


# X-MLCC-05058

## ML Starter Kit Carrier Card

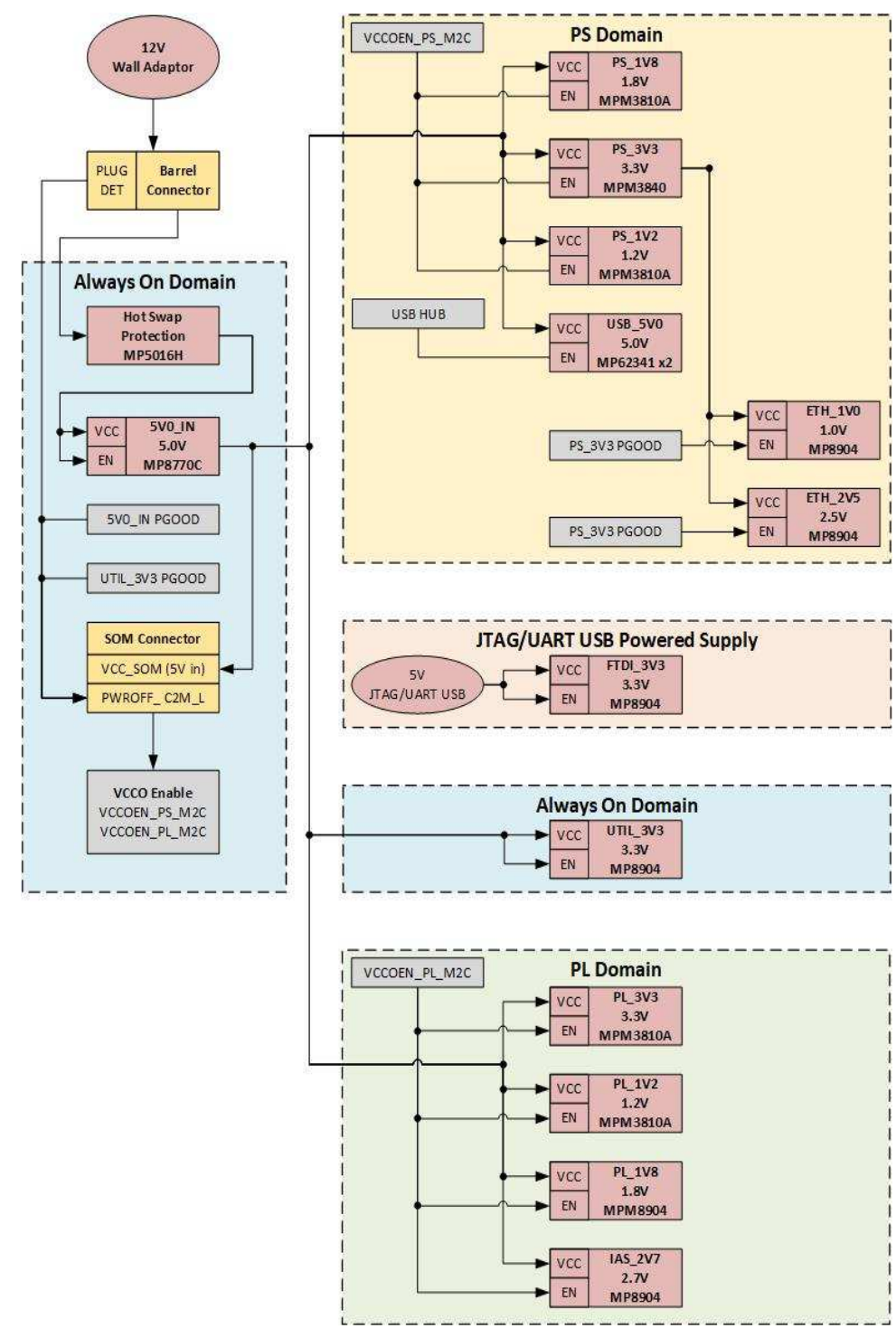
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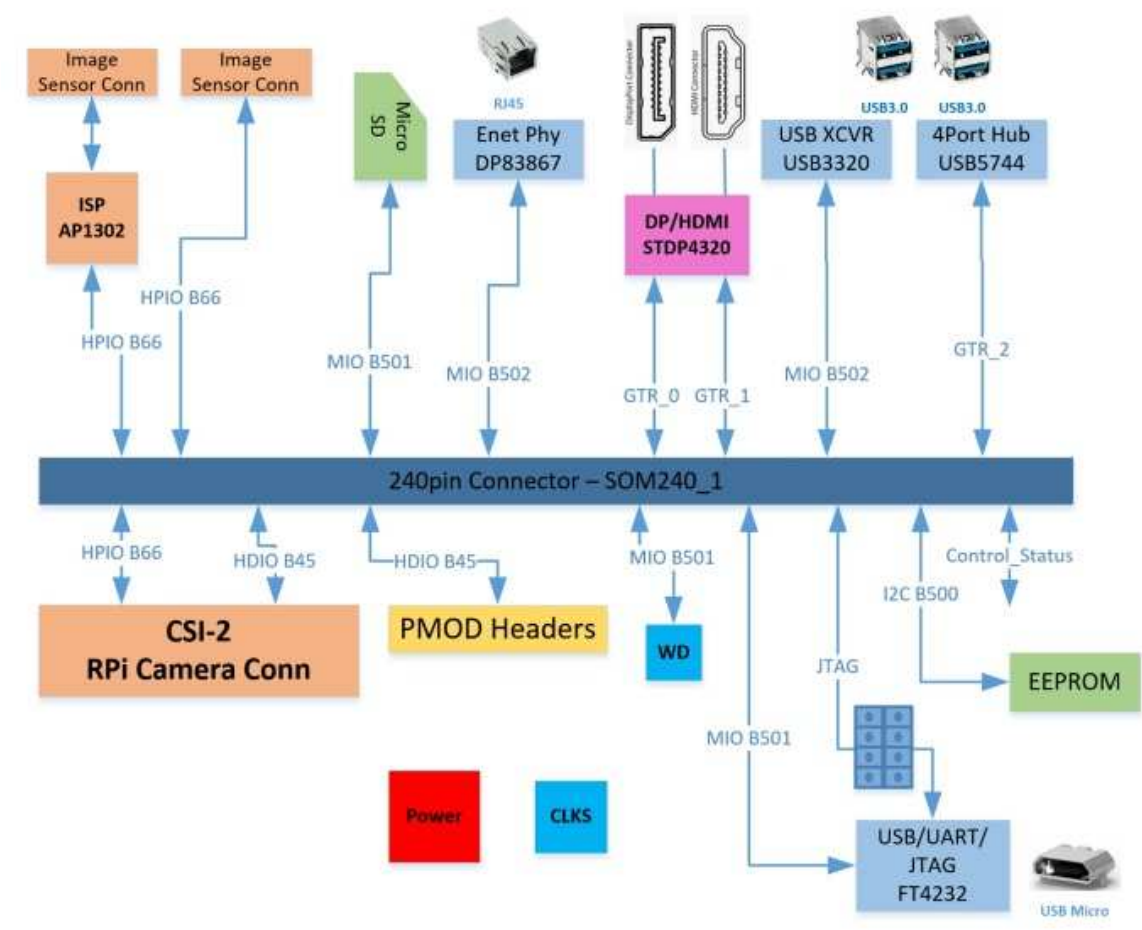
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 <b>XILINX</b> 2100 Logic Drive San Jose, CA 95124		SKIT	
Title: ML Starter Kit Carrier Card 01 - Title Page			
Size <b>B</b>	Date Modified: Thursday, April 21, 2022	Document Number: <b>038-05058-01</b>	Rev <b>B05</b>
Engineer: RH		Sheet 1 of 18	

POWER BLOCK DIAGRAM

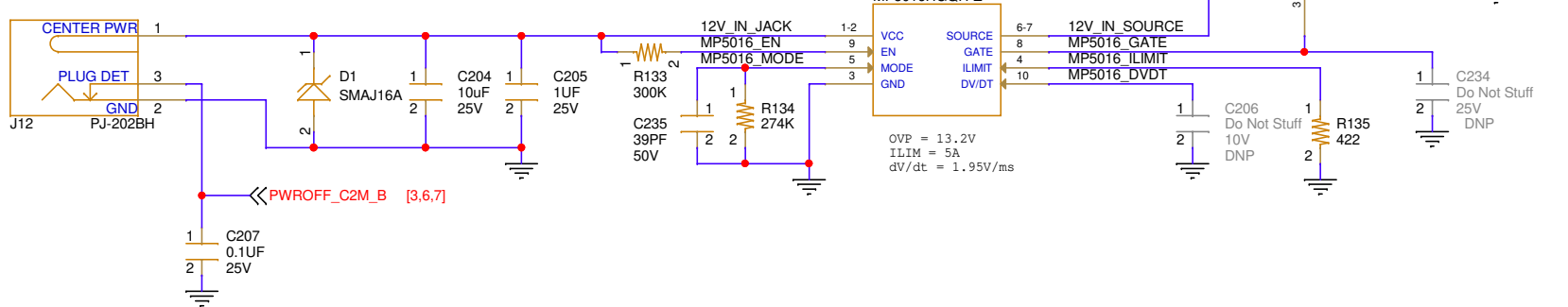


PERIPHERAL BLOCK DIAGRAM




 <b>XILINX</b> 2100 Logic Drive San Jose, CA 95124		SKIT	
Title: <b>ML Starter Kit Carrier Card</b> <b>02 - Block Diagram</b>			
Size <b>B</b>	Date Modified: Thursday, April 21, 2022	Document Number: <b>038-05058-01</b>	Rev <b>B05</b>
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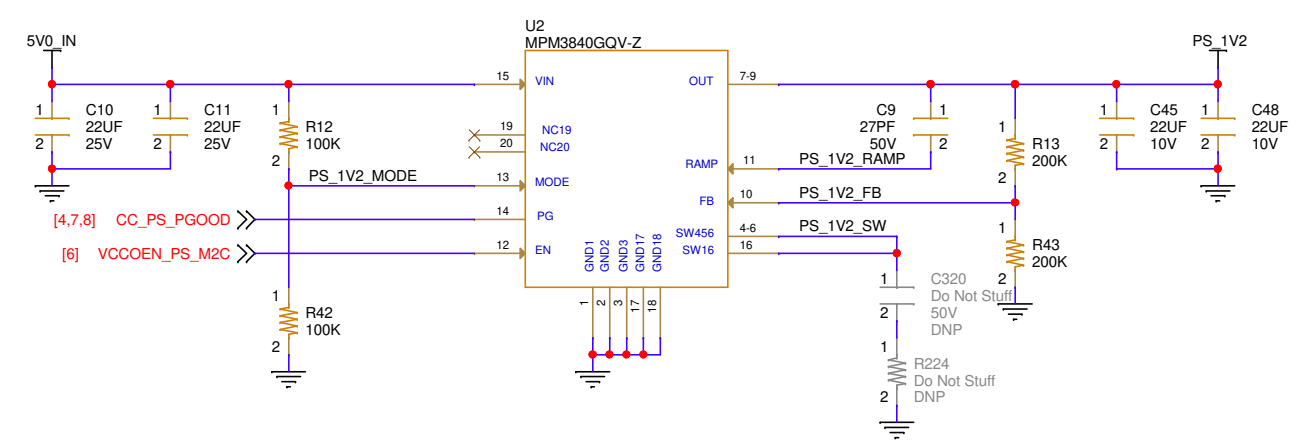
ID: 2.5mm  
OD: 5.5mm  
Depth: 9.0mm

[illegible]

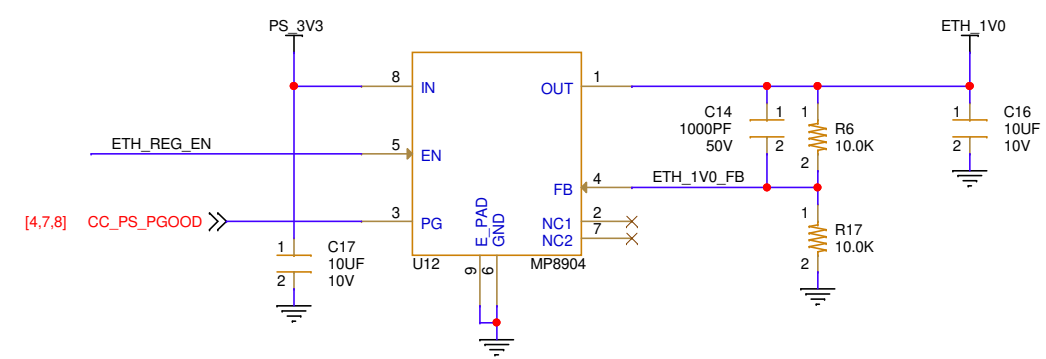
The diagram shows four test points (TP1, TP3, TP5, TP7) connected to the 12V IN JACK and 5V0 IN terminals. TP1 and TP3 are connected to the 12V IN JACK. TP5 and TP7 are connected to the 5V0 IN terminal. The connections are shown as blue lines.

