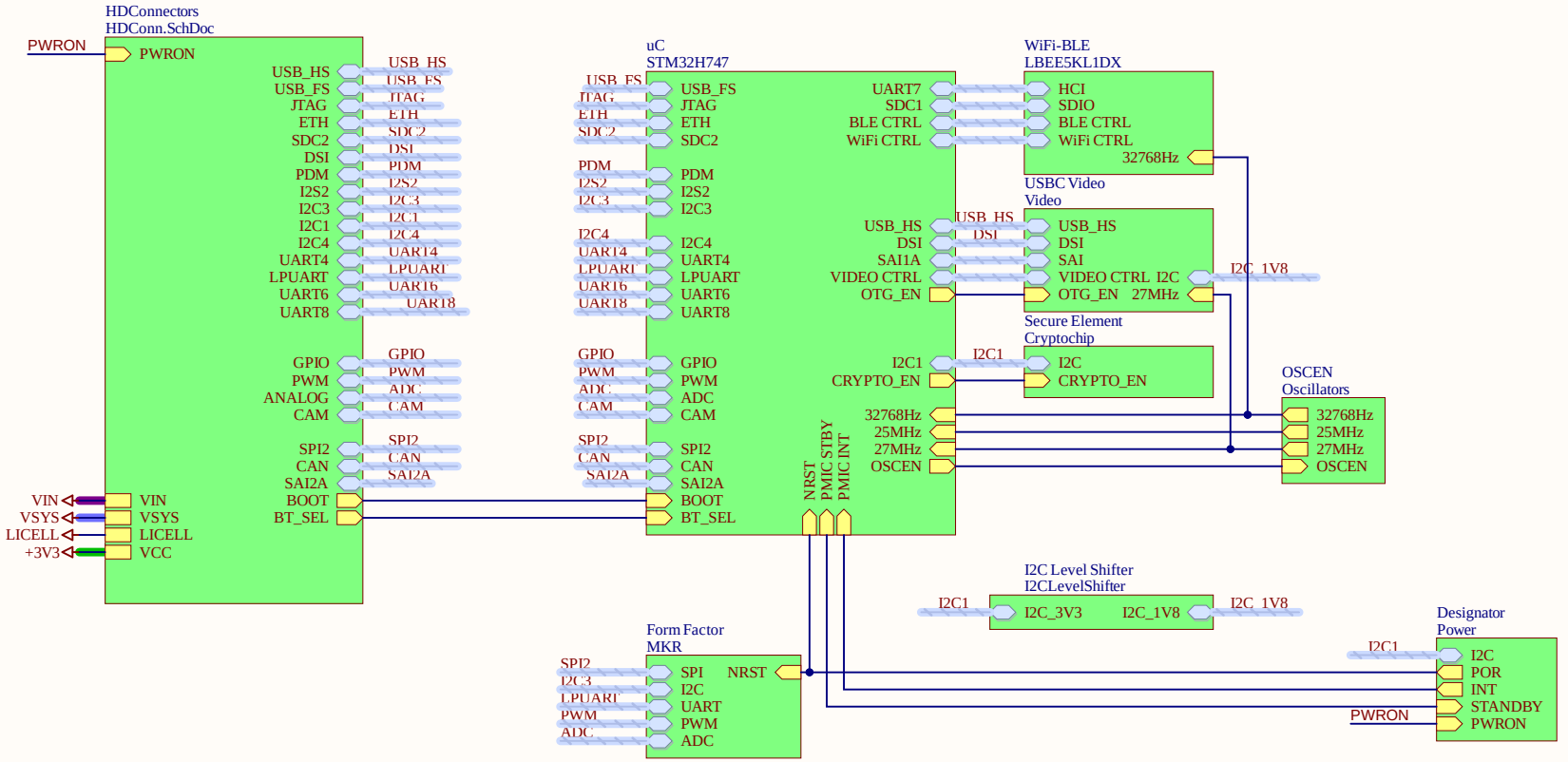

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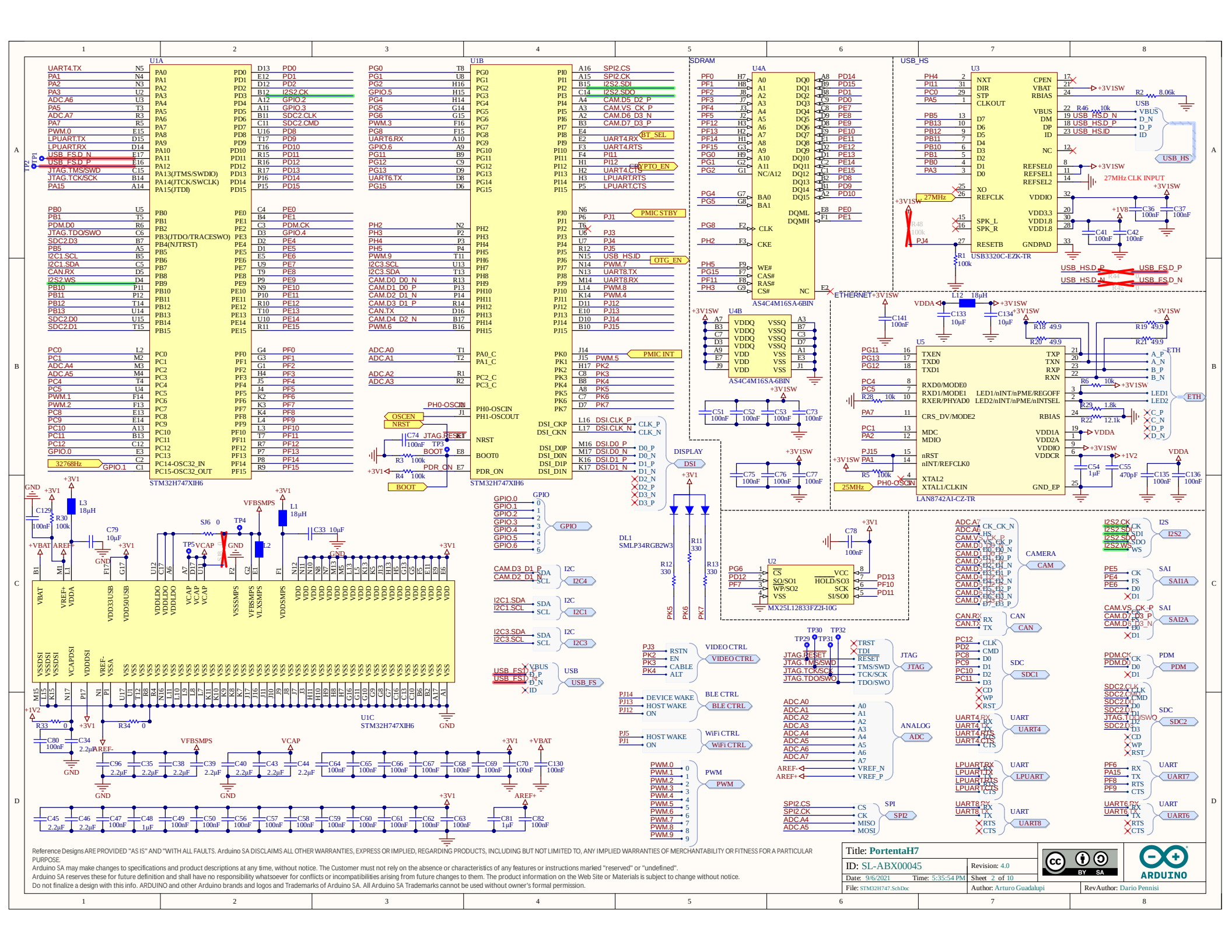
Title: **PortentaH7**			
ID: SL-ABX00045		Revision: 4.0	
Date: 9/6/2021	Time: 5:35:53 PM	Sheet 1 of 10	
File: TopView.SchDoc		Author: Arturo Guadalupi	RevAuthor: Dario Pennisi



