

PicoZed FMC Carrier Gen2	
Avnet Engineering Services	
www.picozed.org	
Sheet Name	
01 - Avnet Lead Sheet	
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05 - Peripherals - 2	
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07 - Switches, LEDs	
08 - HDMI Interface	
09 - PCIe & JX1, JX2, JX3	
10 - Power & Control	
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PicoZed FMC Carrier Gen2

3/15/2016

10:37:25 AM

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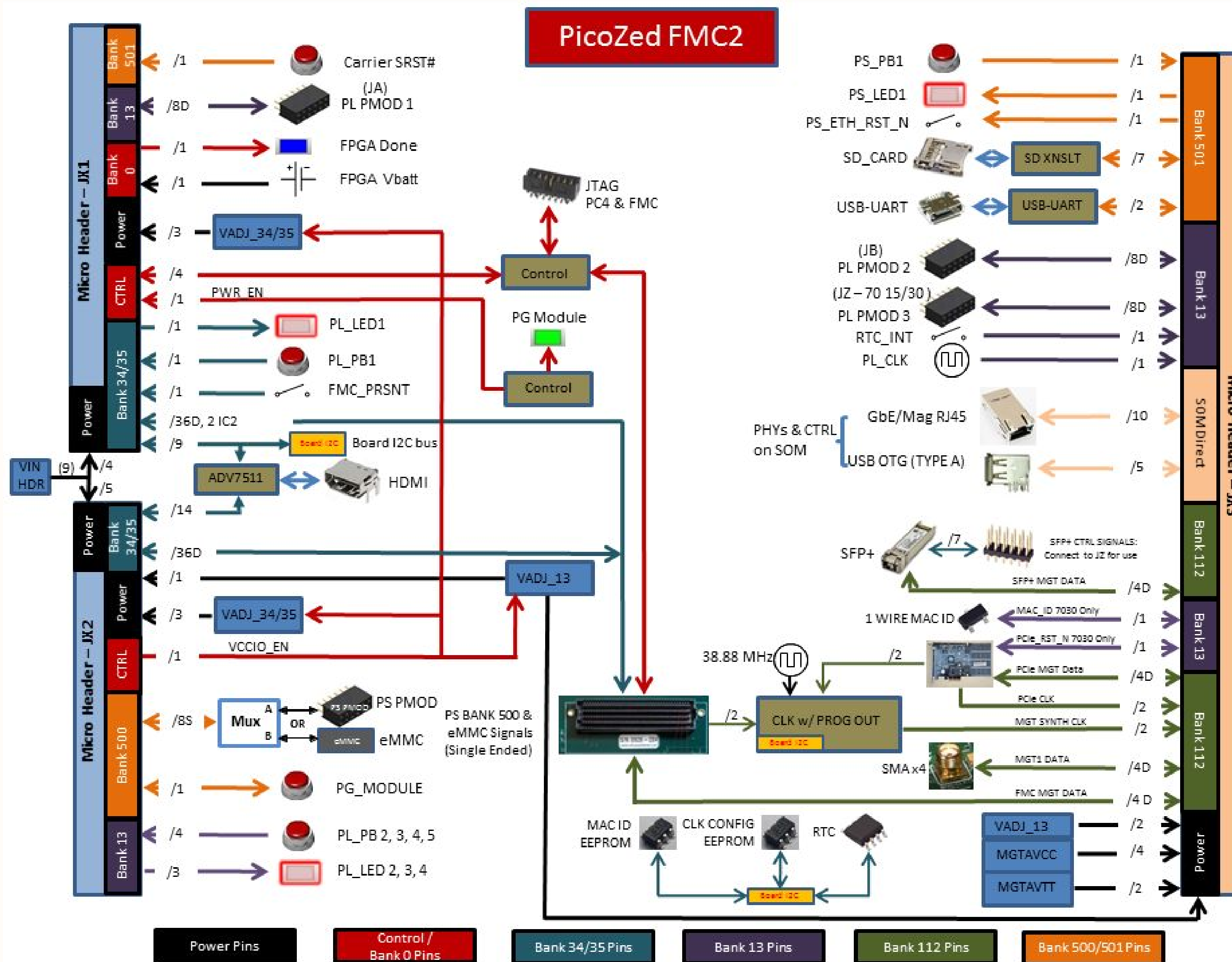
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Note?

Avnet Engineering Services			
Title: 01 - Avnet Lead Sheet			
Size: B	Document Number: PZCC-FMC-Gen2	Variant Description: Build 1 Variant	Rev: 1
Date: 3/15/2016		Sheet 1 of 11	