 <b>XILINX</b> 2100 Logic Drive San Jose, CA 95124		SKIT
Title: <b>ML Starter Kit Carrier Card</b> <b>03 - Always On Pwr, Fan Header</b>		
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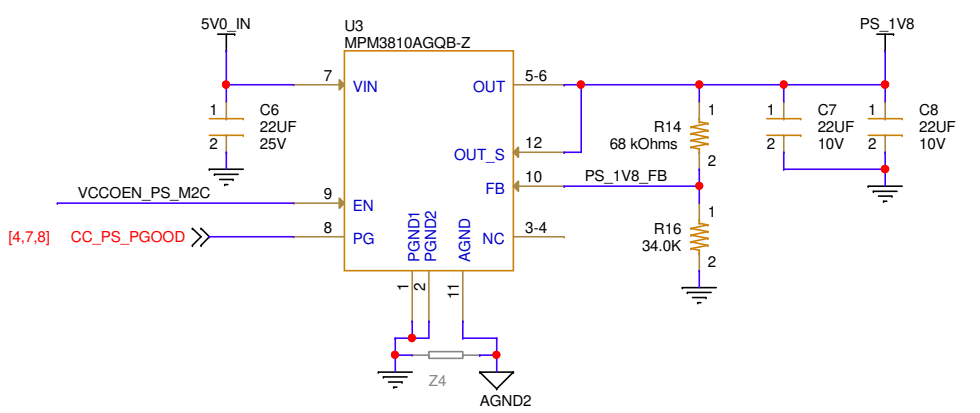
PS\_1V2 REGULATOR



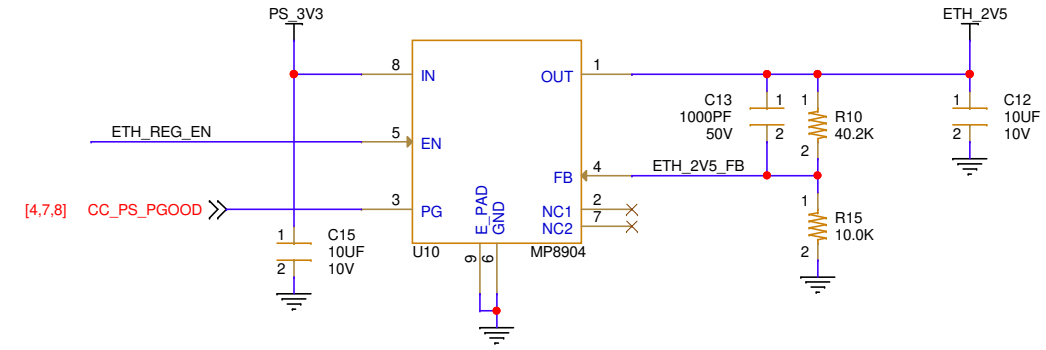
ETH\_1V0 REGULATOR



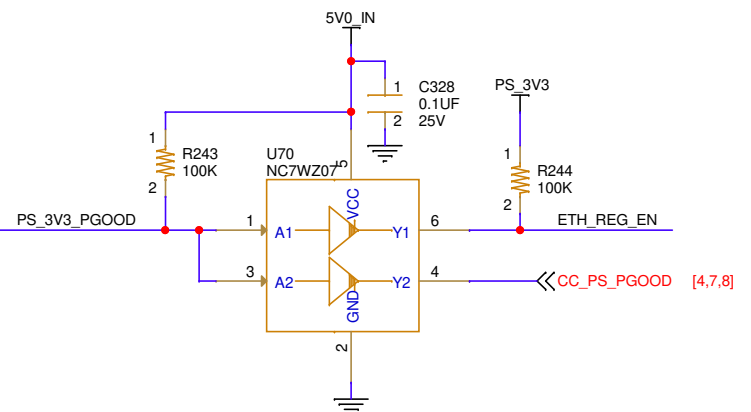
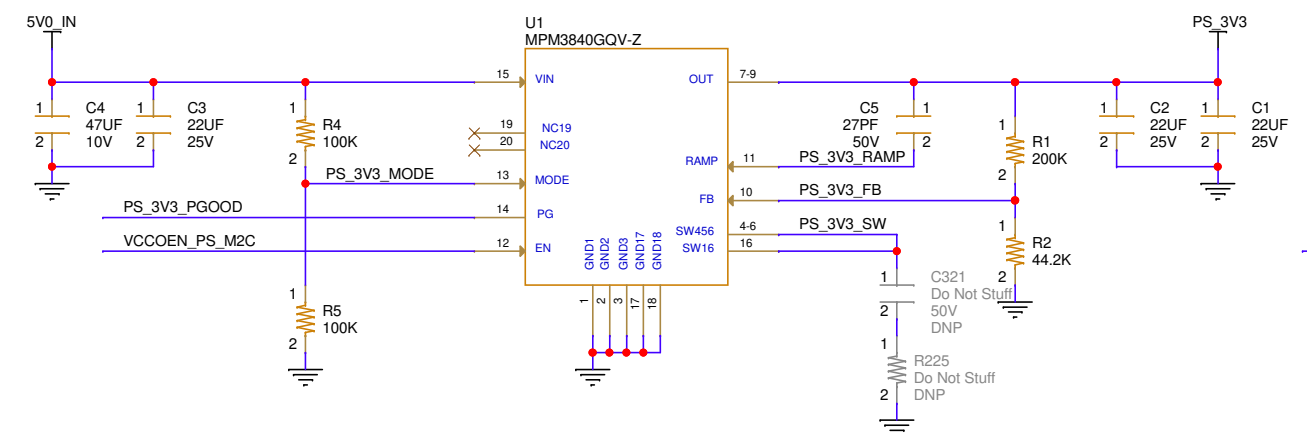
PS\_1V8 REGULATOR



