

P3449-A02

Jetson Nano Carrier Board
HDMI, USB, M.2, Gbe

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P3449 I2C Port Assignments	
Slave Device	BUS:Device address
BOARDID EEPROM	I2C Gen 3 : 7'57h
RTS5411S USB3.1 HUB	CAM I2C : 7'6Ah
M.2 KEY-E WIFI/BT	I2C Gen 3 : TBD

Please get the latest BOM information from BOM sheet(P3449_A02_BOM.xlsx).

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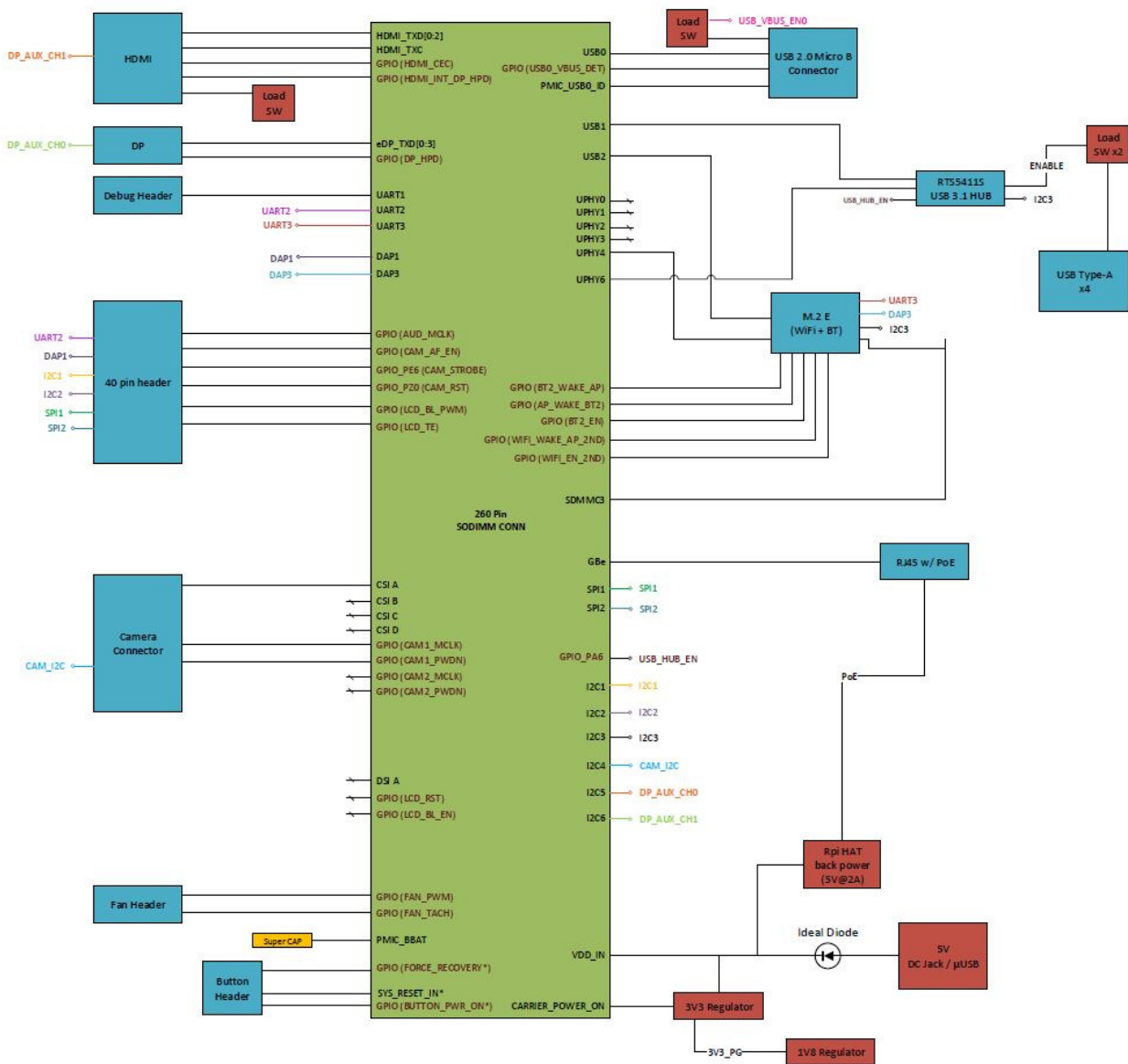
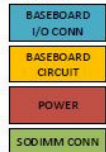
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Map Legend:



ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	Block Diagram

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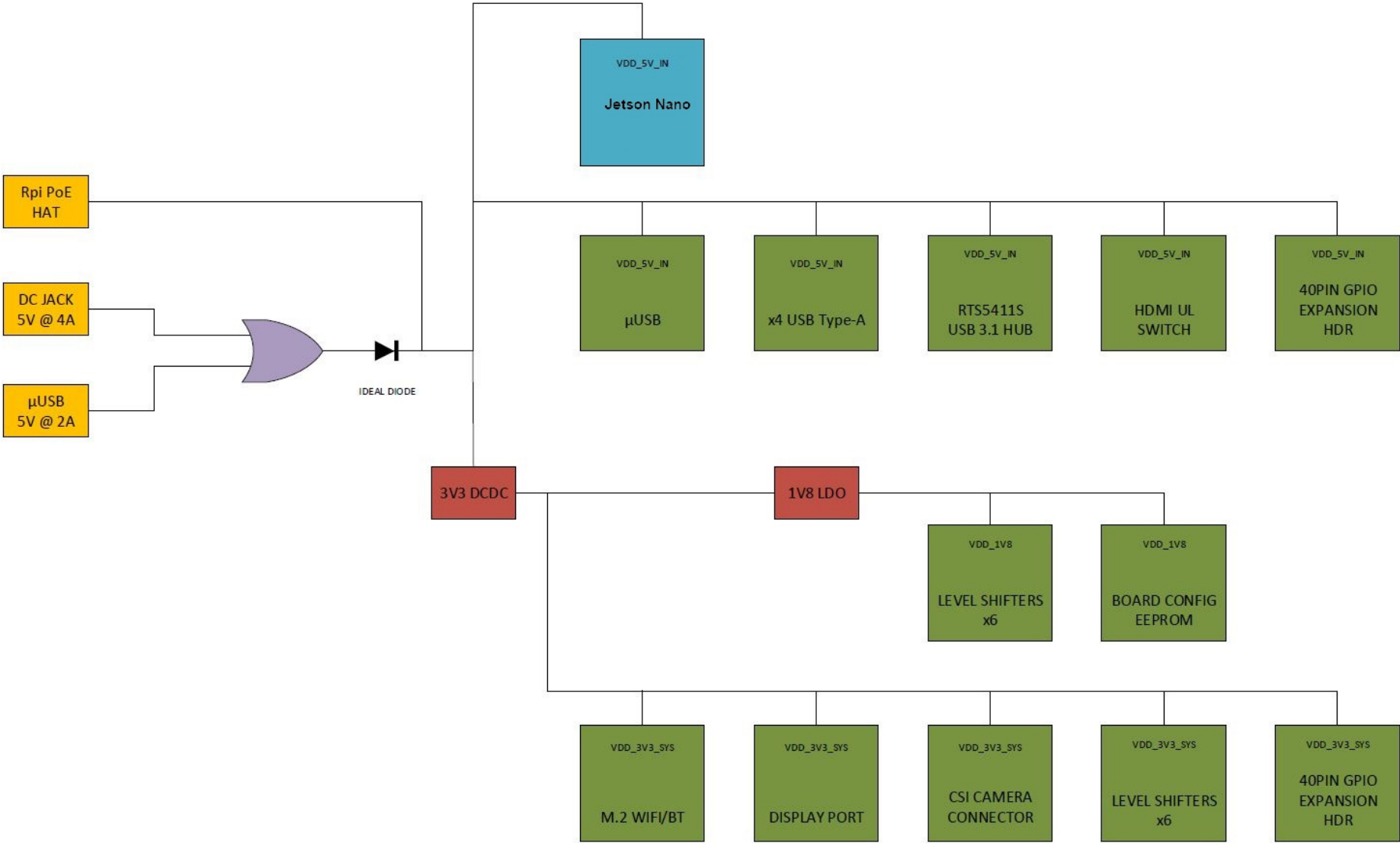
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Power Tree