Topology

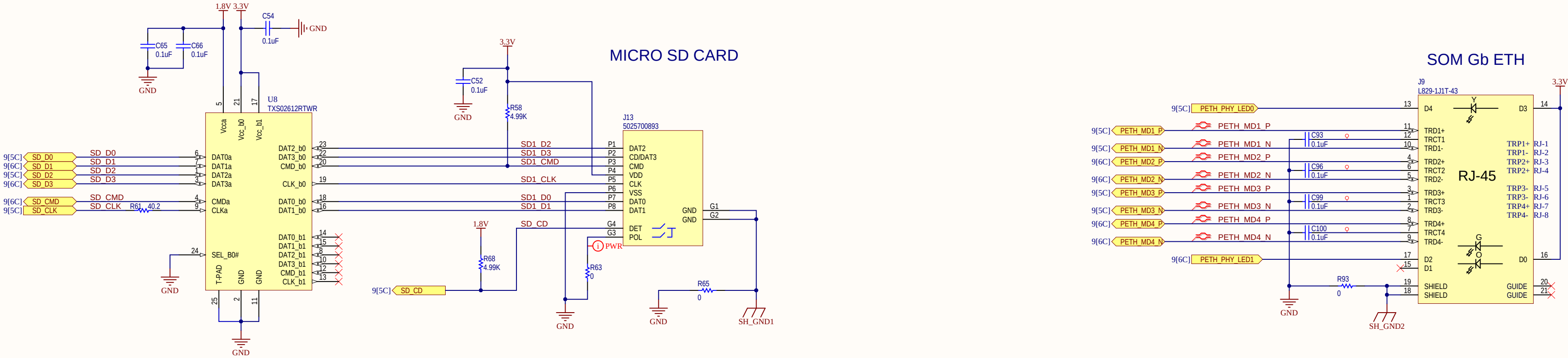


Peripherals - 1

MICRO SD LEVEL TRANSLATOR

MICRO SD CARD

SOM Gb ETH



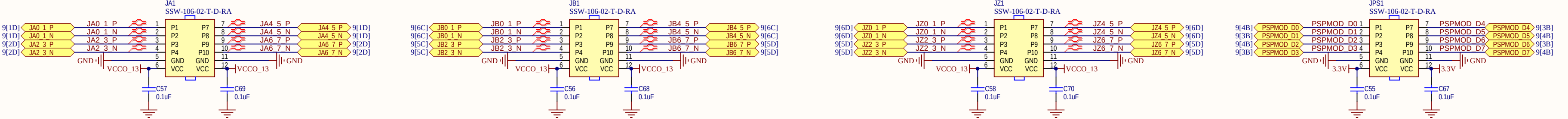
PMOD INTERFACES

JA PL PMOD

JB PL PMOD

JZ PL PMOD

PS PMOD Interface

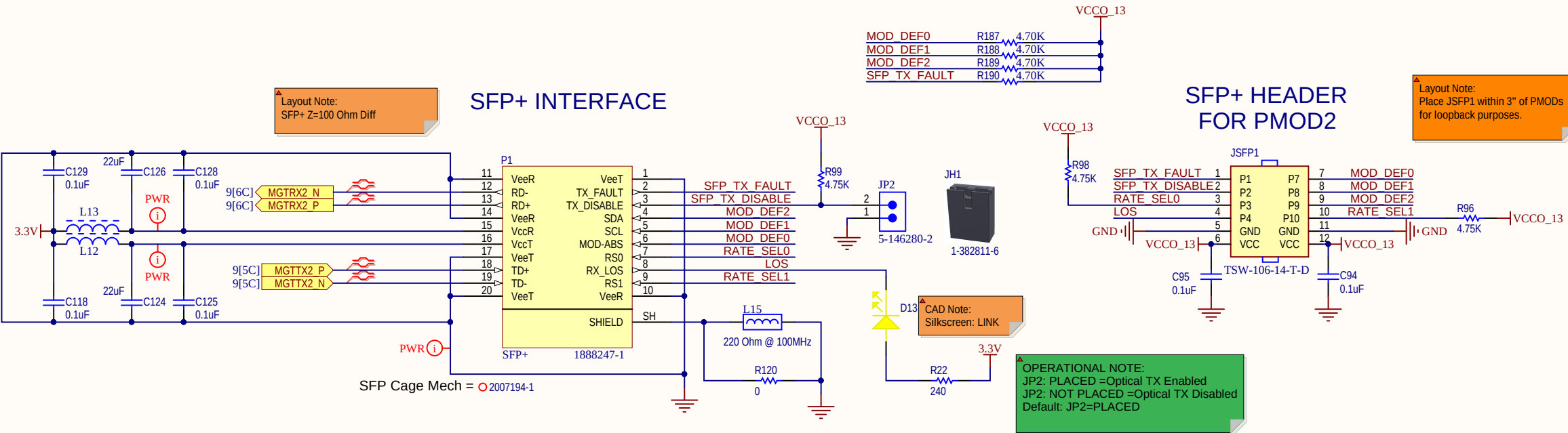


JA & JB Available on 7015/20/30 ONLY

JZ Available on 7015/30 ONLY

SFP+ INTERFACE

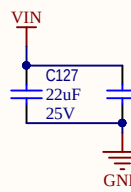
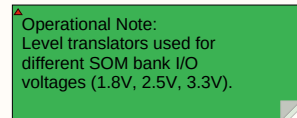
SFP+ HEADER FOR PMOD2



FMC LPC INTERFACE

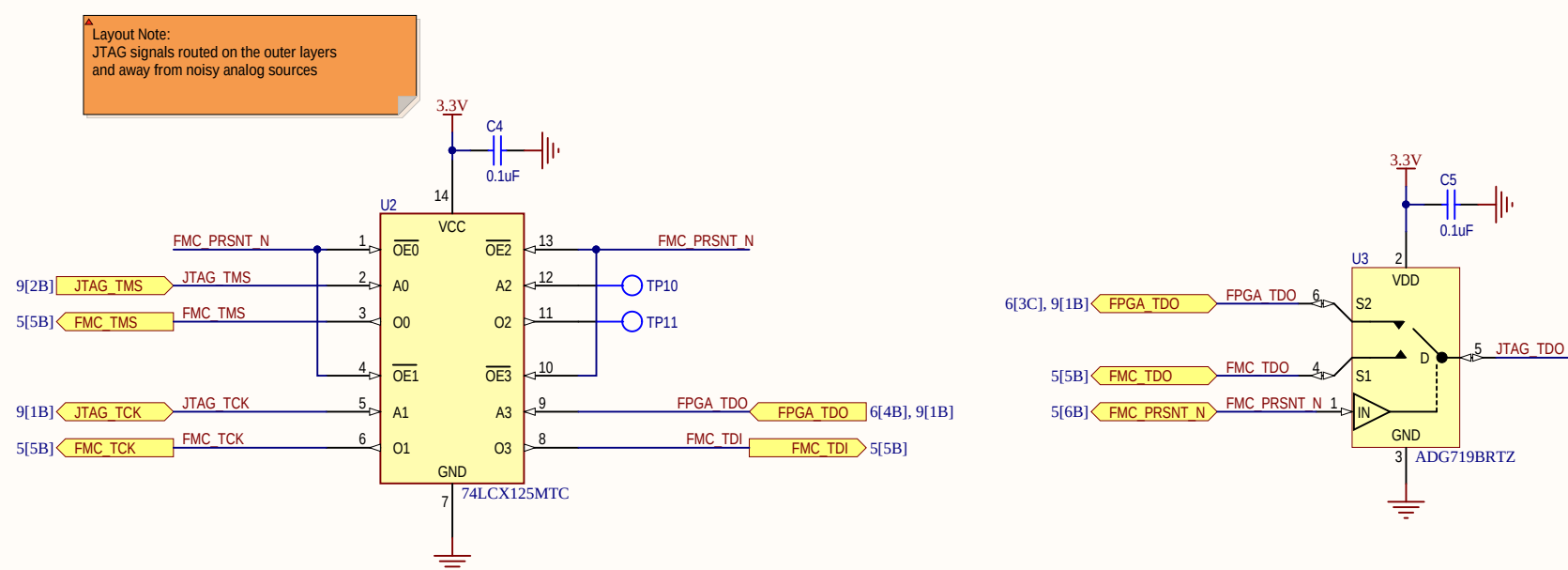
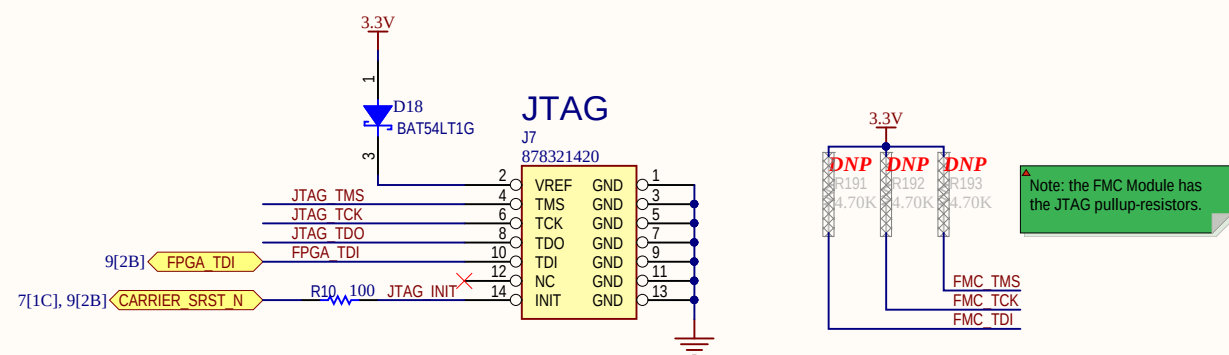