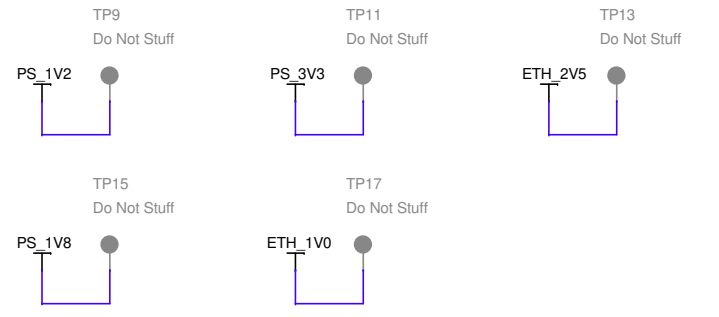
ETH\_2V5 REGULATOR



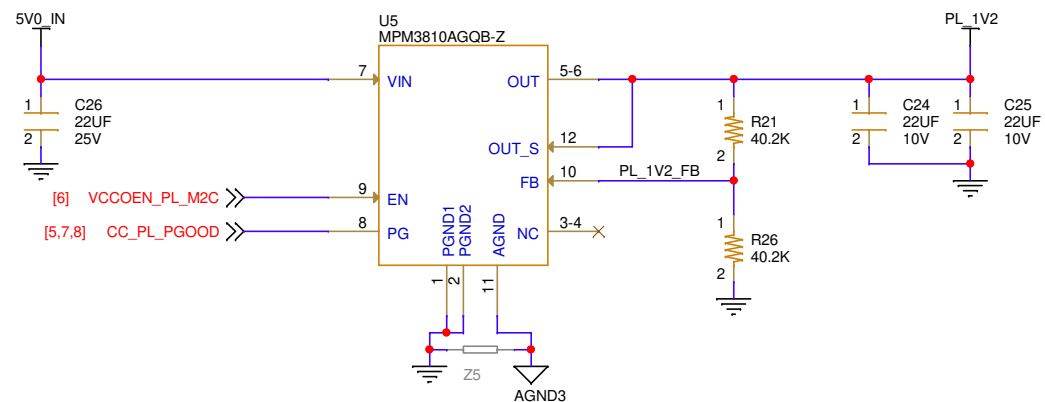
PS\_3V3 REGULATOR



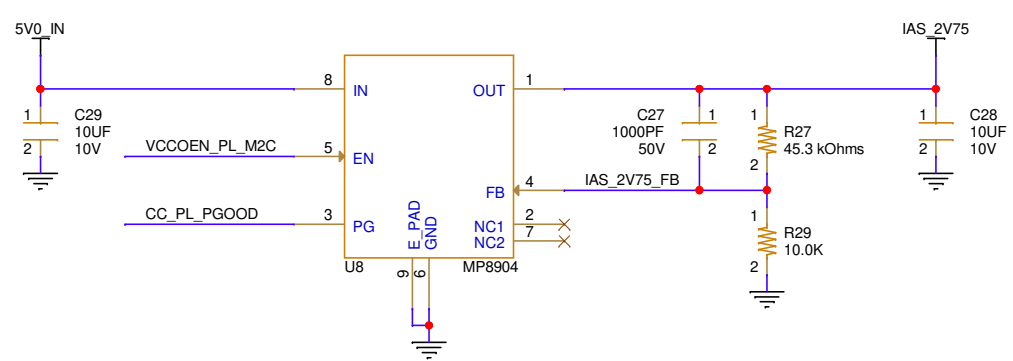
POWER TEST POINTS



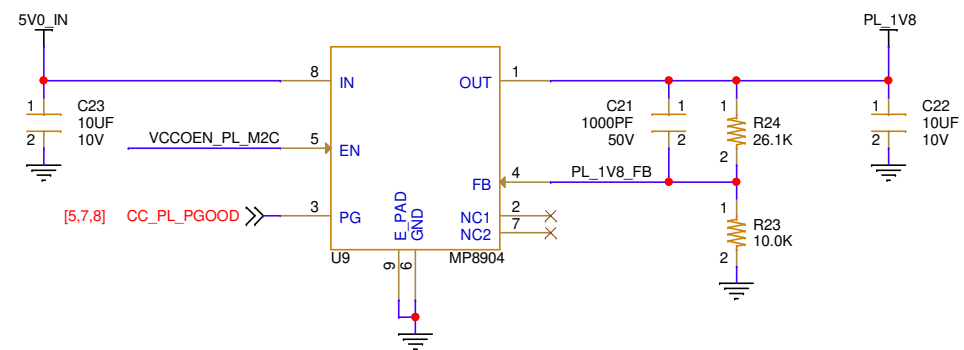
PL\_1V2 REGULATOR



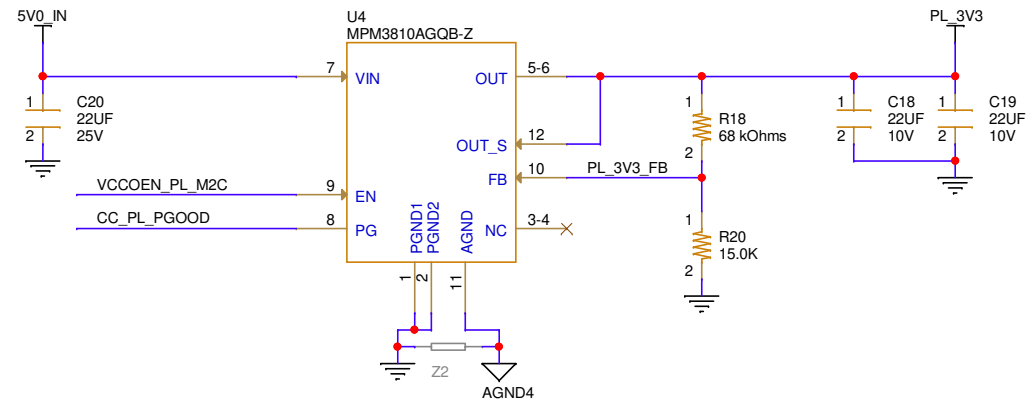
IAS\_2V75 REGULATOR



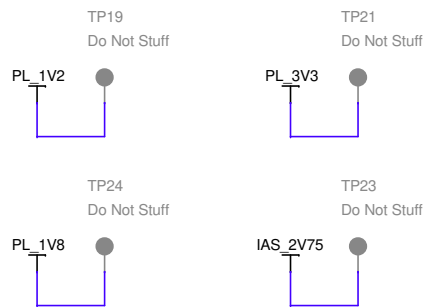
PL\_1V8 REGULATOR




PL\_3V3 REGULATOR



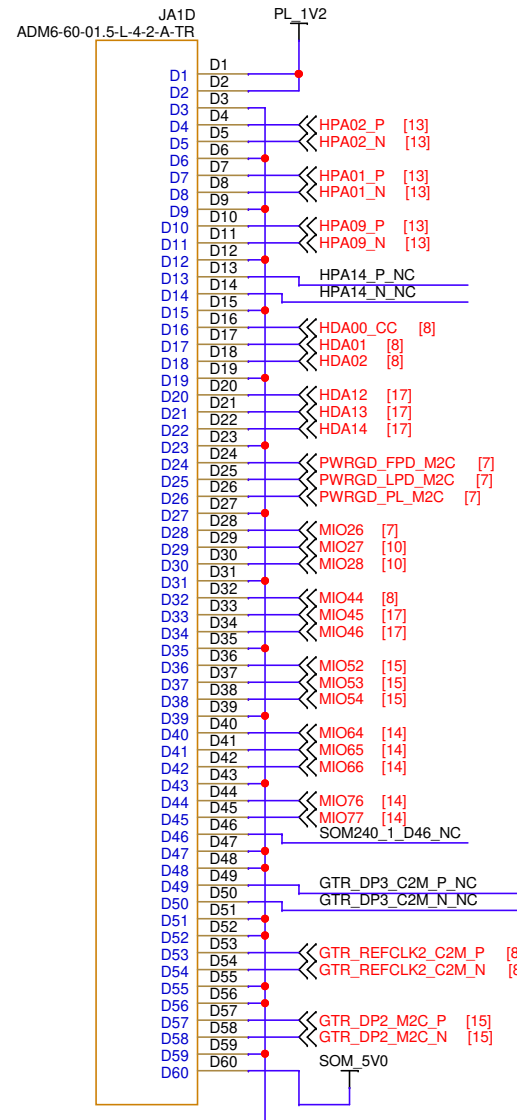
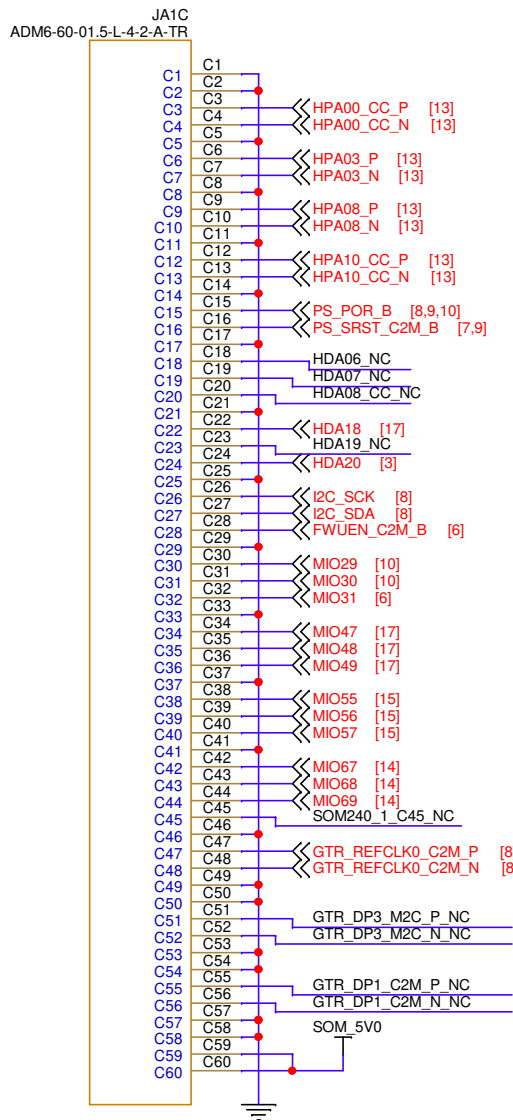
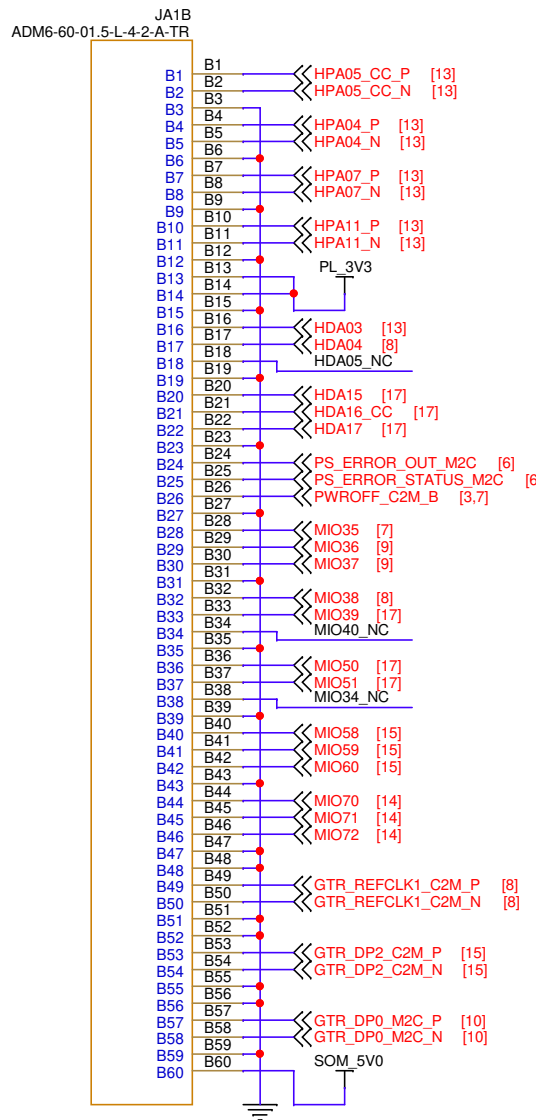
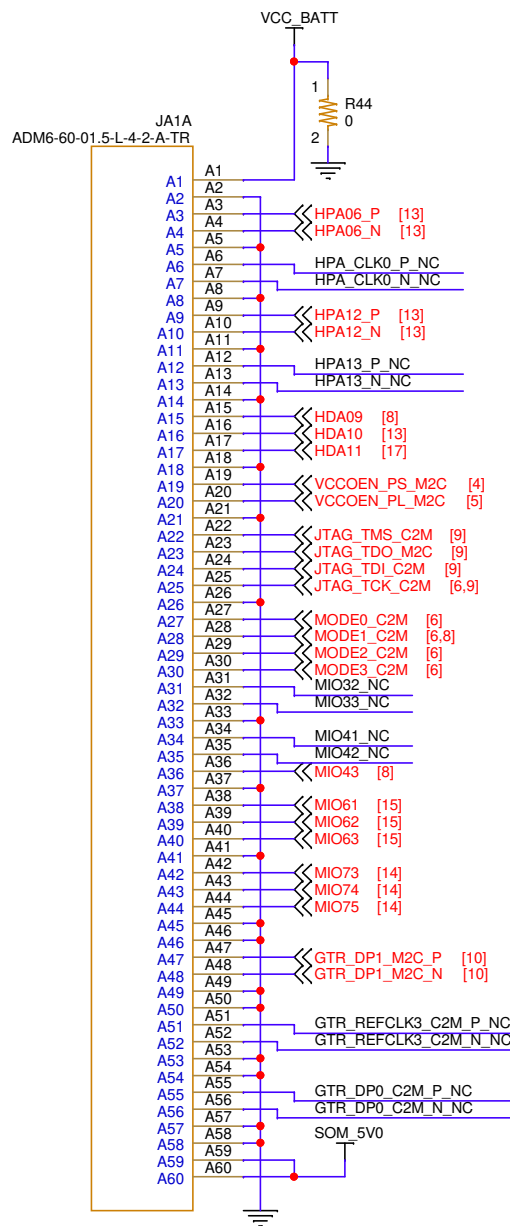
POWER TEST POINTS



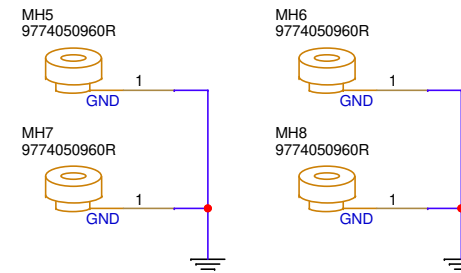
 <b>XILINX</b> 2100 Logic Drive San Jose, CA 95124		SKIT	
Title: <b>ML Starter Kit Carrier Card</b> <b>05 - PL Power</b>			
Size <b>B</b>	Date Modified: Thursday, April 21, 2022	Document Number: <b>038-05058-01</b>	Rev <b>B05</b>
Engineer: <b>RH</b>		Sheet <b>5</b> of <b>18</b>	