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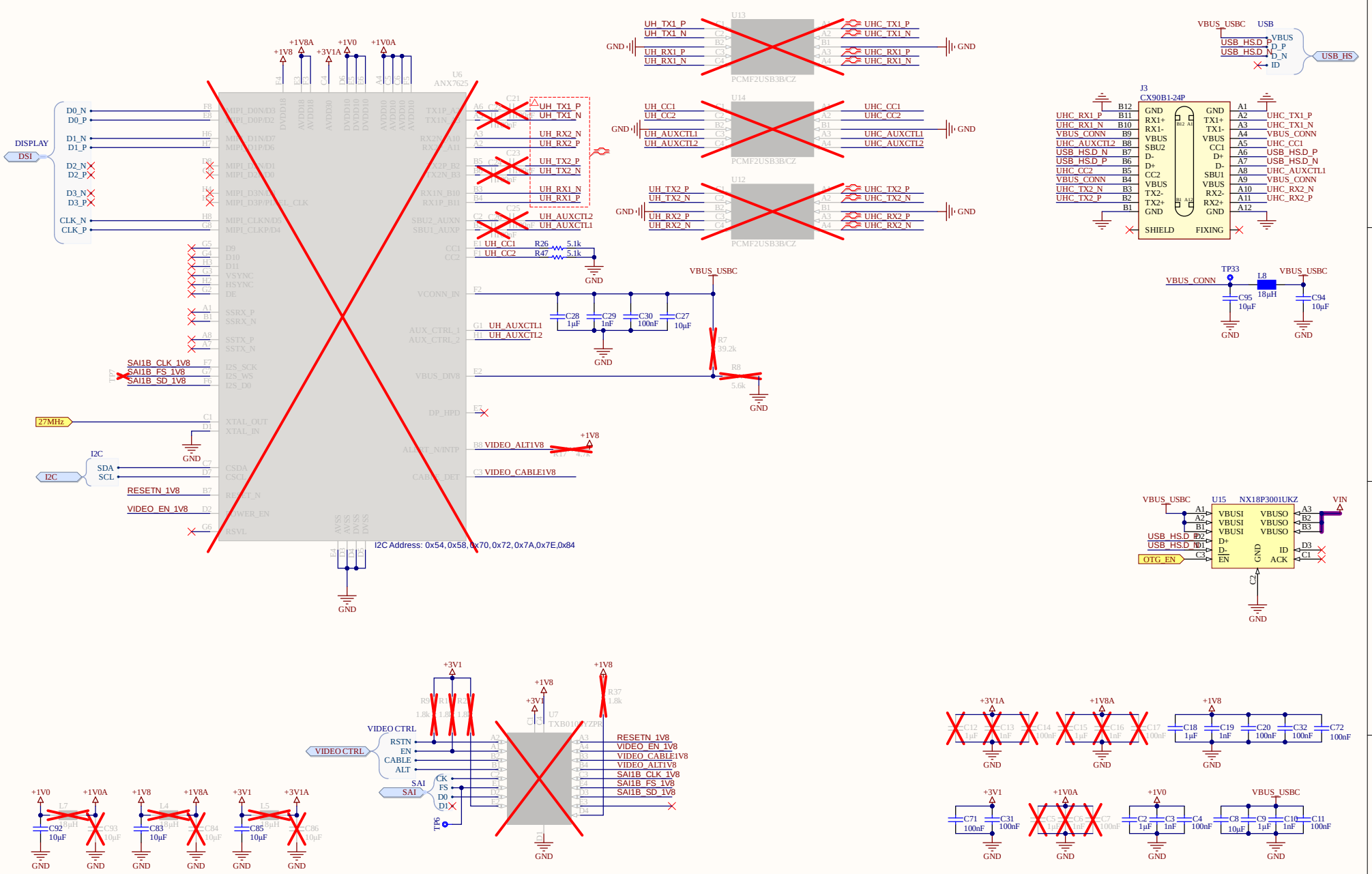

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Title: PortentaH7		
ID: SL-ABX00045	Revision: 4.0	
Date: 9/6/2021 Time: 5:35:56 PM	Sheet 3 of 10	
File: Video.SchDoc	Author: Arturo Guadalupi	RevAuthor: Dario Pennisi