USB TX/RX LEVEL TRANSLATOR

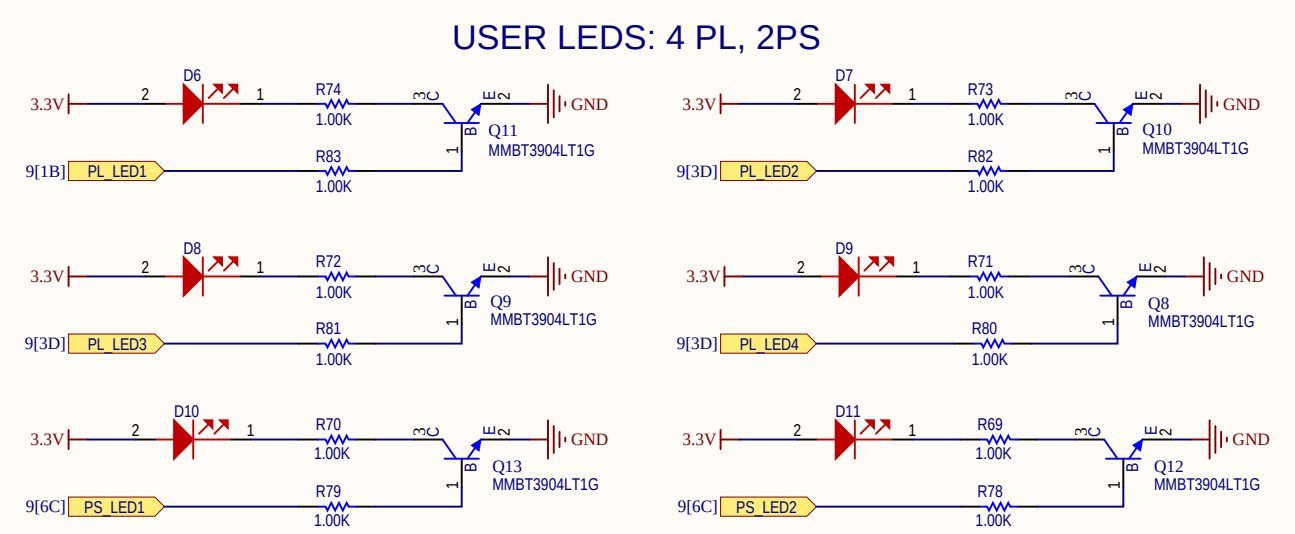
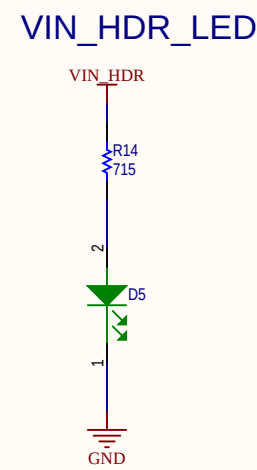
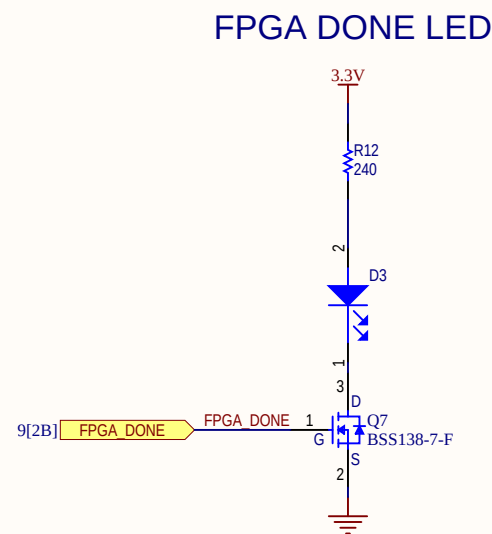
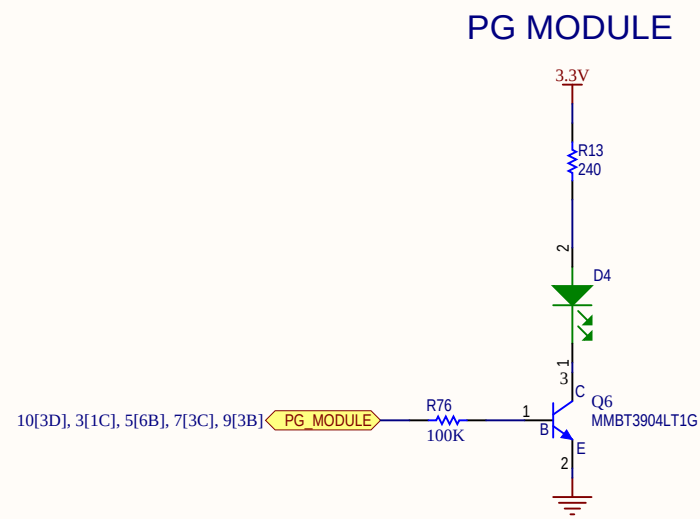


