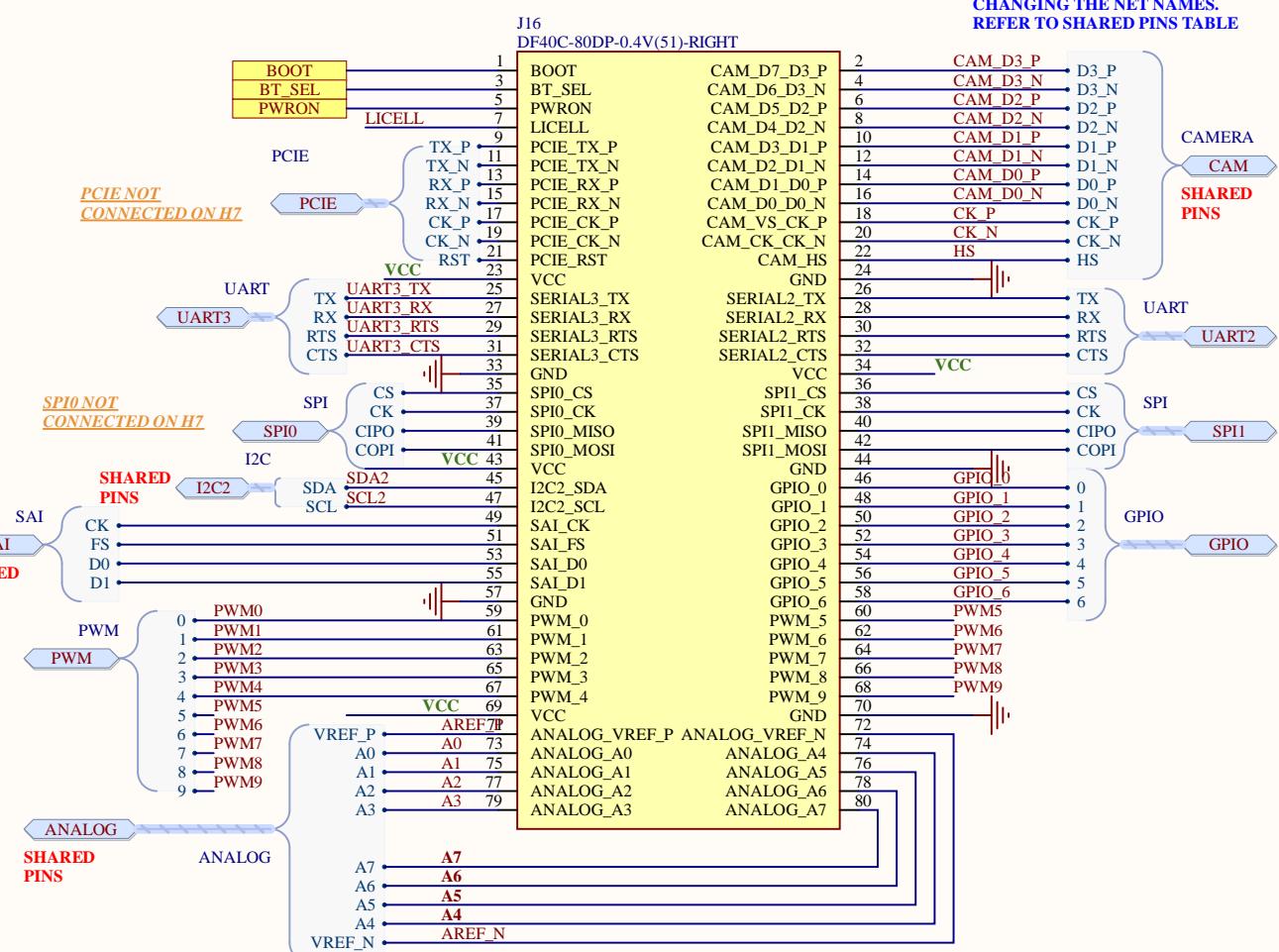
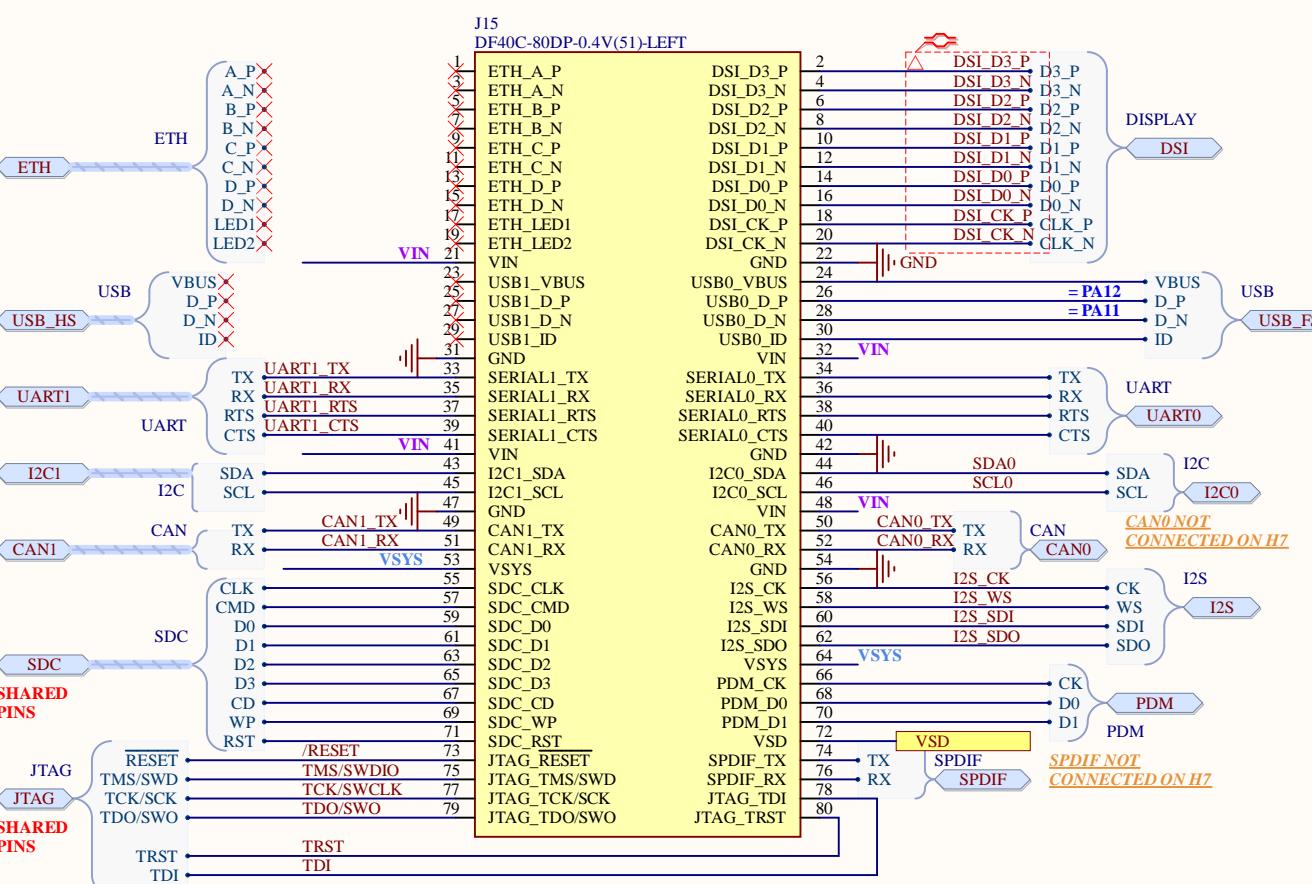
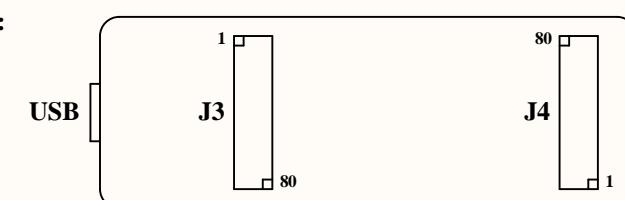
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Title: Portenta Breakout Carrier
ID: ASX00031 **Revision:** V1.3
Date: 10/25/2021 **Time:** 9:42:33 AM **Sheet** 5 of 6
File: SD_CONNECTOR.SchDoc **Author:** Ernesto Lopez **RevAuthor:** Silvio Navaretti




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	SPI2	
ANALOG	SPI2	

POWER NETS TABLE

NET	TYPE	RANGES	DESCRIPTION
VIN	VIN	4.1V to 6V.	Default 3.3V, PMIC (U10) programmable output.
VCC	VCC	1.1V to 3.3V in steps, max 1A.	Default 3.3V, PMIC (U10) programmable output.
VSYS	VSYS	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	LICELL	PORTENTA INPUT	3.5V to 4.2V, max 600mA.
LICELL	LICELL	PORTENTA INPUT	Coin cell max 3.6V, max 46uA with PMIC in standby/suspend mode.

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Title: Portenta Breakout Carrier

ID: ASX00031 Revision: V1.3

Date: 10/25/2021 Time: 9:42:35 AM Sheet 6 of 6

File: HDConn_MALE.SchDoc Author: S. Navaretti