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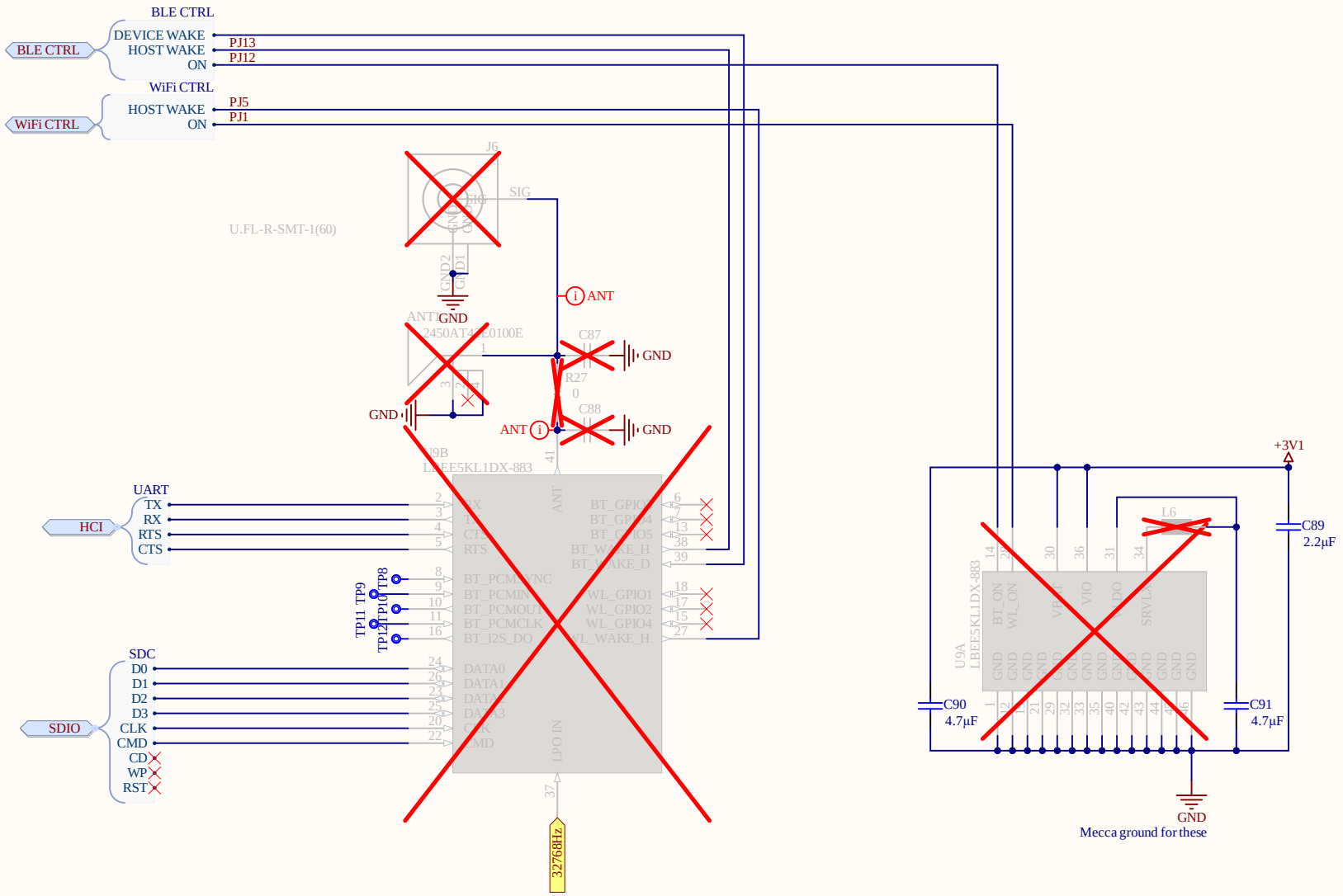