Peripherals - 3

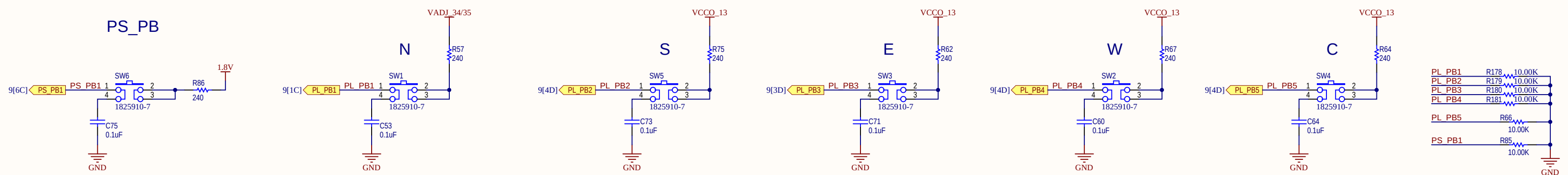
JTAG - PC4 & FMC



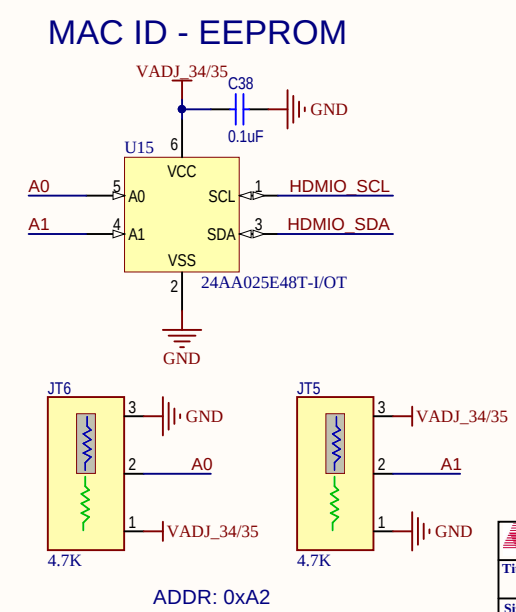
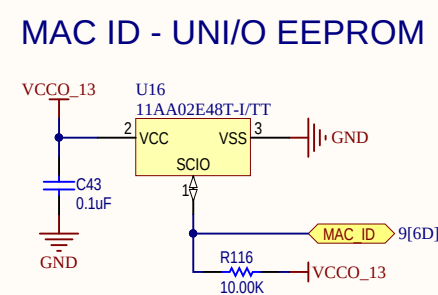
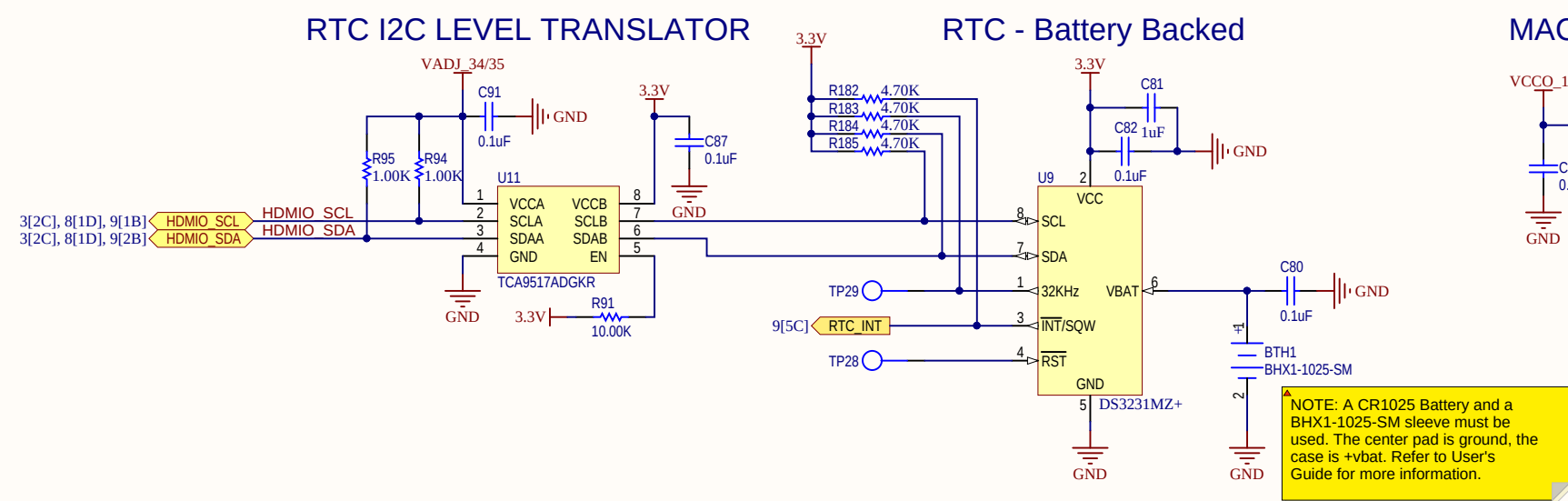
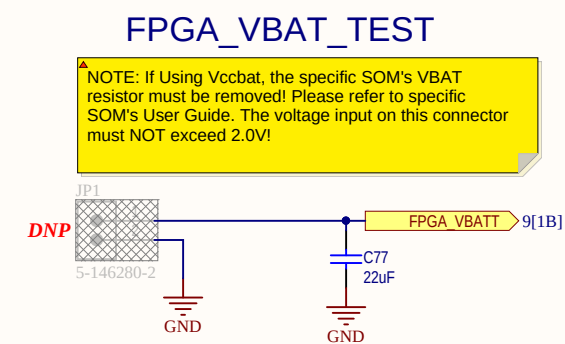
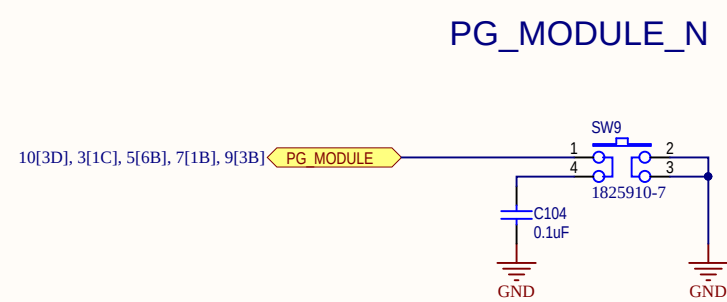
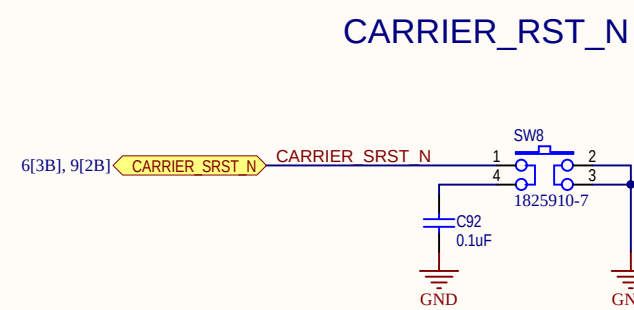
SWITCHES & LEDs