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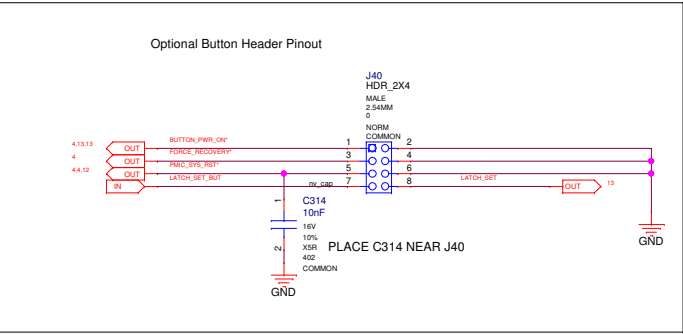
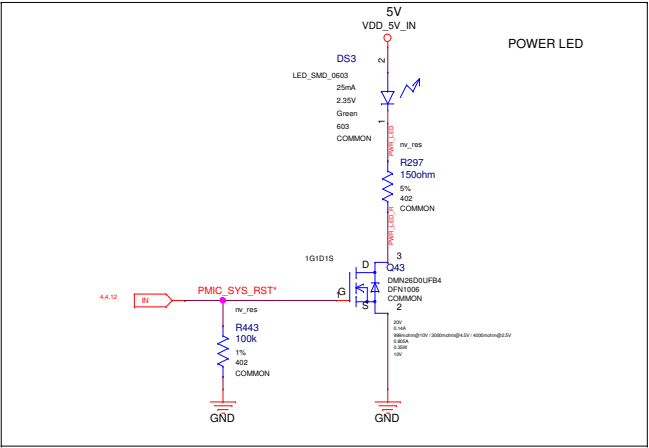
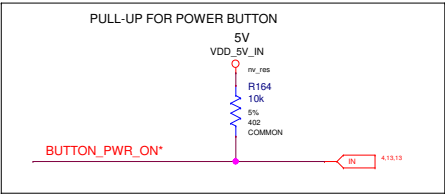
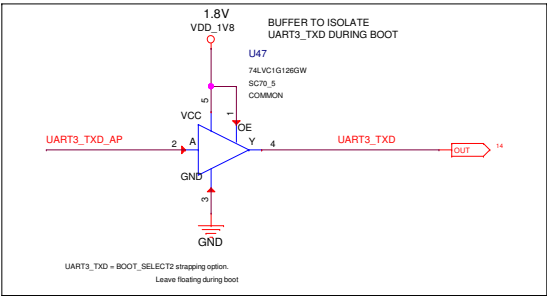
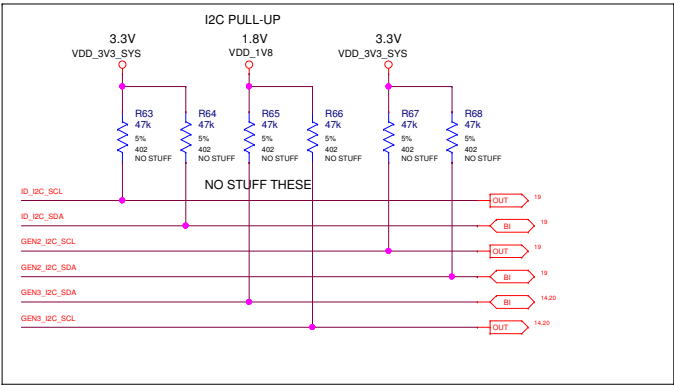
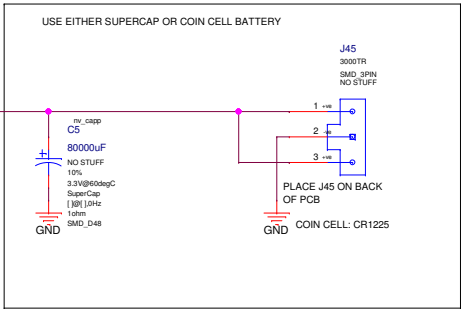
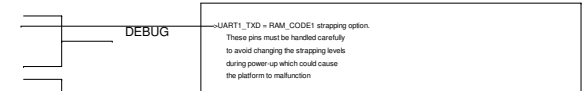
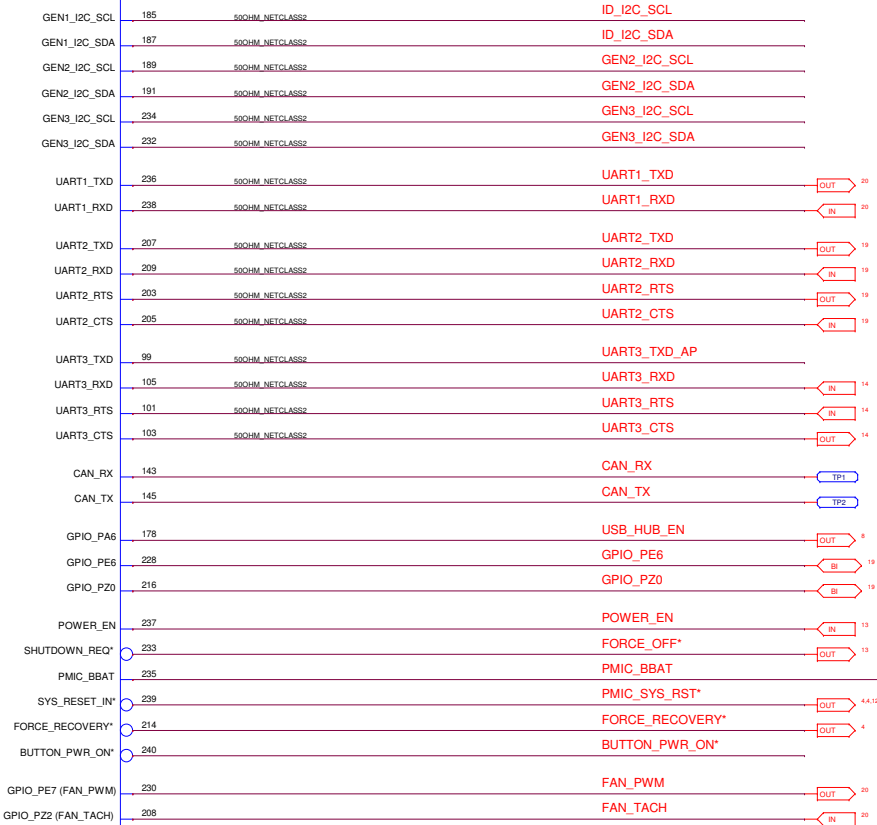
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UART, I2C, CAN and GPIOs