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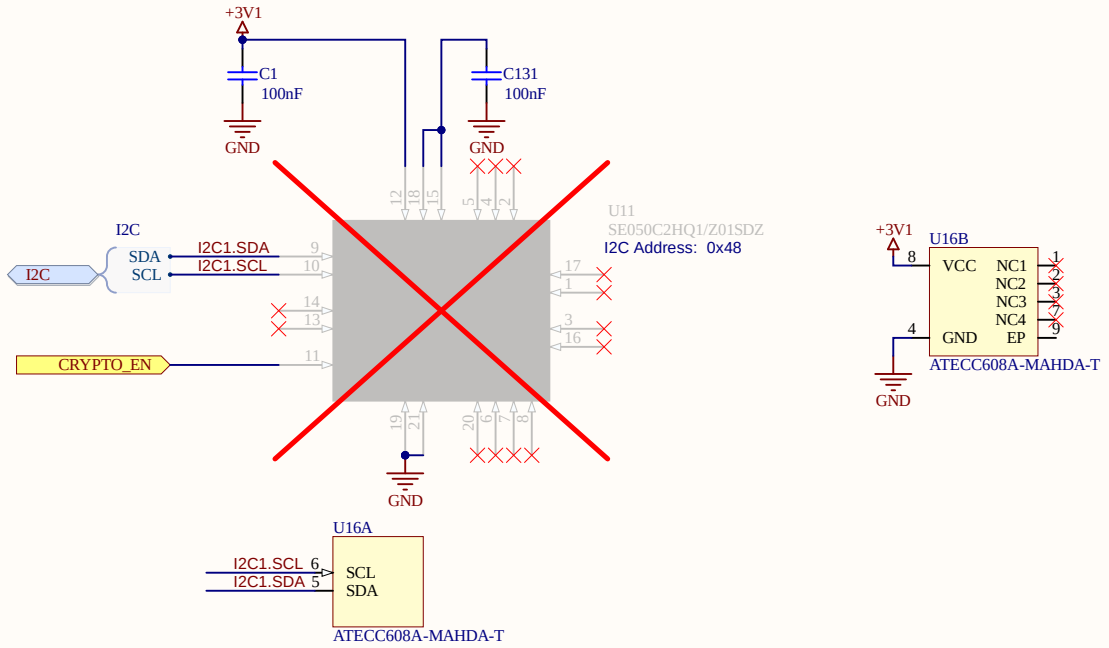
Title: **PortentaH7**			
ID: SL-ABX00045	Revision: 4.0		
Date: 9/6/2021 Time: 5:35:57 PM	Sheet 4 of 10		
File: LBEE5KL1DX.SchDoc	Author: Arturo Guadalupi	RevAuthor: Dario Pennisi	



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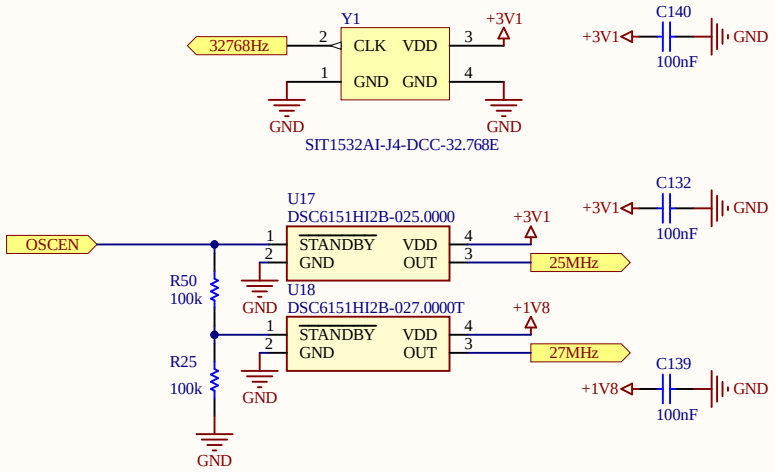
Title: **PortentaH7**			
ID: SL-ABX00045	Revision: 4.0		
Date: 9/6/2021 Time: 5:35:58 PM	Sheet 5 of 10		
File: Cryptochip.SchDoc	Author: ArturoGuadalupi	RevAuthor: Dario Pennisi	