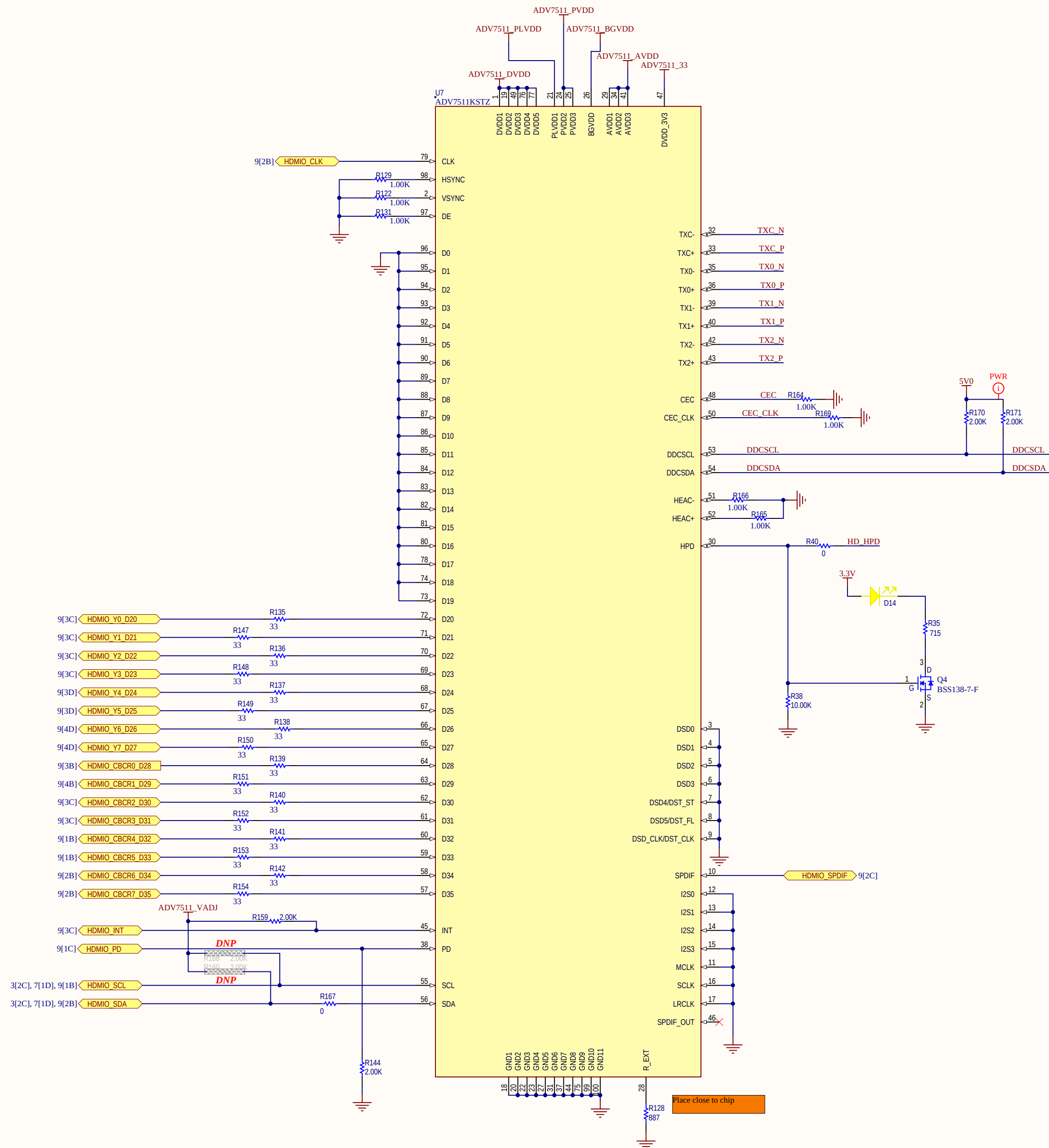
USER PUSH BUTTONS



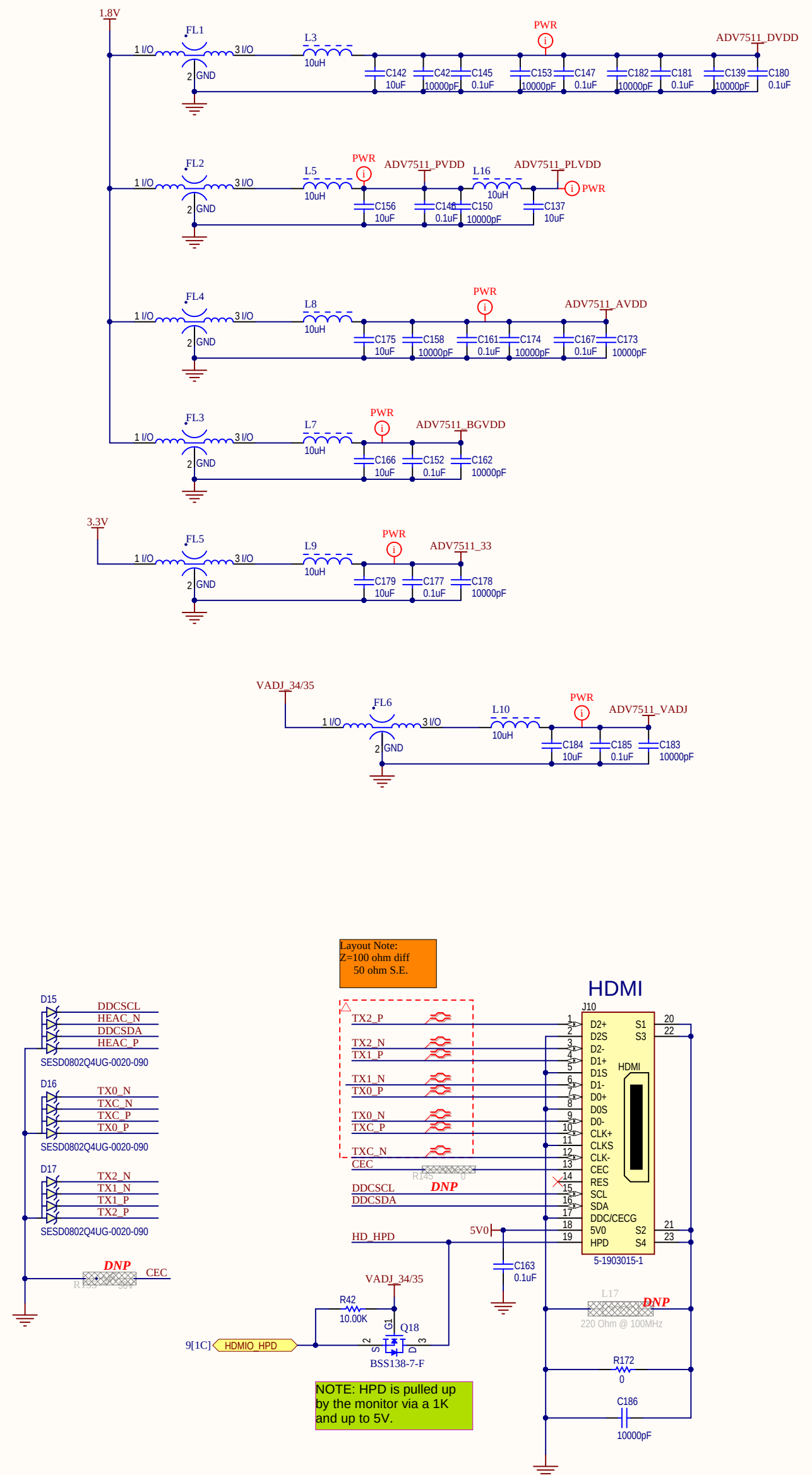
CONFIGURATION & CONTROL SWITCHES/HEADER



JX2 - HDMI Video Encoder

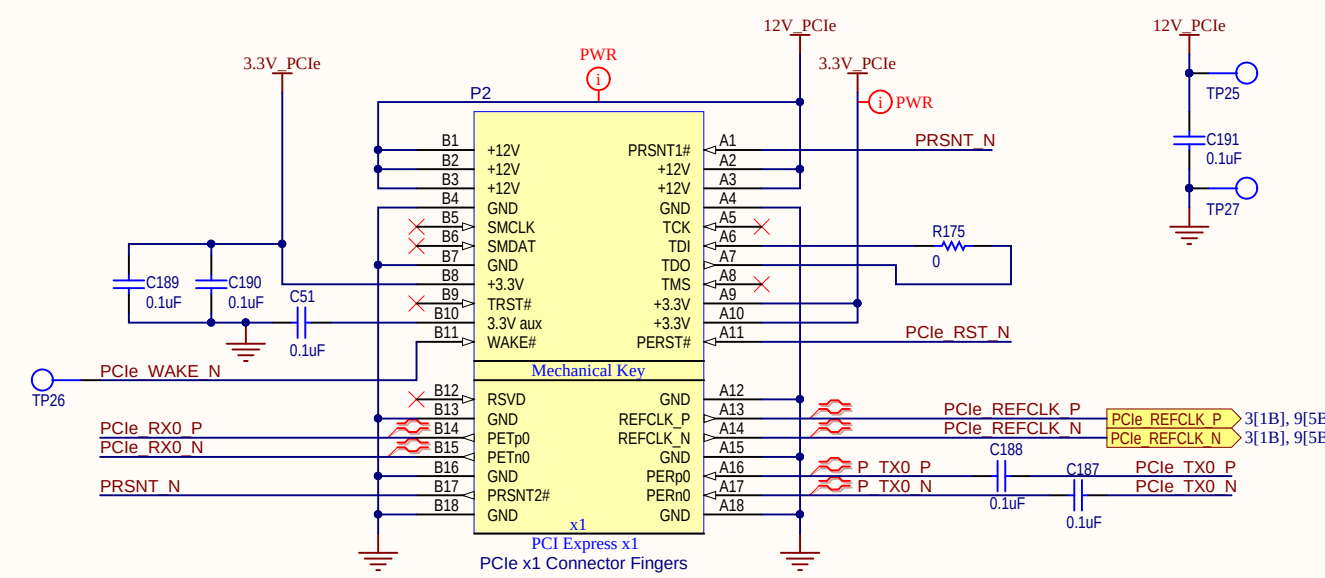


ADV7511 POWER SUPPLY FILTERS