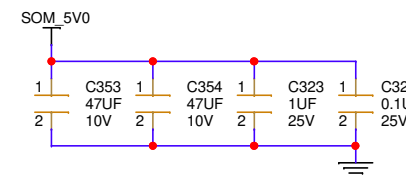
## SOM240\_1



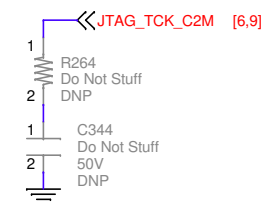
## SOM STANDOFFS



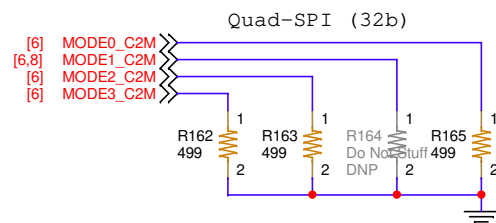
## SOM\_5V0 Connector Decoupling



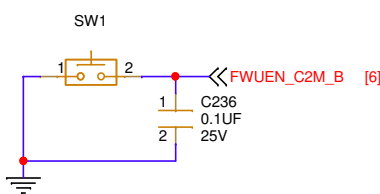
## TCK TERM



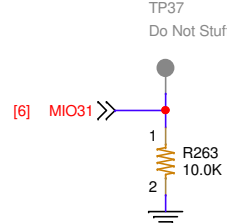
## MODE PINS



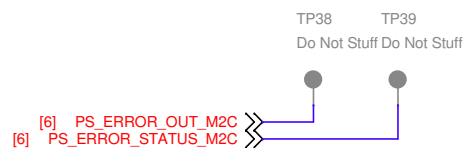
## FWUEN BUTTON




## SHUTDOWN

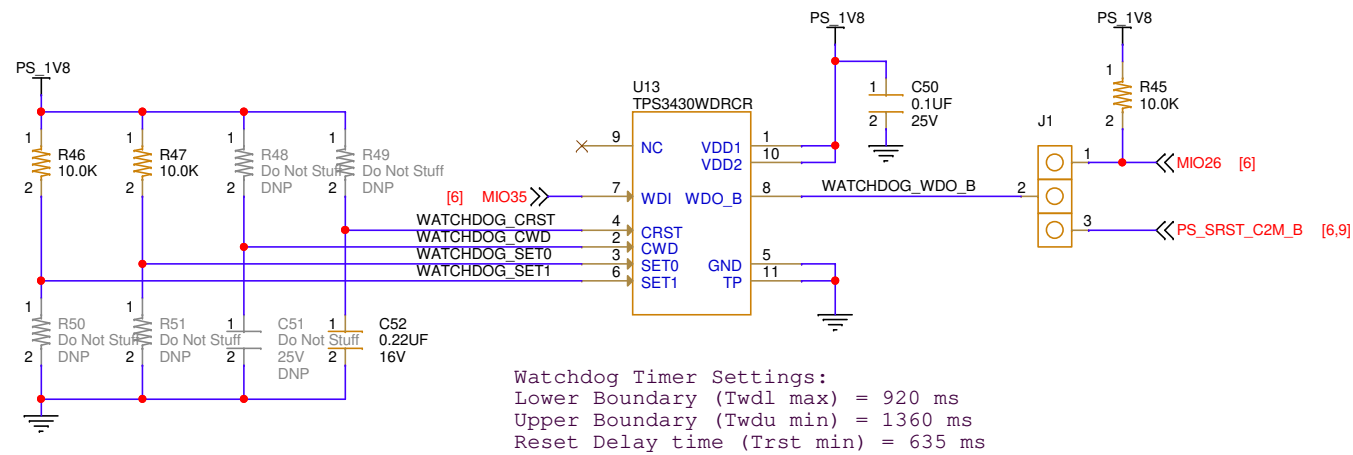


## PS\_ERROR\_OUT/STATUS TEST POINTS

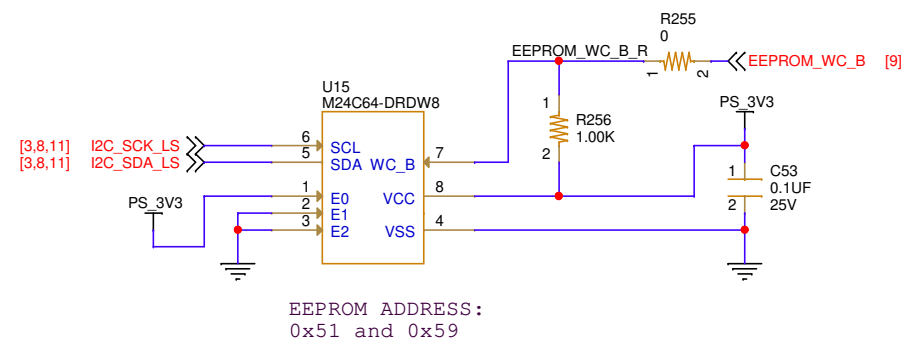


 <b>XILINX</b> 2100 Logic Drive San Jose, CA 95124		SKIT	
Title: ML Starter Kit Carrier Card 06 - SOM240_1 Connector			
Size <b>B</b>	Date Modified: Thursday, April 21, 2022	Document Number: <b>038-05058-01</b>	Rev <b>B05</b>
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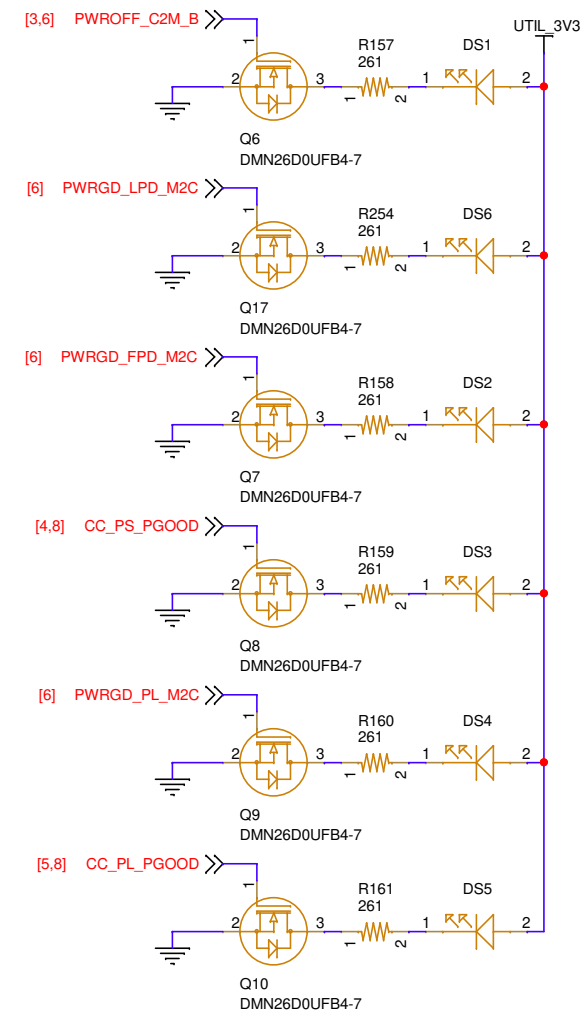
WATCHDOG TIMER