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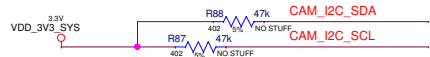
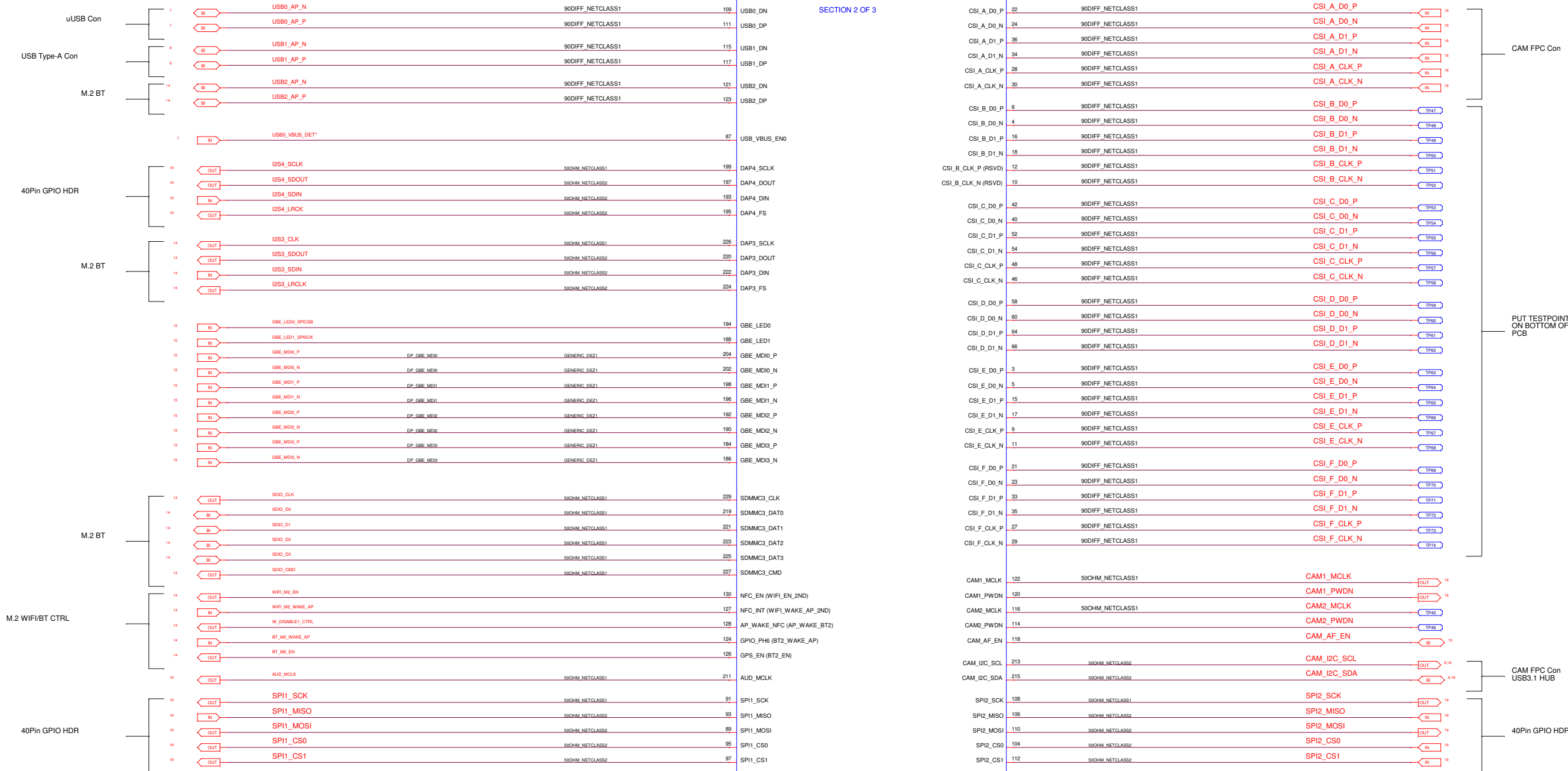
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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	SODIMM connector 1/3