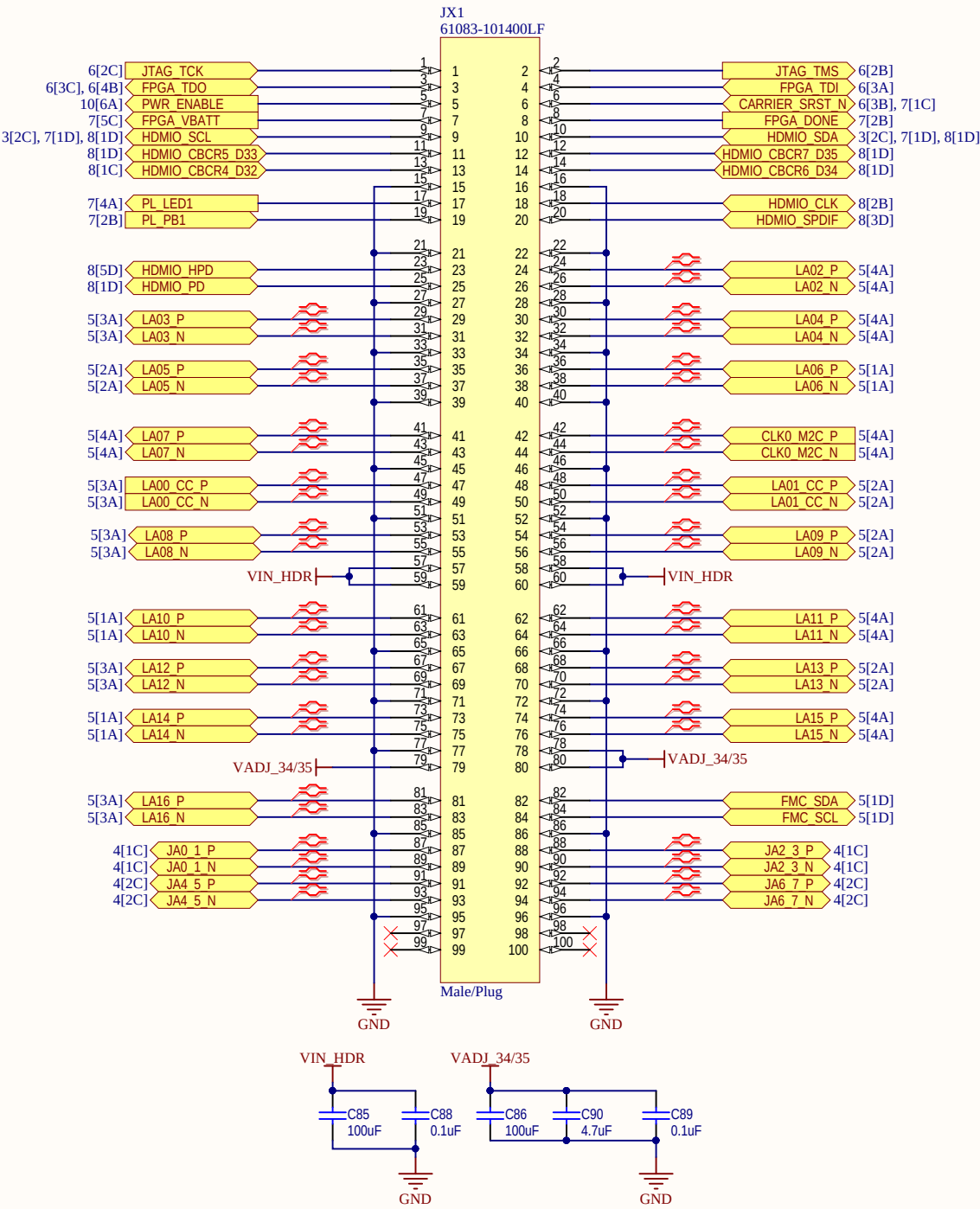
PCIe & SOM Connectors

PCIe x1 EDGE CONNECTOR

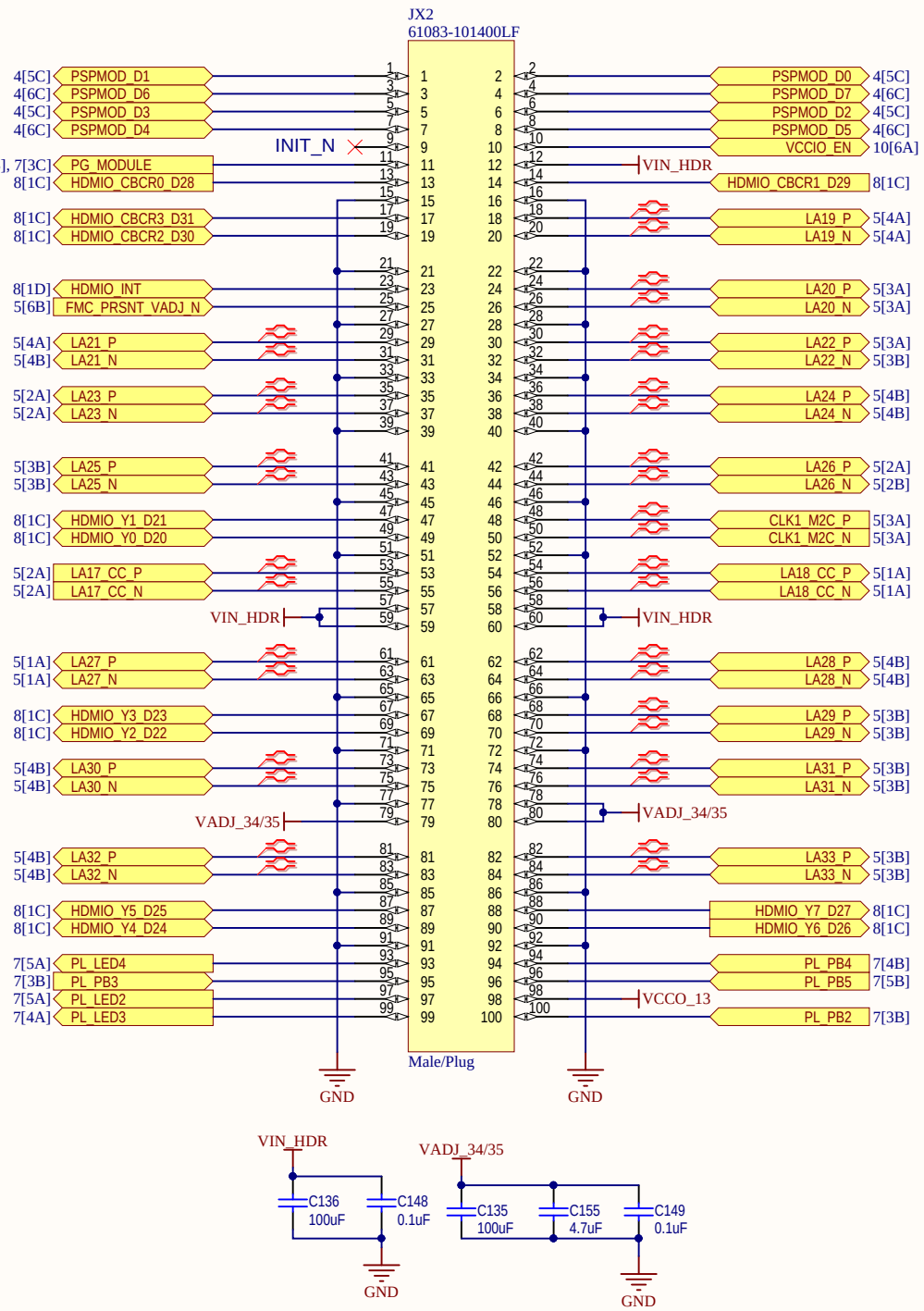


Layout Note:
Route ALL P/N pairs differentially
on all JX connectors. Refer to AES
layout guidelines.