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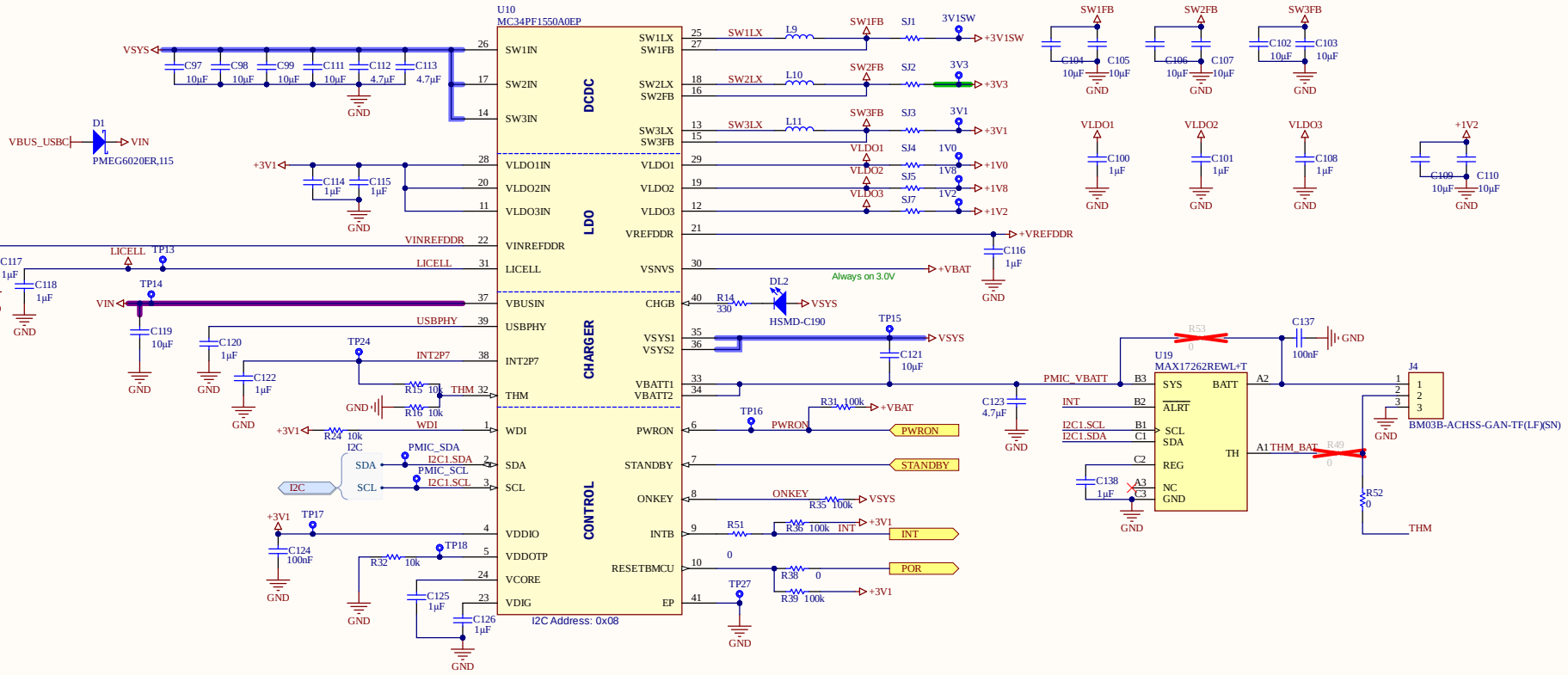
Title: **PortentaH7**			
ID: SL-ABX00045		Revision: 4.0	
Date: 9/6/2021	Time: 5:35:59 PM	Sheet 6 of 10	
File: Oscillators.SchDoc		Author: Arturo Guadalupi	RevAuthor: Dario Pennisi



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Title: PortentaH7			
ID: SL-ABX00045		Revision: 4.0	
Date: 9/6/2021	Time: 5:36:00 PM	Sheet 7 of 10	
File: Power.SchDoc		Author: Arturo Guadalupi	RevAuthor: Dario Pennisi