USB2.0, I2S, SPI, GBe and CSI

J28
2308413-1
CON_SODIMM280_JETSON_NANO
COMMON

SODIMM CVB CON
SECTION 2 OF 3



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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	SODIMM connector 2/3

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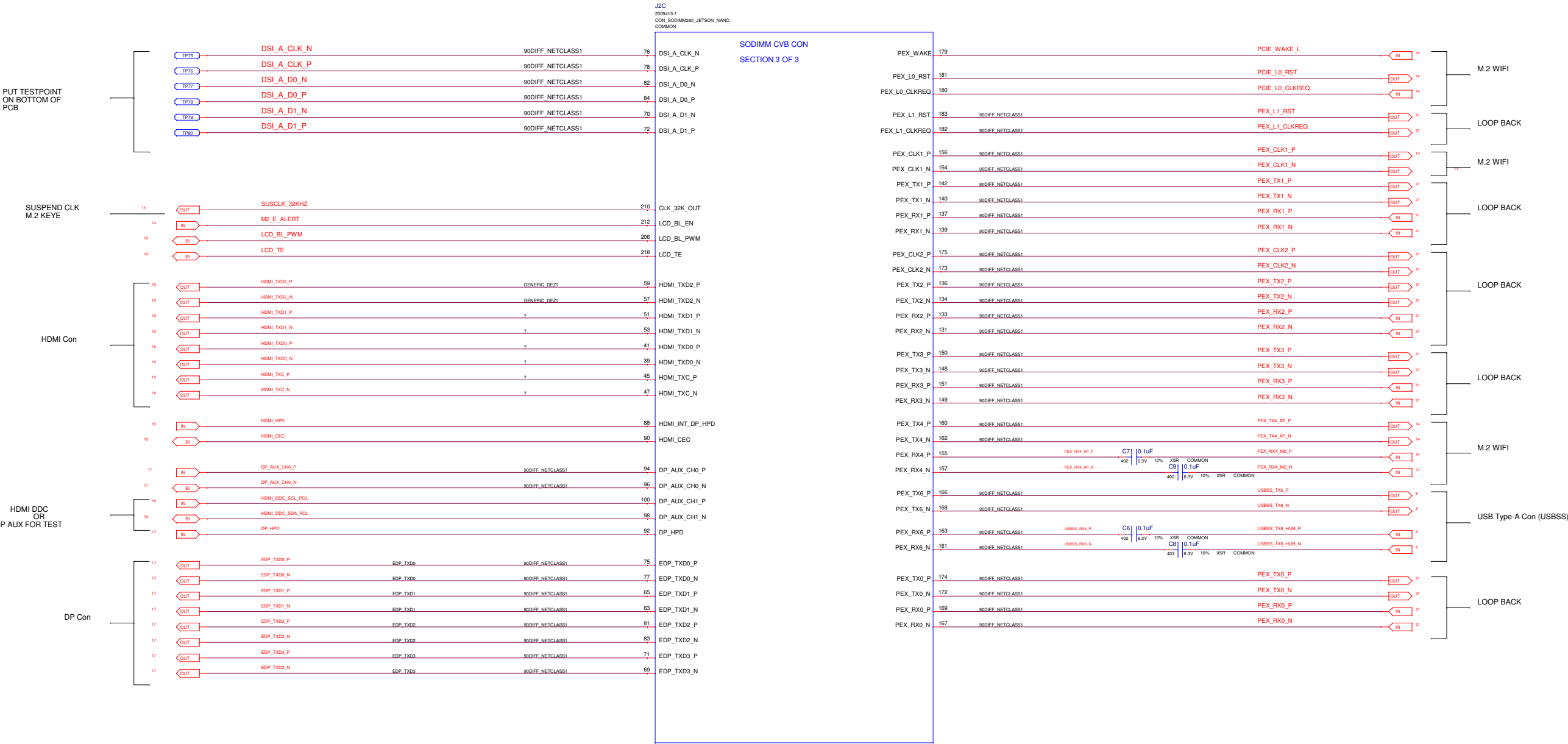
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HDMI, eDP, DSI, USBSS and PEX



ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	SODIMM connector 3/3

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MICRO AB USB 2.0 CONNECTOR

The schematic illustrates the electrical connections for a MICRO AB USB 2.0 connector. It includes a power section with a diode D11, capacitor C147, and resistor R434 connected to VDD_5V_USB. A signal section features a differential pair of resistors R435 and R439, and two LEDs D21 and D22. The central component is the CO-LAYOUT J28 and J47, which connects the USB pins to the board signals. The board signals include USB_AP_N, USB_AP_P, SNN_USB_ID_CONN, USB_CC1, USB_CC2, and various RX/TX pairs. The connector pins are labeled with their respective functions and values.

ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	USB2.0 micro

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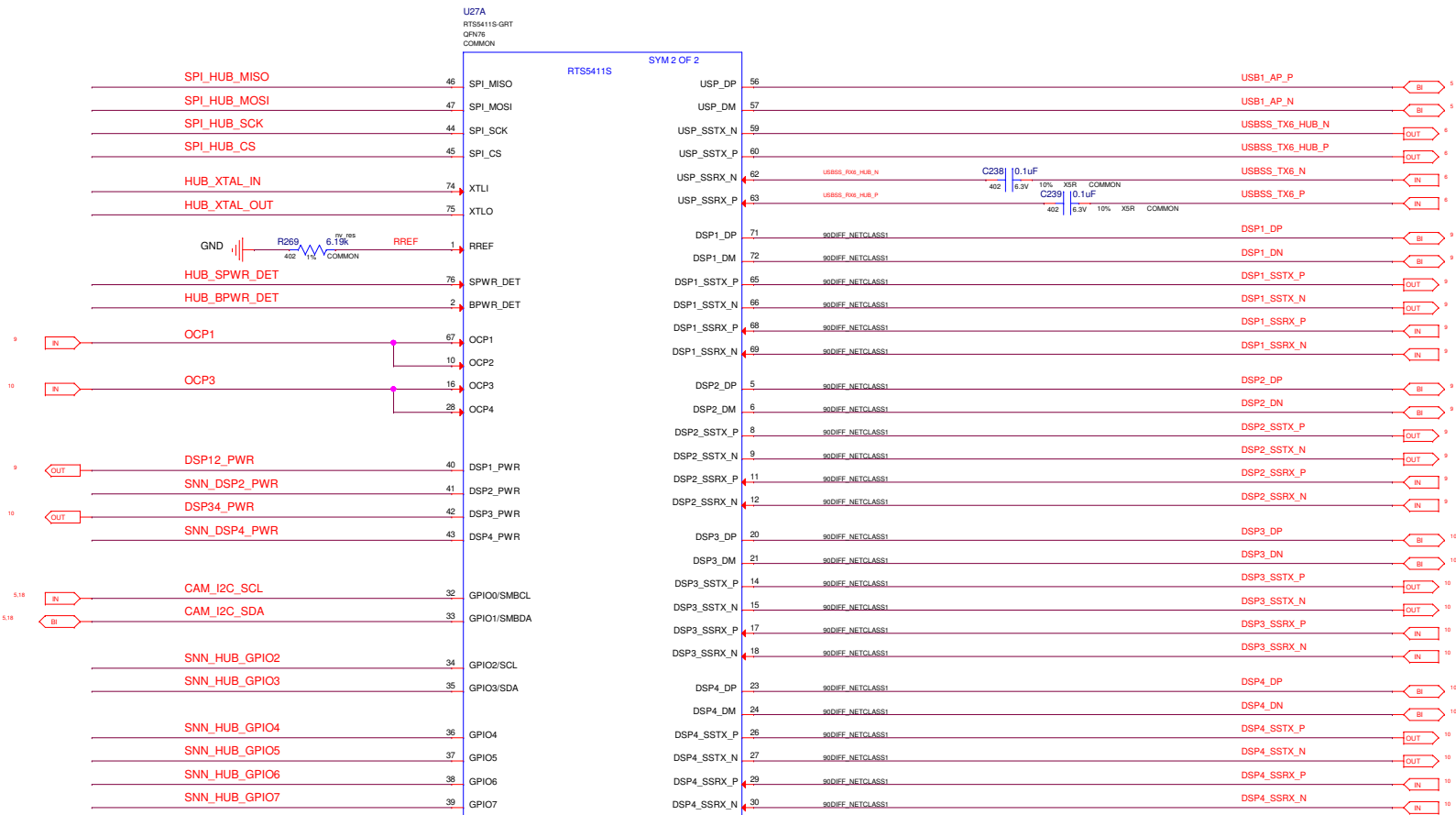