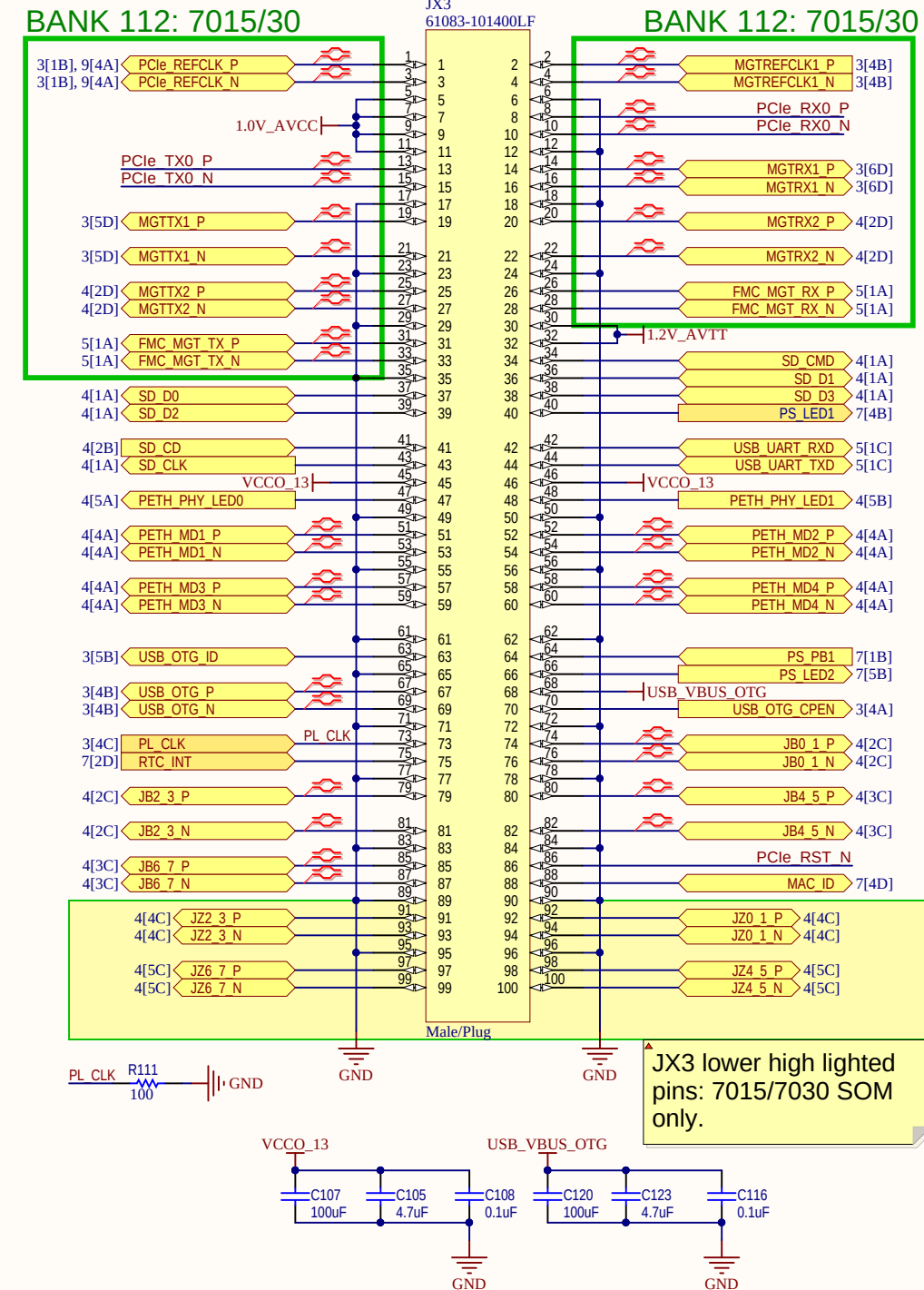
ZYNQ BANK 34/35



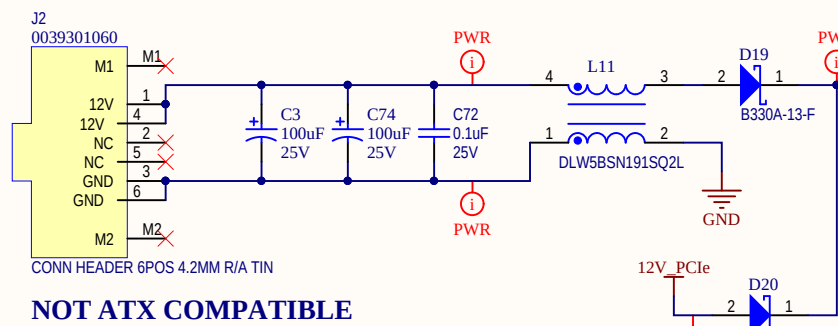
ZYNQ BANK 34/35



ZYNQ BANK 13, 501



POWER JACK



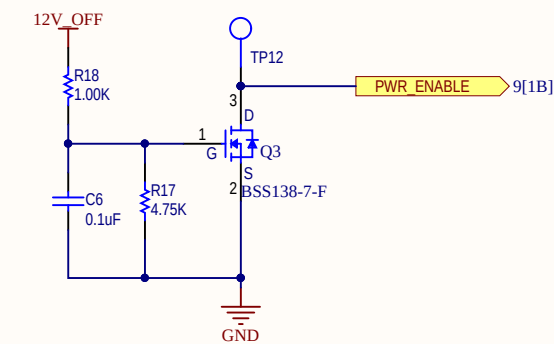
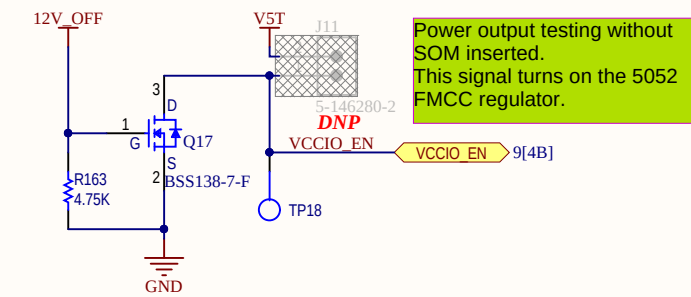
BOARD POWER

VIN TO 5V POWER SUPPLY

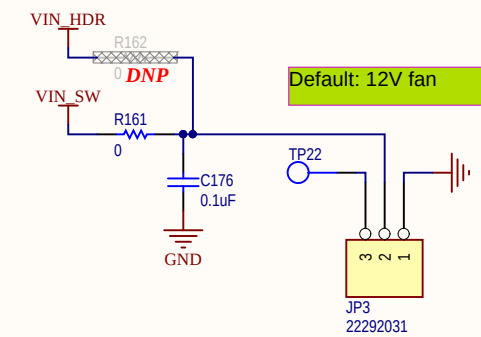
DESIGN NOTES - Switching Frequency is set to 600KHz via 124K resistor.