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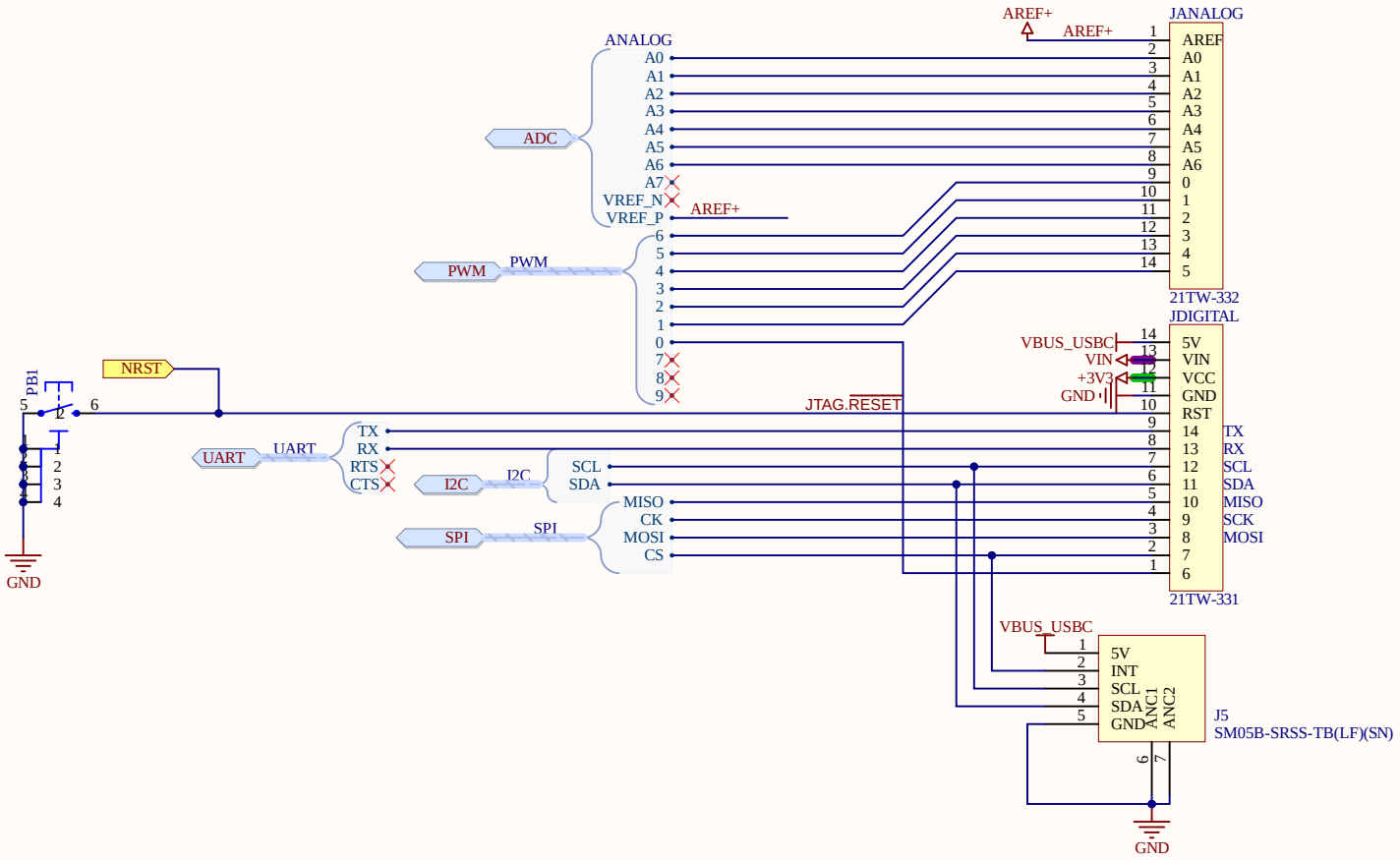

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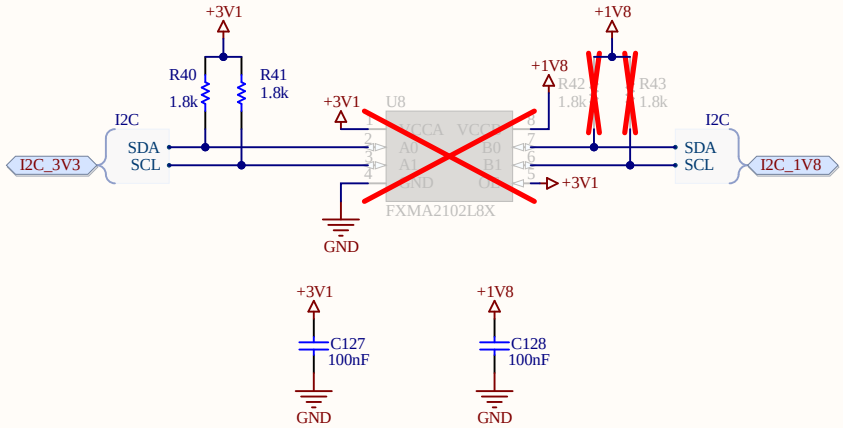
Title: **PortentaH7**			
ID: SL-ABX00045		Revision: 4.0	
Date: 9/6/2021	Time: 5:36:01 PM	Sheet 8 of 10	
File: MKR.SchDoc		Author: Arturo Guadalupi	RevAuthor: Dario Pennisi