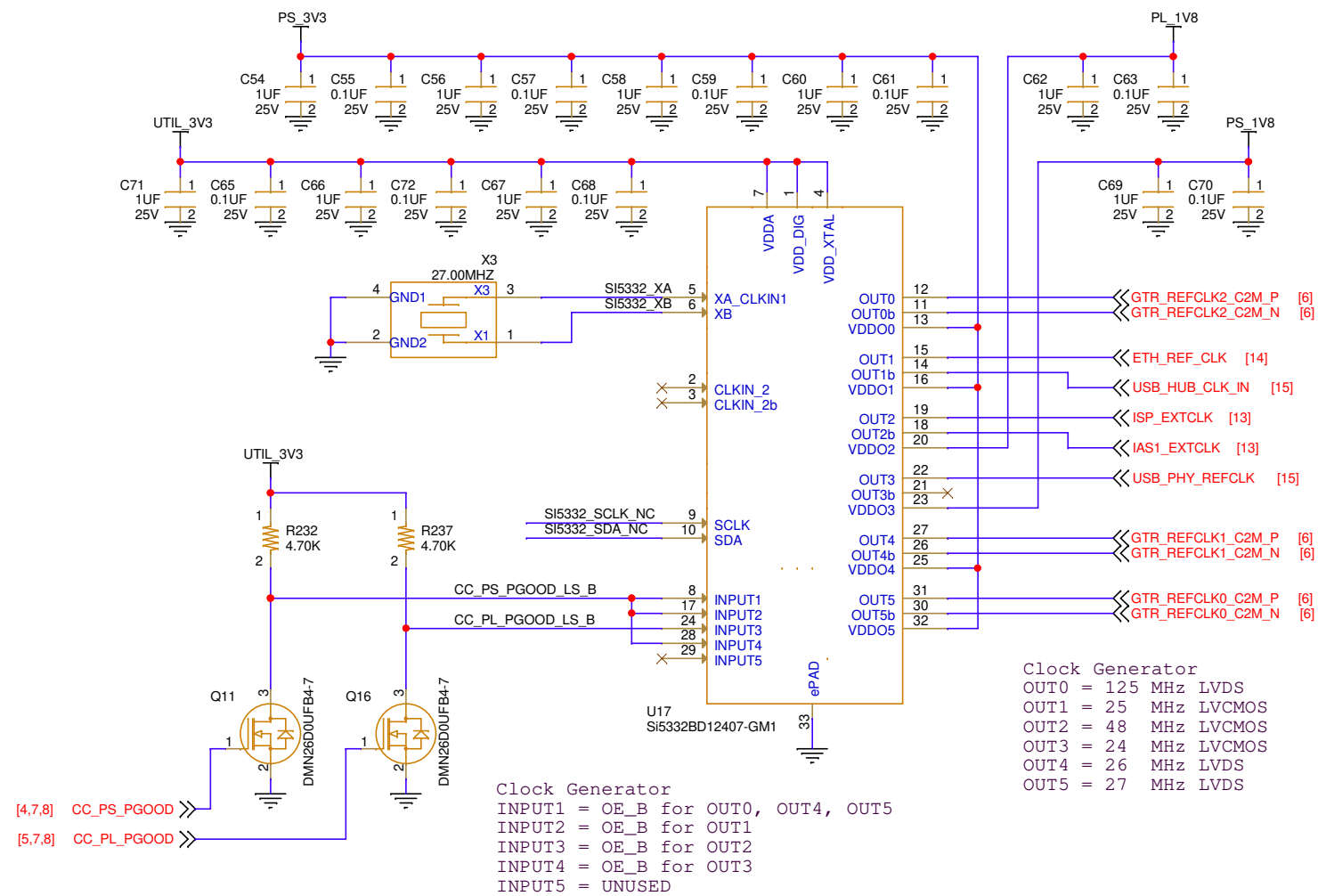
EEPROM



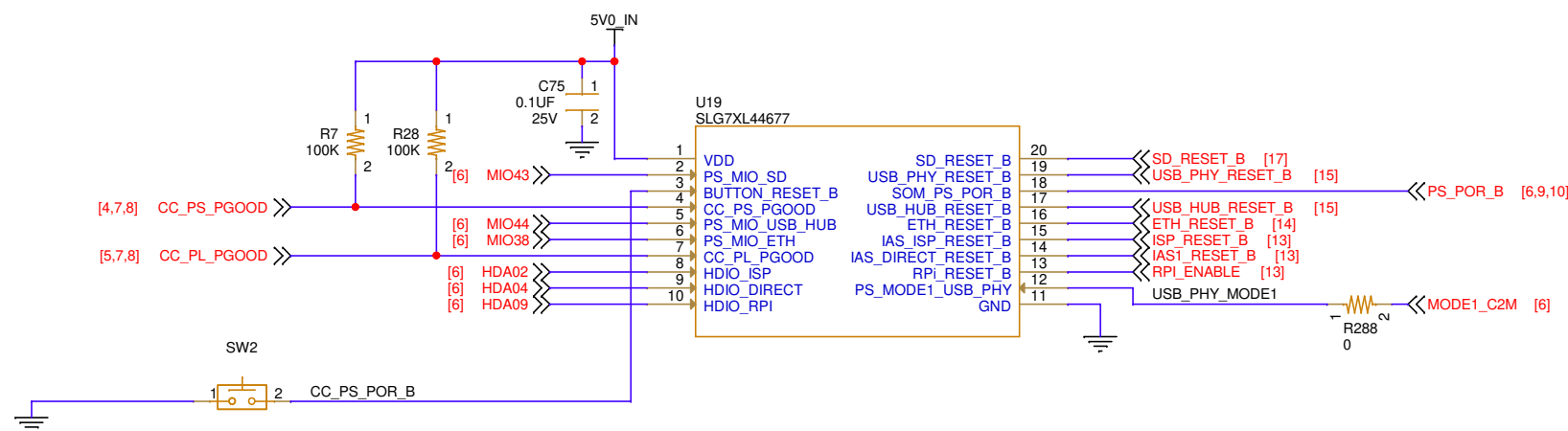
POWER STATUS LEDs



## CLOCK GENERATOR

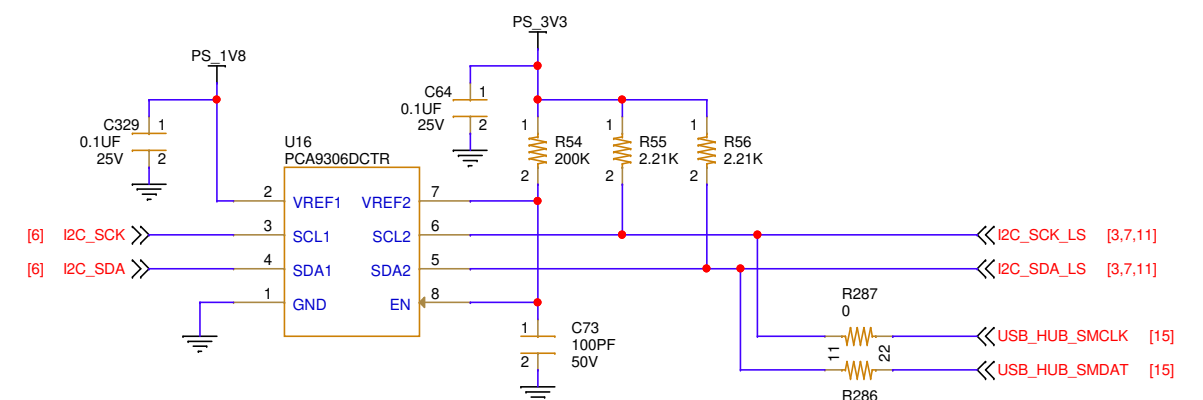


## RESET LOGIC

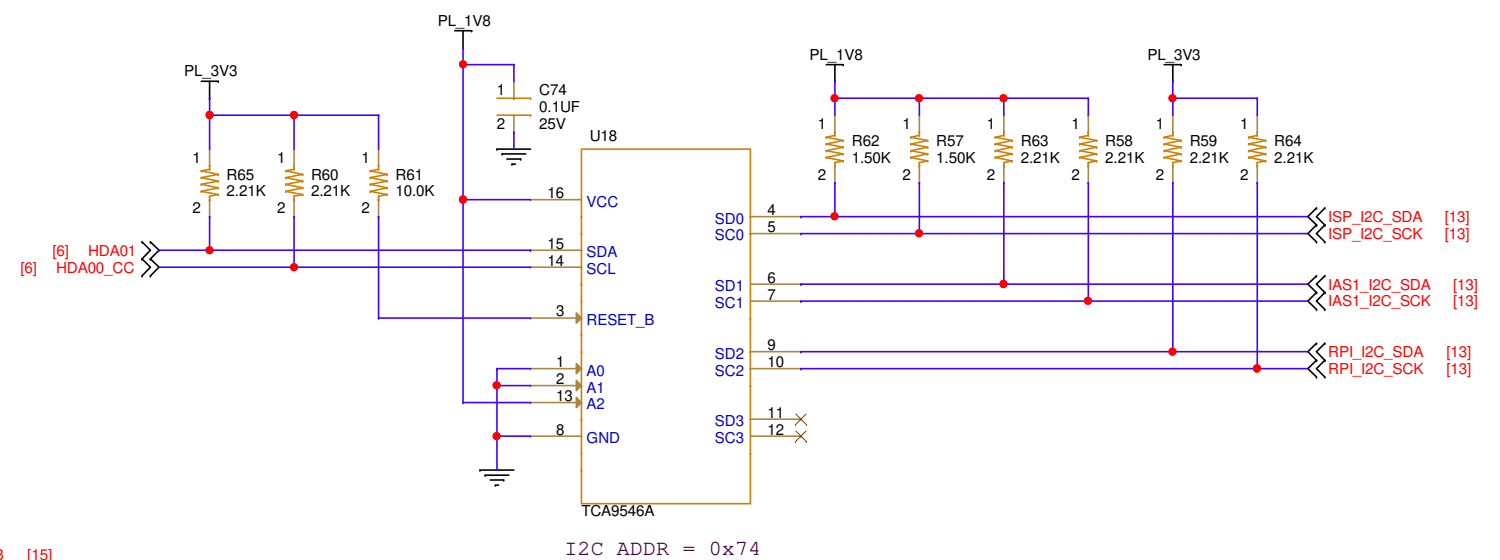



## RESET BUTTON

## MIO I2C LEVEL SHIFTER



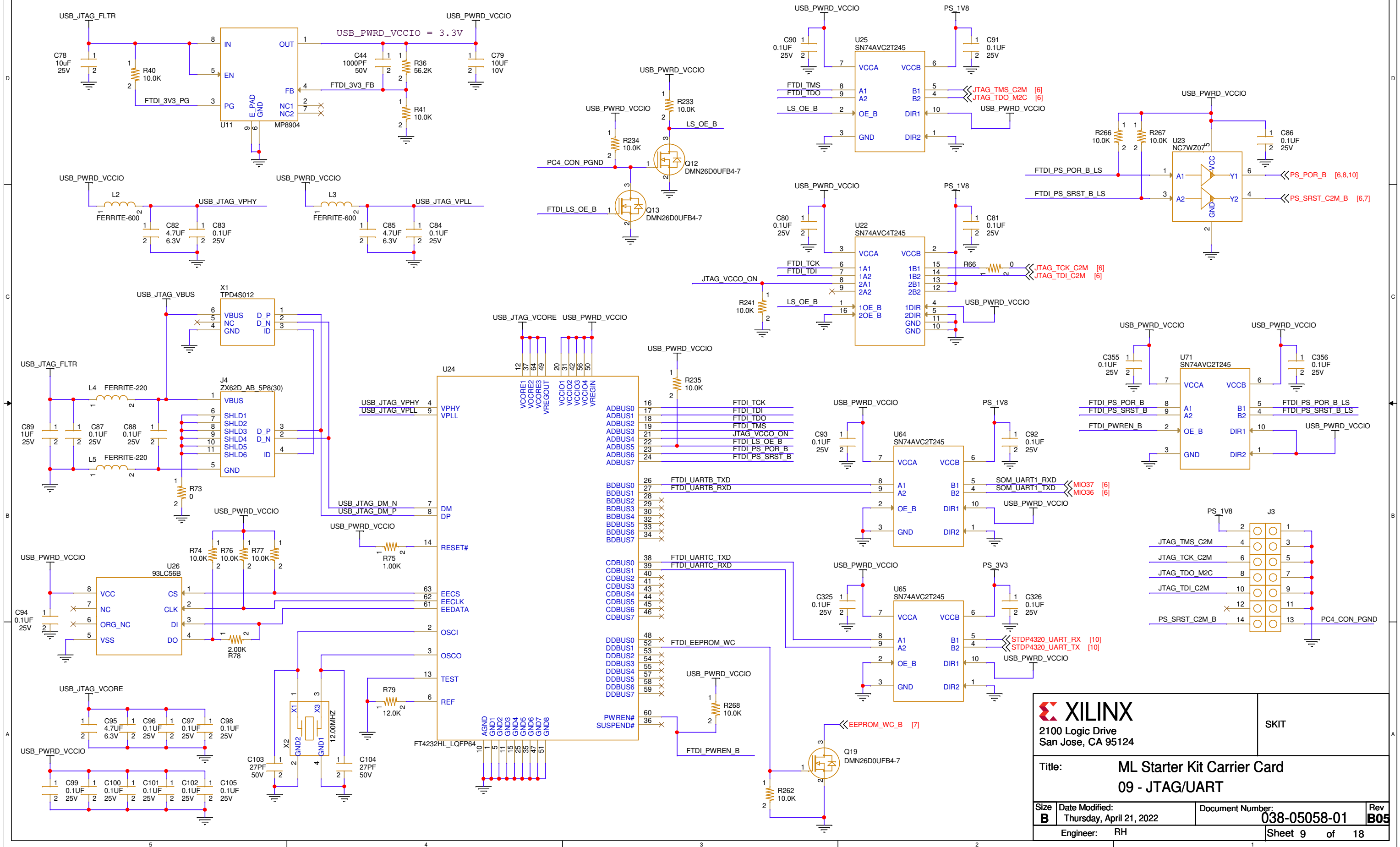
## HDA I2C SWITCH




 2100 Logic Drive San Jose, CA 95124		SKIT	
Title: ML Starter Kit Carrier Card 08 - Clock Gen, I2C, Reset			
Size B	Date Modified: Thursday, April 21, 2022	Document Number: 038-05058-01	Rev B05
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# FTDI JTAG/UART



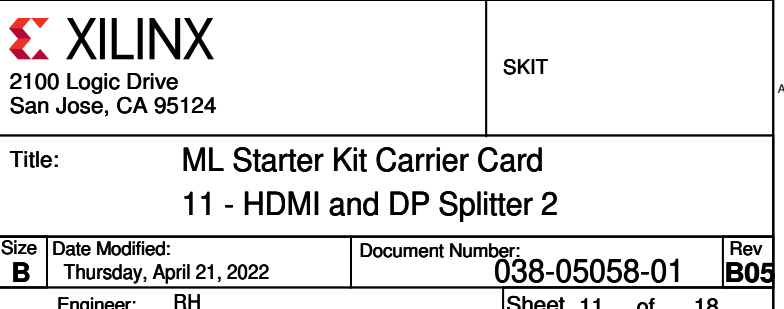
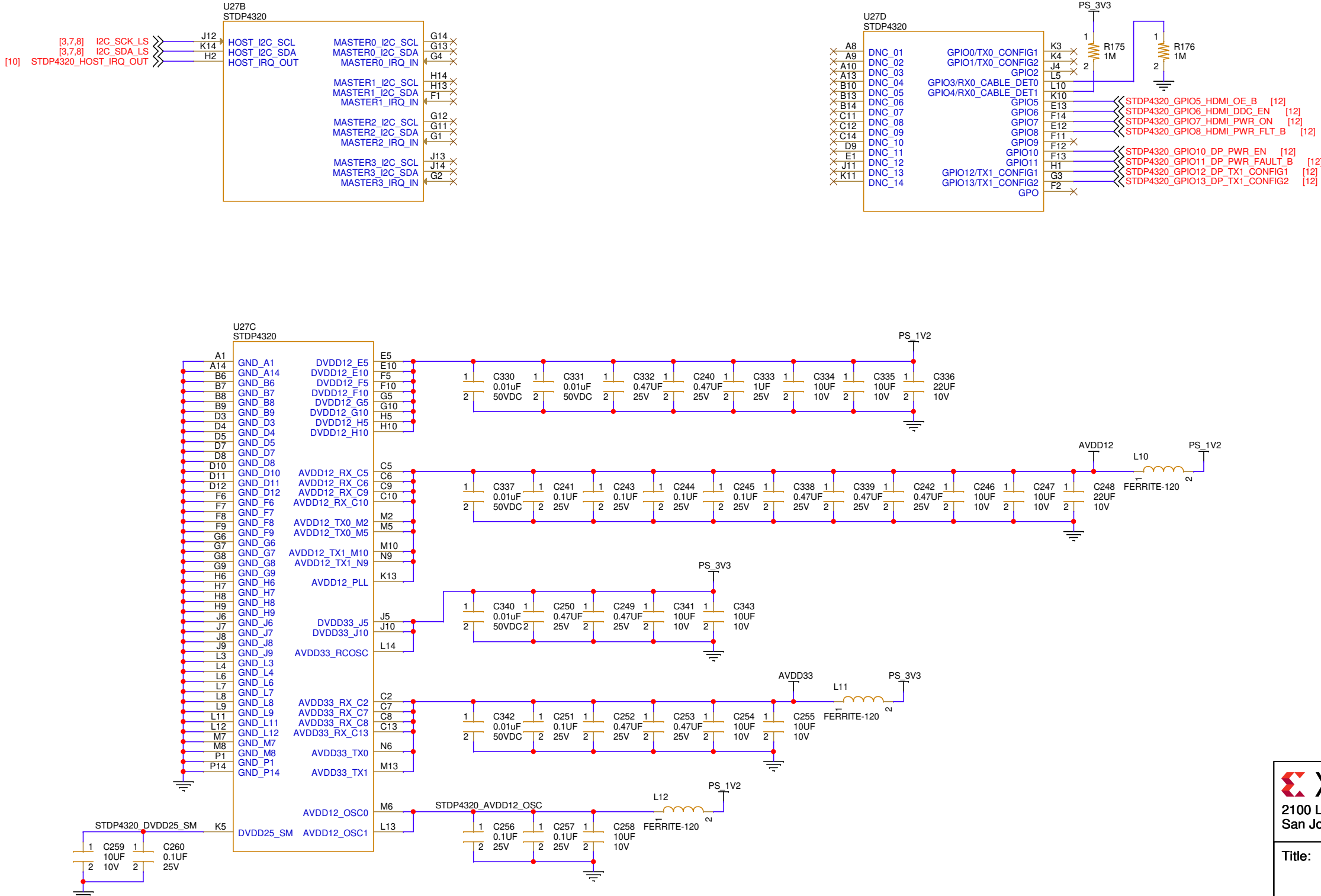
 2100 Logic Drive San Jose, CA 95124		SKIT	
Title: ML Starter Kit Carrier Card 09 - JTAG/UART			
Size B	Date Modified: Thursday, April 21, 2022	Document Number: 038-05058-01	Rev B05
Engineer: RH		Sheet 9 of 18	