R89/R118 used to select VIN for ADI IC (5V or 12V) Default is 12V

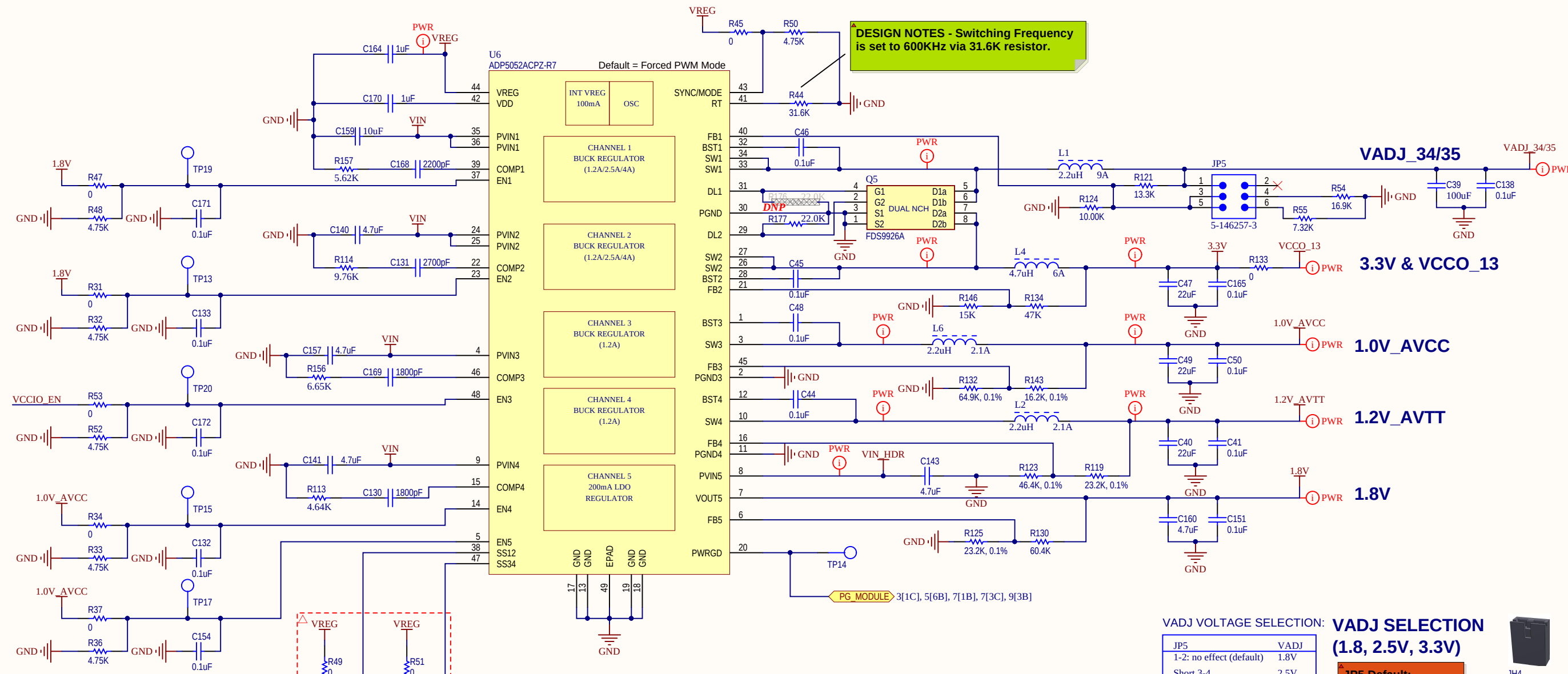
SOM POWER CONTROL



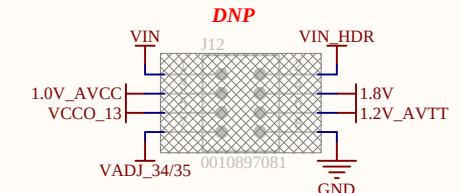
FAN HEADER



5 CHANNEL SEQUENCED POWER SUPPLY



VOLTAGE MONITOR HEADER



POWER SEQUENCE:
Vccio_En -> 1V -> 1.2V & 1.8V -> VADJ & 3.3V

VADJ VOLTAGE SELECTION:	
JP5	VADJ
1-2: no effect (default)	1.8V
Short 3-4	2.5V
Short 5-6	3.3V

VADJ SELECTION
(1.8, 2.5V, 3.3V)

JP5 Default:
1.8V (No Jumper)

WARNING:
7030 SOMs MUST HAVE
VADJ SET TO 1.8V ONLY!



Revision Notes:

Assembly:

Label1
BD-XXXX-XXXX-G
Label, Product

Label2

XXXXXXX
Label, Serial Number

ESD1

ESD Bag

Label ESD1

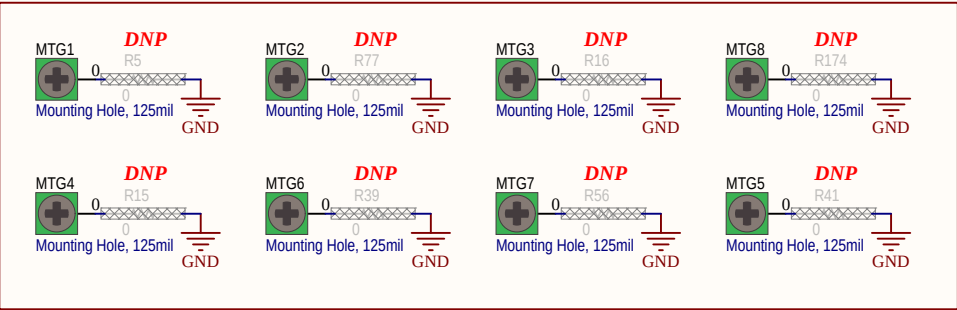
Label ESD
Label NATX

Label, Non-ATX

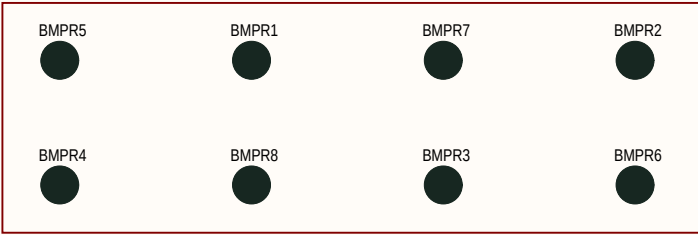
Mechanicals:



PCB Mounting Holes



Bumper Standoffs



GROUND TEST POINTS