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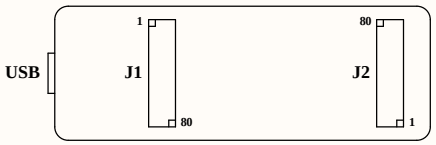
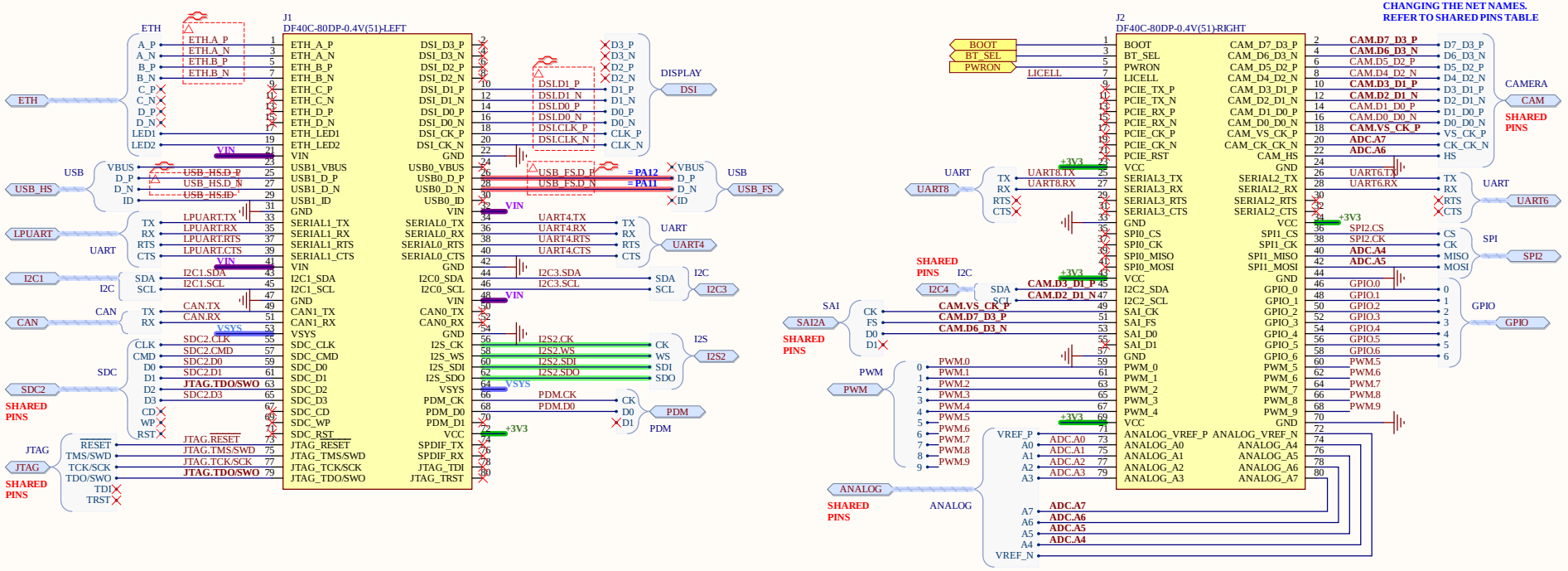
Title: **PortentaH7**			
ID: SL-ABX00045	Revision: 4.0		
Date: 9/6/2021 Time: 5:36:02 PM	Sheet 9 of 10		
File: I2CLevelShifter.SchDoc	Author: Arturo Guadalupi	RevAuthor: Dario Pennisi	

Board side view:

Board BOTTOM view:



IF NECESSARY ROUTE CAMERA WITH DIFFERENTIAL PAIR RULES CHANGING THE NET NAMES. REFER TO SHARED PINS TABLE



SHARED PINS TABLE

NET	BUS 1	BUS 2
JTAG.TDO/SWO	JTAG	SDC2
CAM.D2_D1_N	CAM	I2C4
CAM.D3_D1_P	CAM	I2C4
CAM.VS_CK_P	CAM	SAI2A
CAM.D6_D3_N	CAM	SAI2A
CAM.D7_D3_P	CAM	SAI2A
ADC.A6	CAM	ANALOG
ADC.A7	CAM	ANALOG
ADC.A4	ANALOG	SPI2
ADC.A5	ANALOG	SPI2

POWER NETS TABLE

NET	TYPE	RANGES	DESCRIPTION
VIN	**PORTENTA INPUT**	4.1V to 6V.	Default 3.3V, PMIC (U10) programmable output.
+3V3 / 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**			
ID: SL-ABX00045	Revision: 4.0		
Date: 9/6/2021	Time: 5:36:03 PM	Sheet 10 of 10	
File: HDConn.SchDoc	Author: Arturo Guadalupi	RevAuthor: Dario Pennisi	

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