# HDMI AND DISPLAYPORT SPLITTER 1

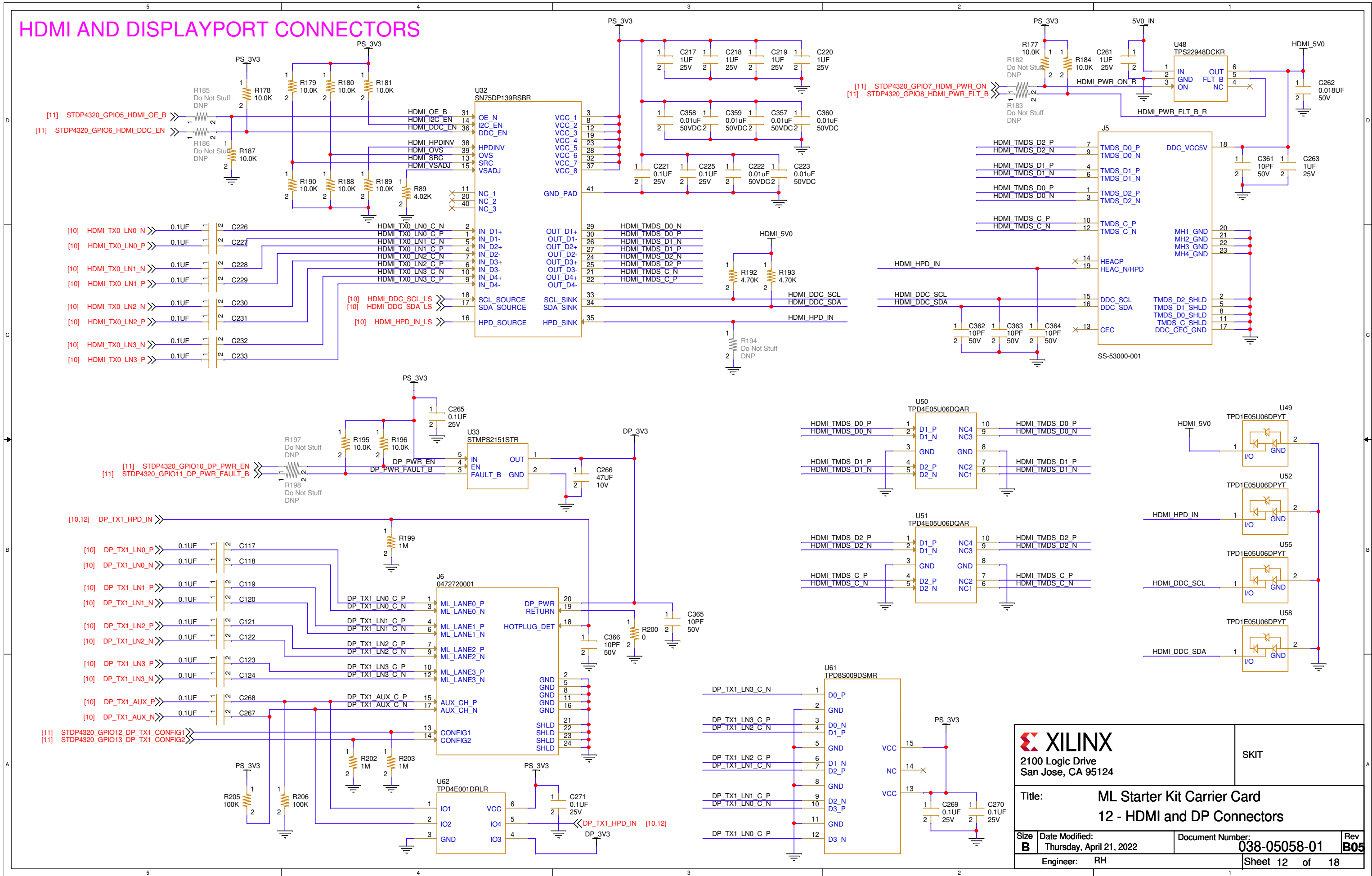
 <b>XILINX</b> 2100 Logic Drive San Jose, CA 95124		SKIT	
Title: <b>ML Starter Kit Carrier Card</b> <b>10 - HDMI and DP Splitter 1</b>			
Size <b>B</b>	Date Modified: Thursday, April 21, 2022	Document Number: <b>038-05058-01</b>	Rev <b>B05</b>
Engineer: RH		Sheet 10 of 18	


## HDMI AND DISPLAYPORT SPLITTER 2

```
I2C_ADDR = 0x73
```

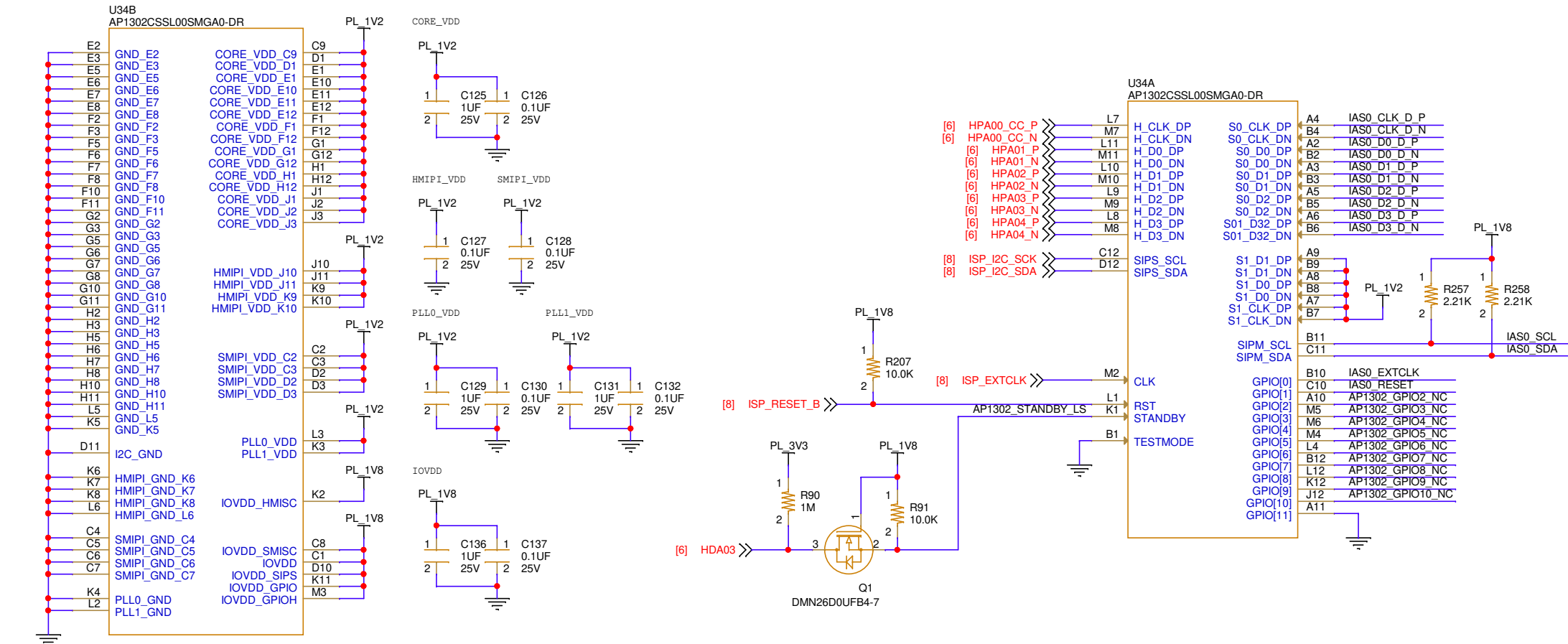


# HDMI AND DISPLAYPORT CONNECTORS

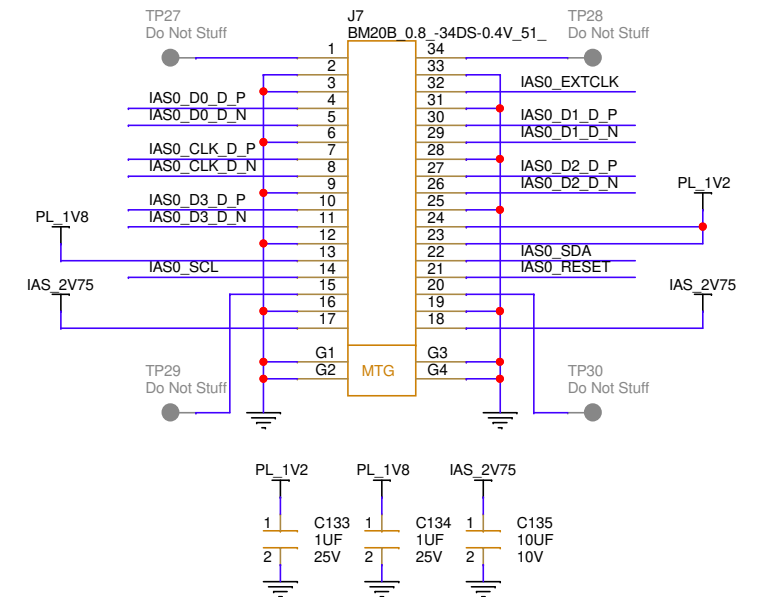


 2100 Logic Drive San Jose, CA 95124		SKIT	
Title: ML Starter Kit Carrier Card 12 - HDMI and DP Connectors			
Size B	Date Modified: Thursday, April 21, 2022	Document Number: 038-05058-01	Rev B05
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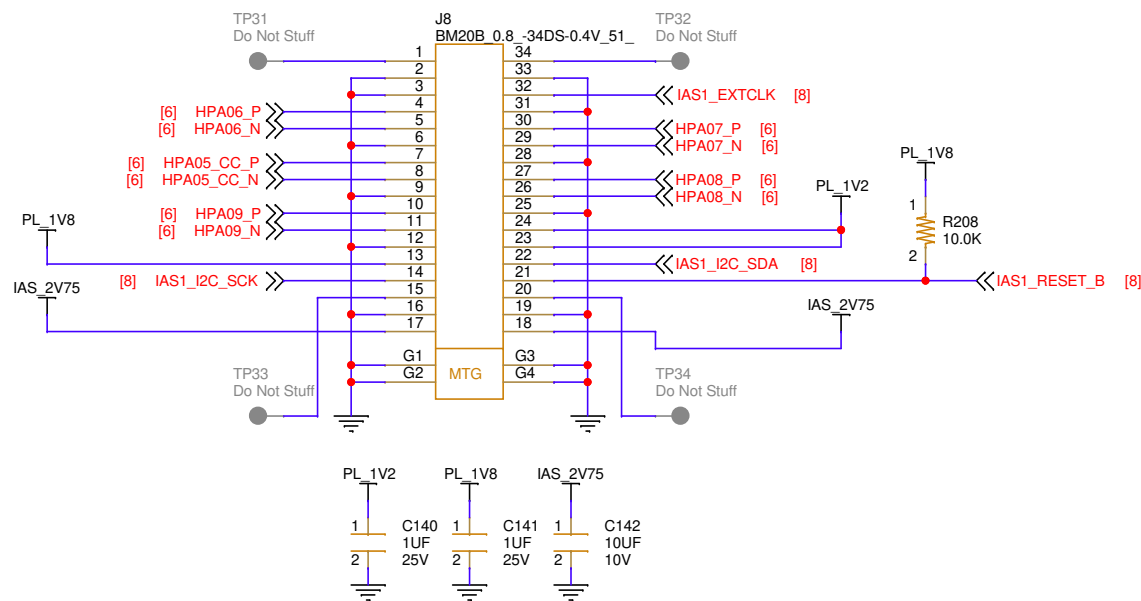
## IMAGE CO-PROCESSOR FOR IAS 0 CONNECTOR



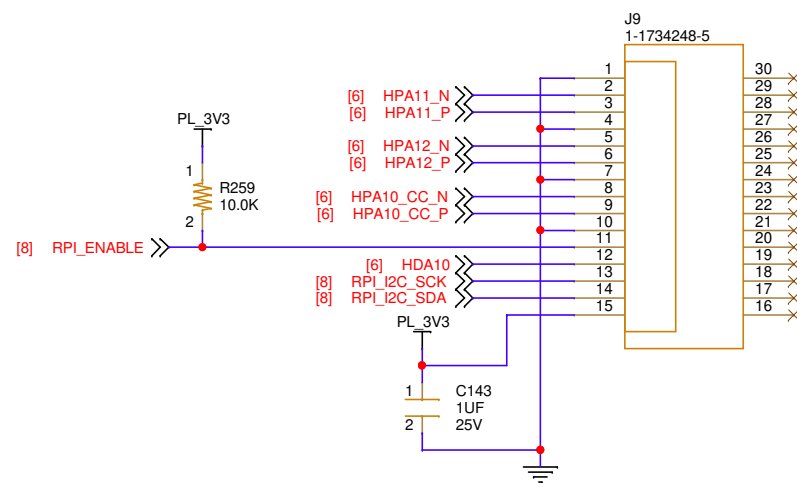
## IAS 0 CONNECTOR




## IAS 1 CONNECTOR



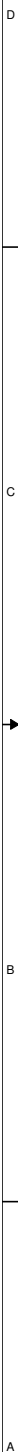
## RASPBERRY PI CONNECTOR



 <b>XILINX</b> 2100 Logic Drive San Jose, CA 95124		SKIT	
Title: <b>ML Starter Kit Carrier Card</b> <b>13 - ISP, IAS, and RPi</b>			
Size <b>B</b>	Date Modified: Thursday, April 21, 2022	Document Number: <b>038-05058-01</b>	Rev <b>B05</b>
Engineer:   RH		Sheet 13    of    18	



A vertical line with points A, B, C, and D marked from bottom to top. A horizontal arrow points to point C.

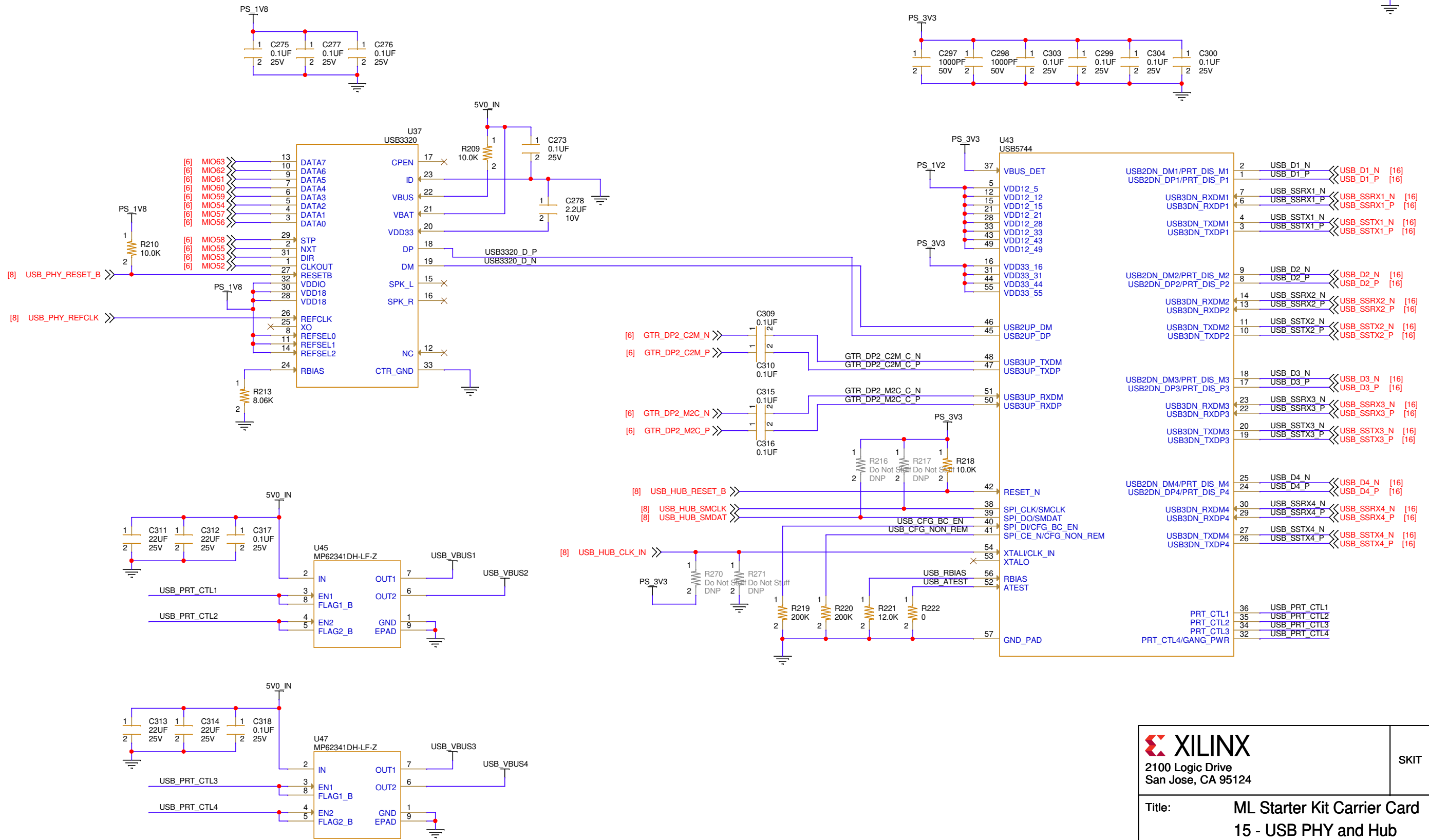



A vertical line with points A, B, C, and D marked from bottom to top. A horizontal arrow points to point C.

A vertical line with points A, B, C, and D marked from bottom to top. A horizontal arrow points to point C.

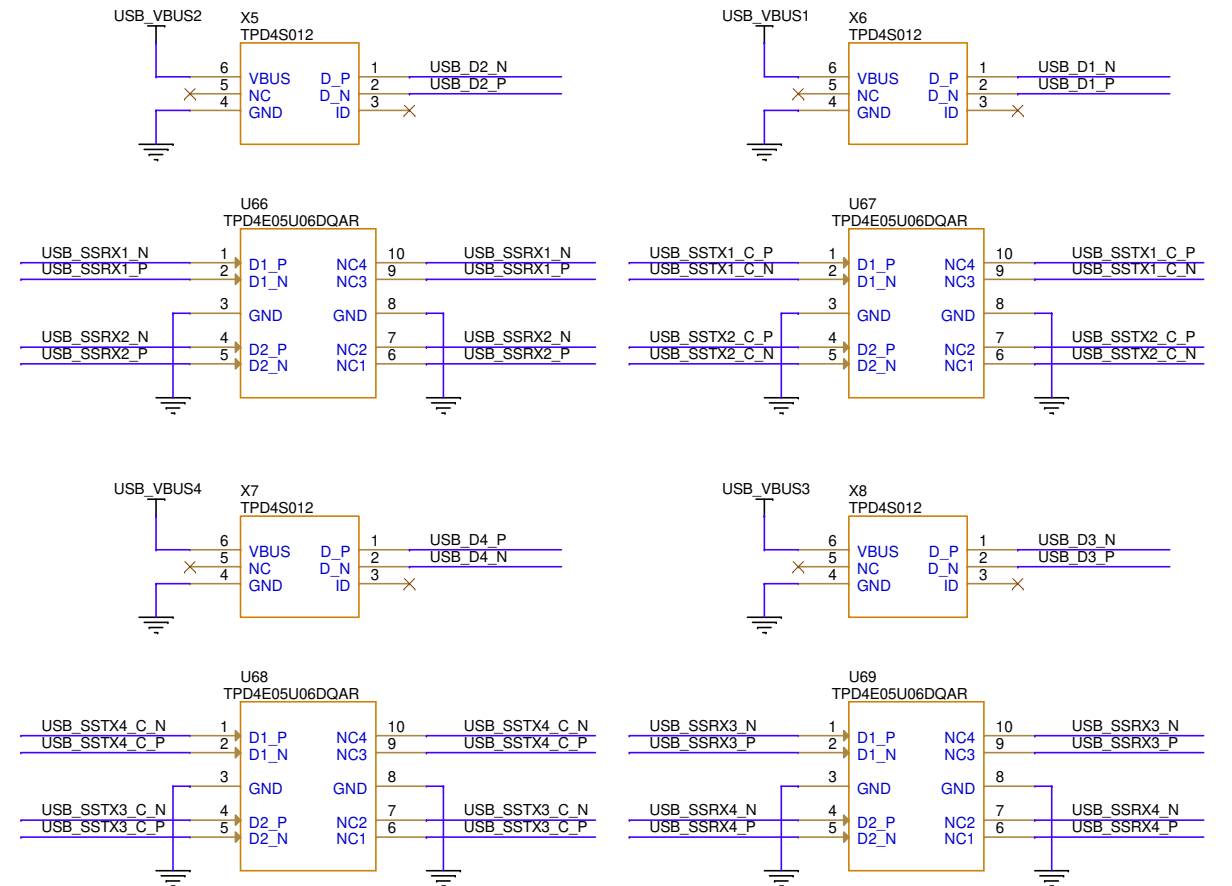
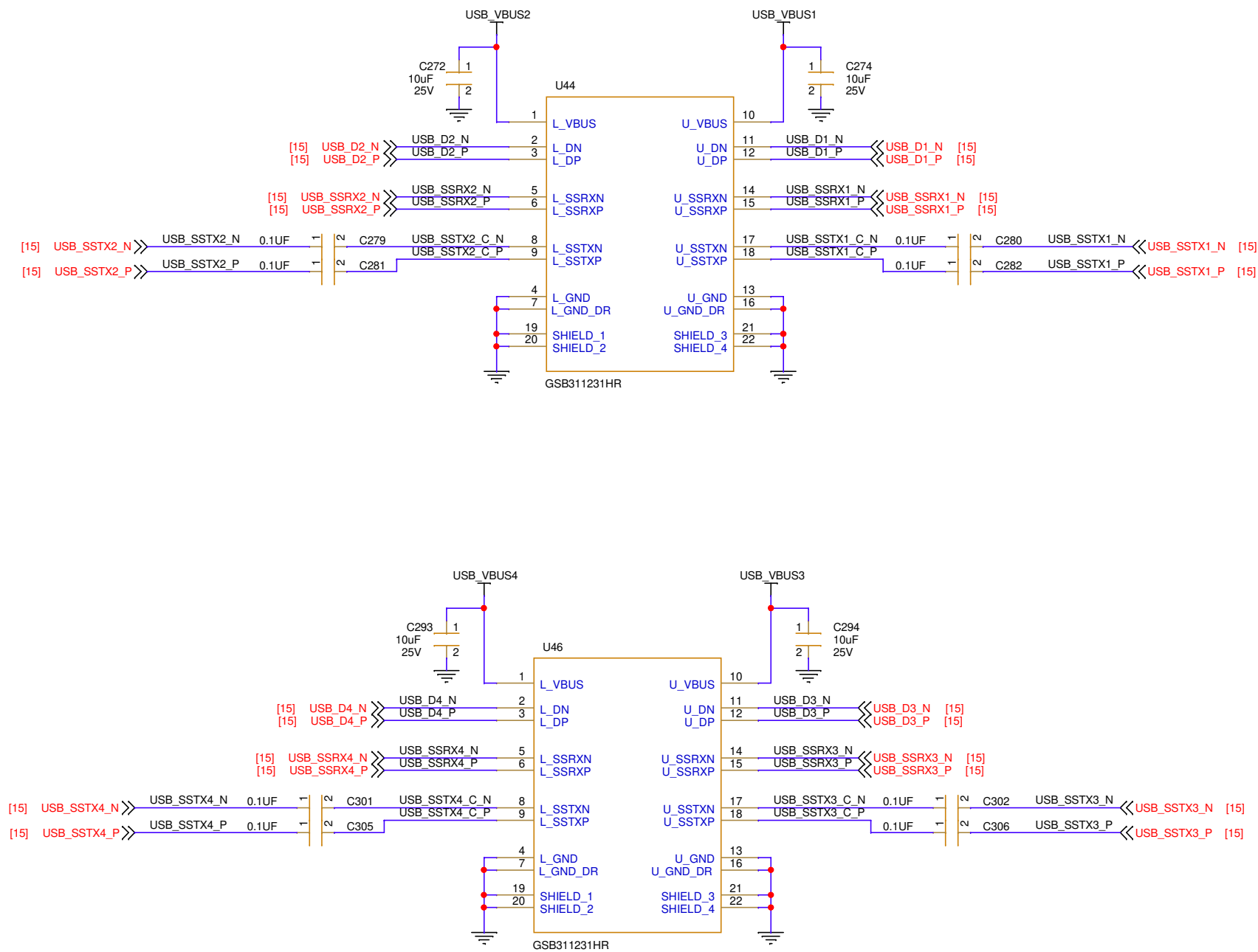



# USB PHY AND HUB



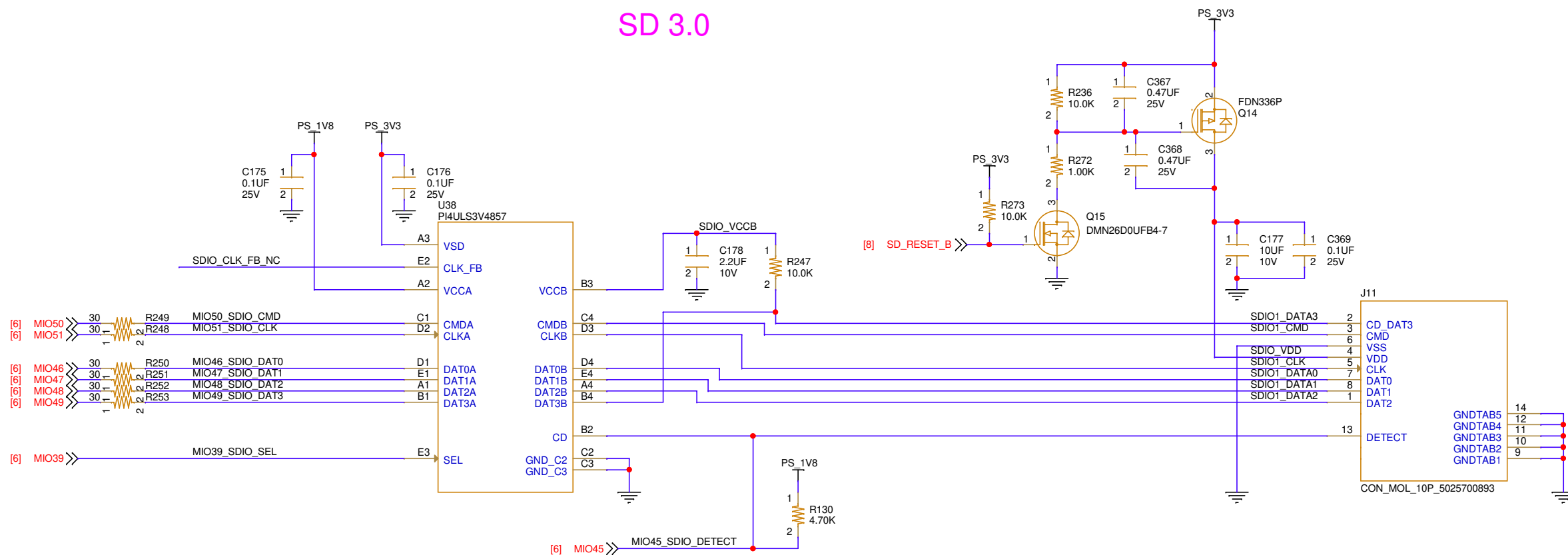
 2100 Logic Drive San Jose, CA 95124		SKIT	
Title: ML Starter Kit Carrier Card 15 - USB PHY and Hub			
Size B	Date Modified: Thursday, April 21, 2022	Document Number: 038-05058-01	Rev B05
Engineer: RH		Sheet 15 of 18	

# USB CONNECTORS

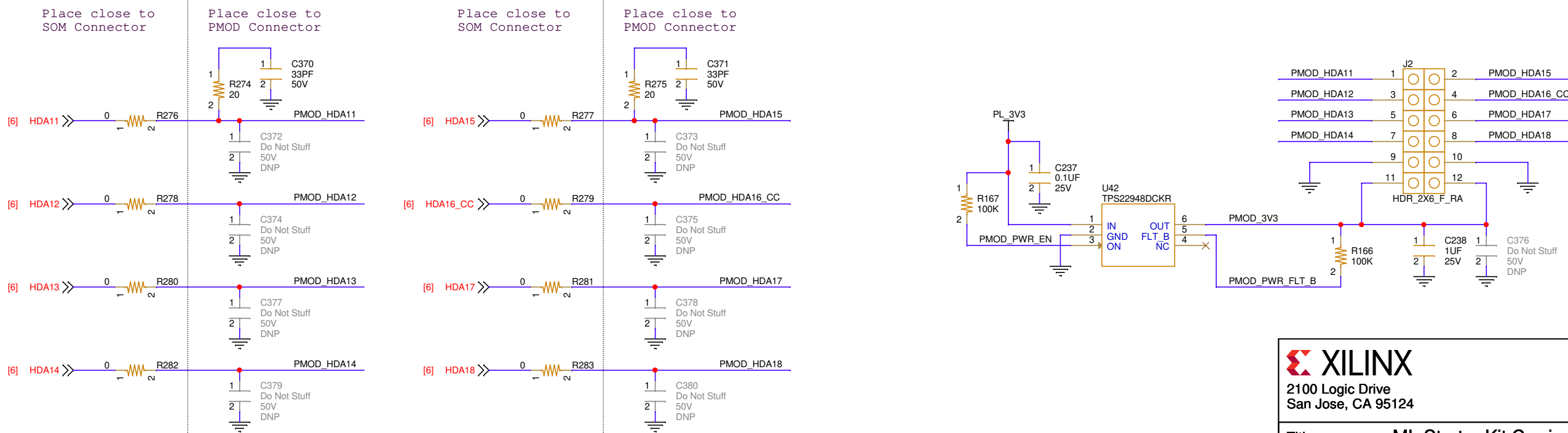



 <b>XILINX</b> 2100 Logic Drive San Jose, CA 95124		SKIT	
Title: ML Starter Kit Carrier Card 16 - USB Connectors			
Size <b>B</b>	Date Modified: Thursday, April 21, 2022	Document Number: <b>038-05058-01</b>	Rev <b>B05</b>
Engineer: RH		Sheet 16 of 18	

# SD 3.0



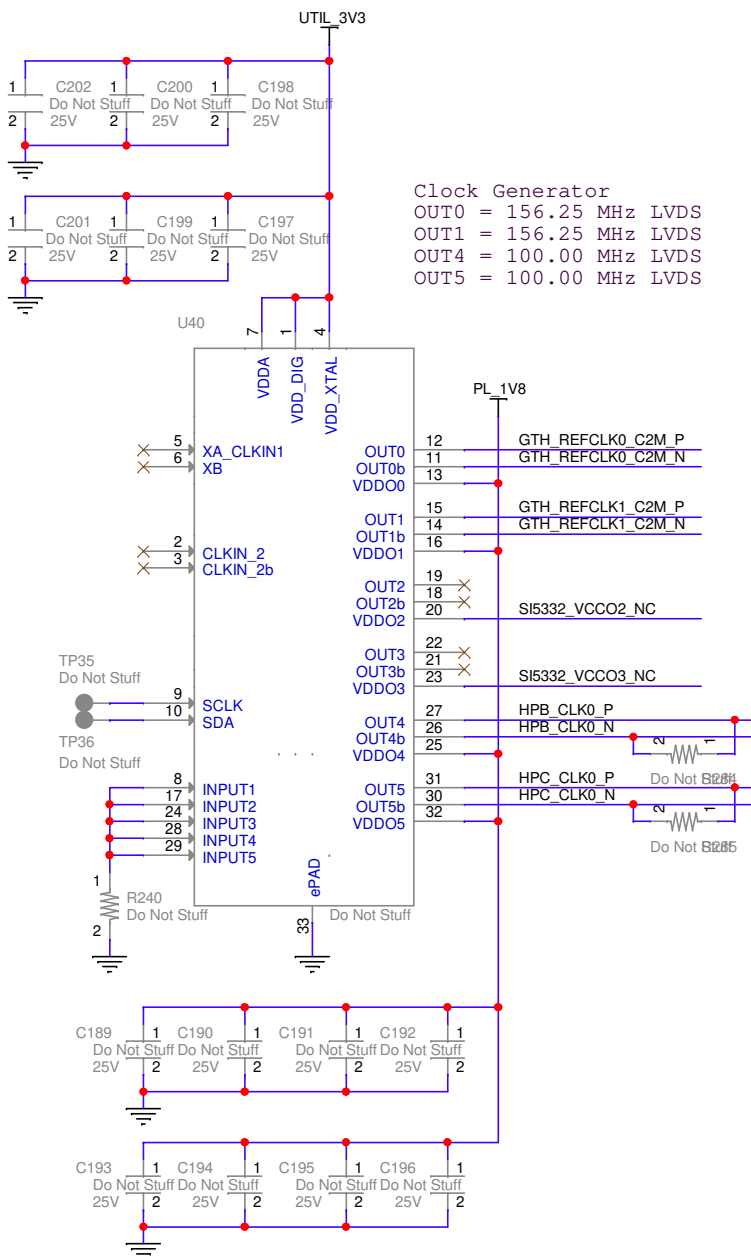
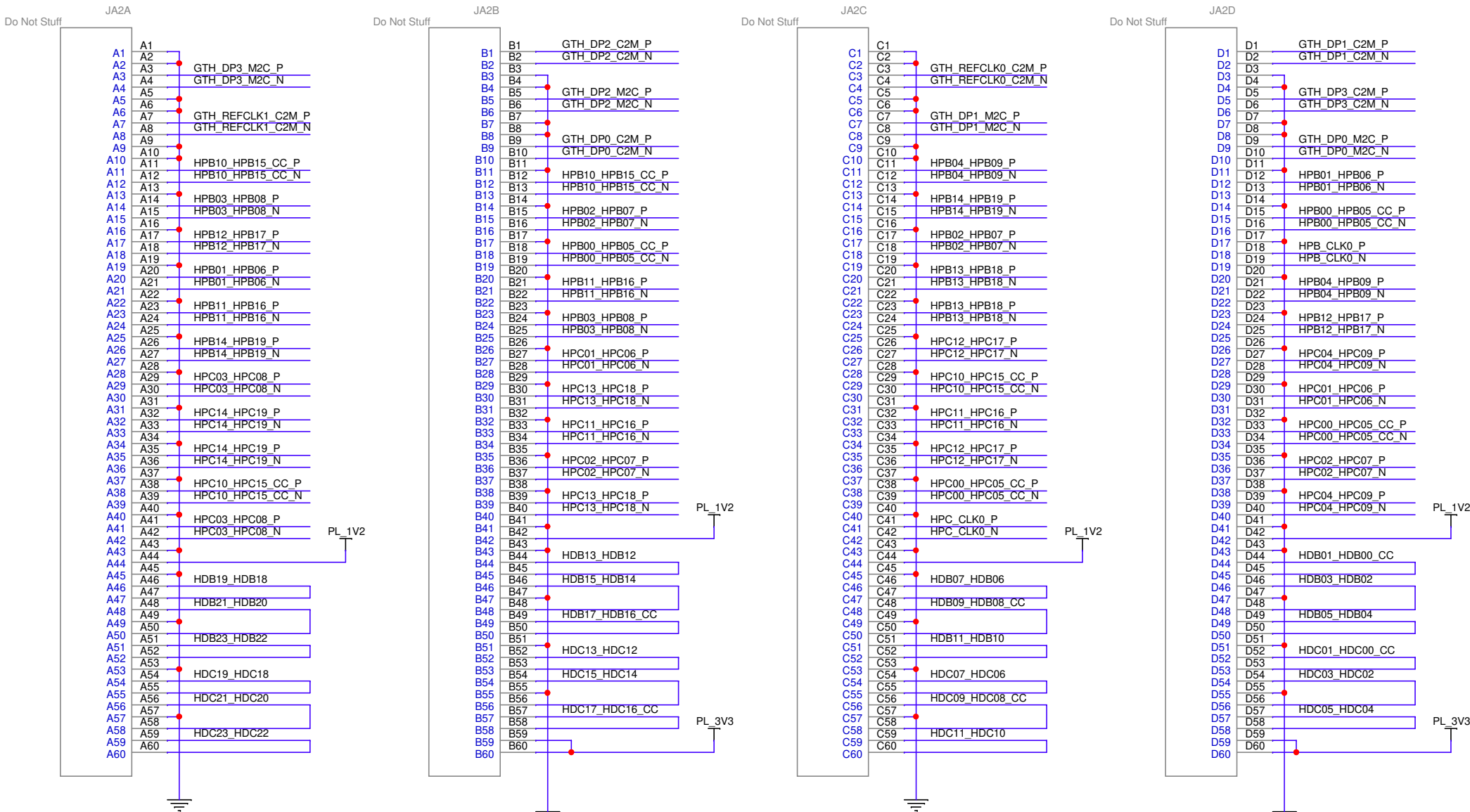
# PMOD



 <b>XILINX</b> 2100 Logic Drive San Jose, CA 95124		SKIT	
Title: <b>ML Starter Kit Carrier Card</b> <b>17 - SD Card, PMOD</b>			
Size <b>B</b>	Date Modified: Thursday, April 21, 2022	Document Number: <b>038-05058-01</b>	Rev <b>B05</b>
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SOM240\_2 CONNECTOR

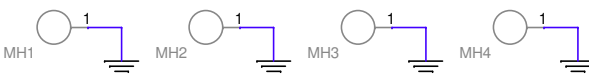
CLOCK GENERATOR FOR LOOPBACK TEST




GTH AC COUPLING

FOUR CORNER MOUNTING HOLES

GTH_DP0_M2C_P	Do Not Stuff	C345	GTH_DP0_C2M_P	GTH_DP2_M2C_P	Do Not Stuff	C346	GTH_DP2_C2M_P
GTH_DP0_M2C_N	Do Not Stuff	C347	GTH_DP0_C2M_N	GTH_DP2_M2C_N	Do Not Stuff	C348	GTH_DP2_C2M_N
GTH_DP1_M2C_P	Do Not Stuff	C349	GTH_DP1_C2M_P	GTH_DP3_M2C_P	Do Not Stuff	C350	GTH_DP3_C2M_P
GTH_DP1_M2C_N	Do Not Stuff	C351	GTH_DP1_C2M_N	GTH_DP3_M2C_N	Do Not Stuff	C352	GTH_DP3_C2M_N





2100 Logic Drive  
San Jose, CA 95124

SKIT

Title: ML Starter Kit Carrier Card  
18 - SOM240\_2 Loopback, MH

Size B	Date Modified: Thursday, April 21, 2022	Document Number: 038-05058-01	Rev B05
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