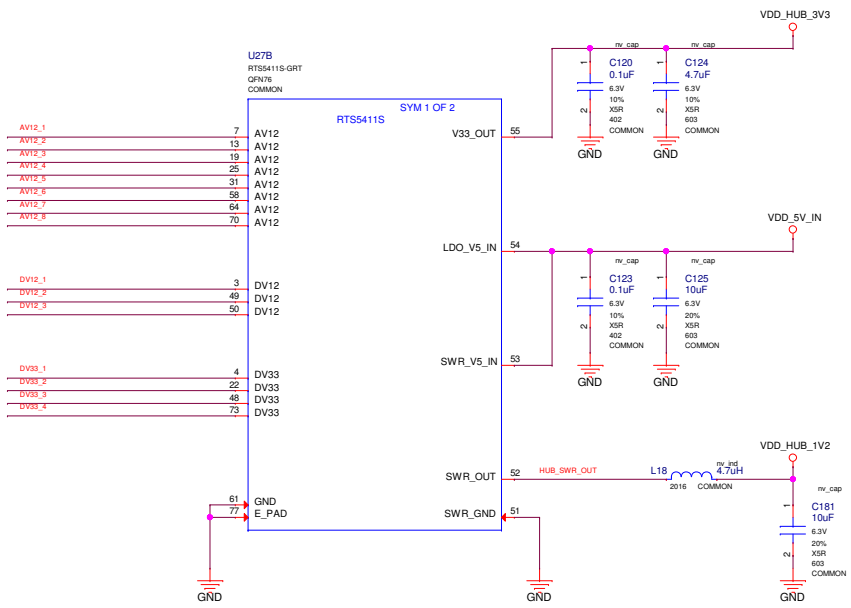
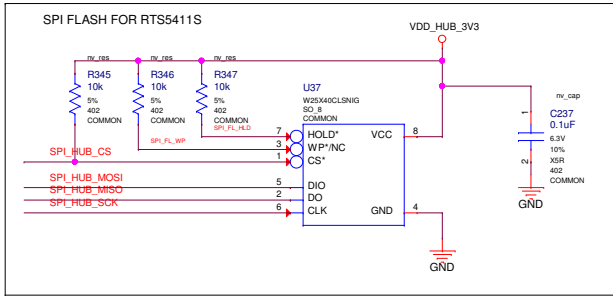
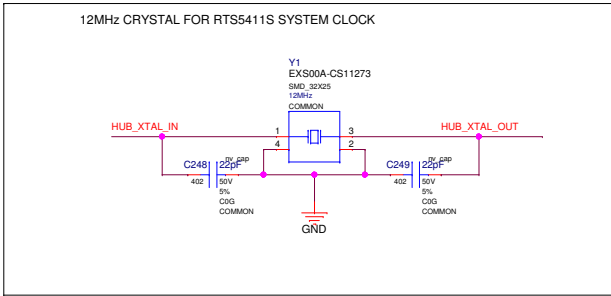
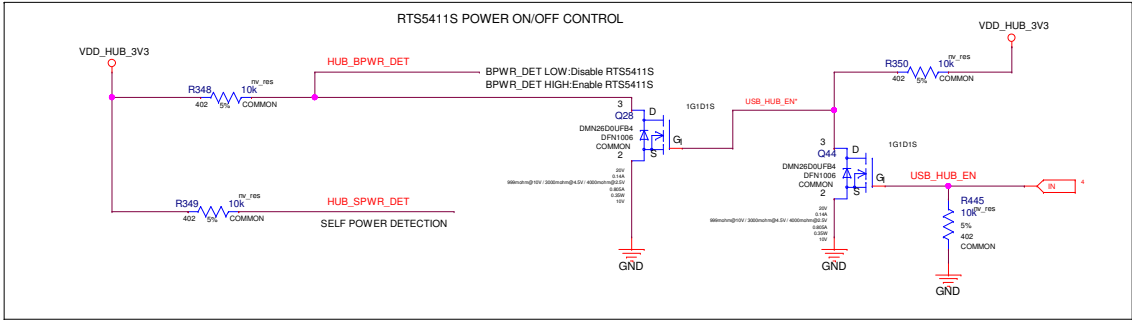
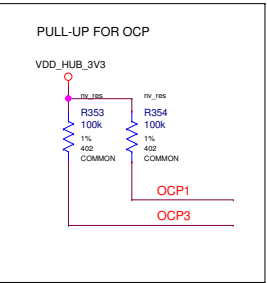
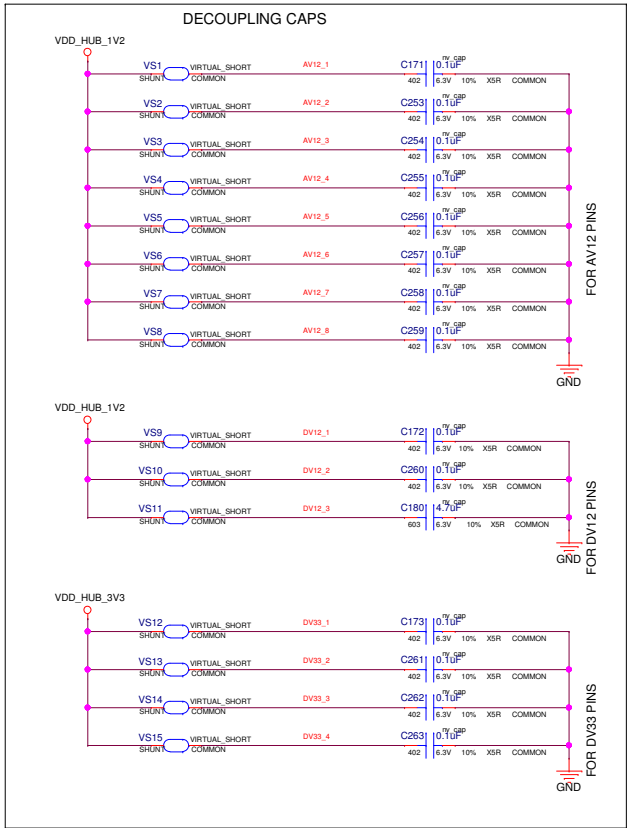
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USB3.1 HUB x4 PORTS

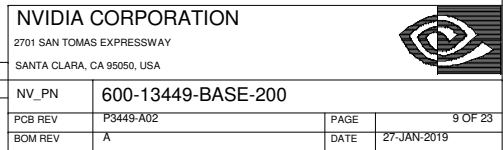


I2C slave addr: 7'1101010b = 7'h6A

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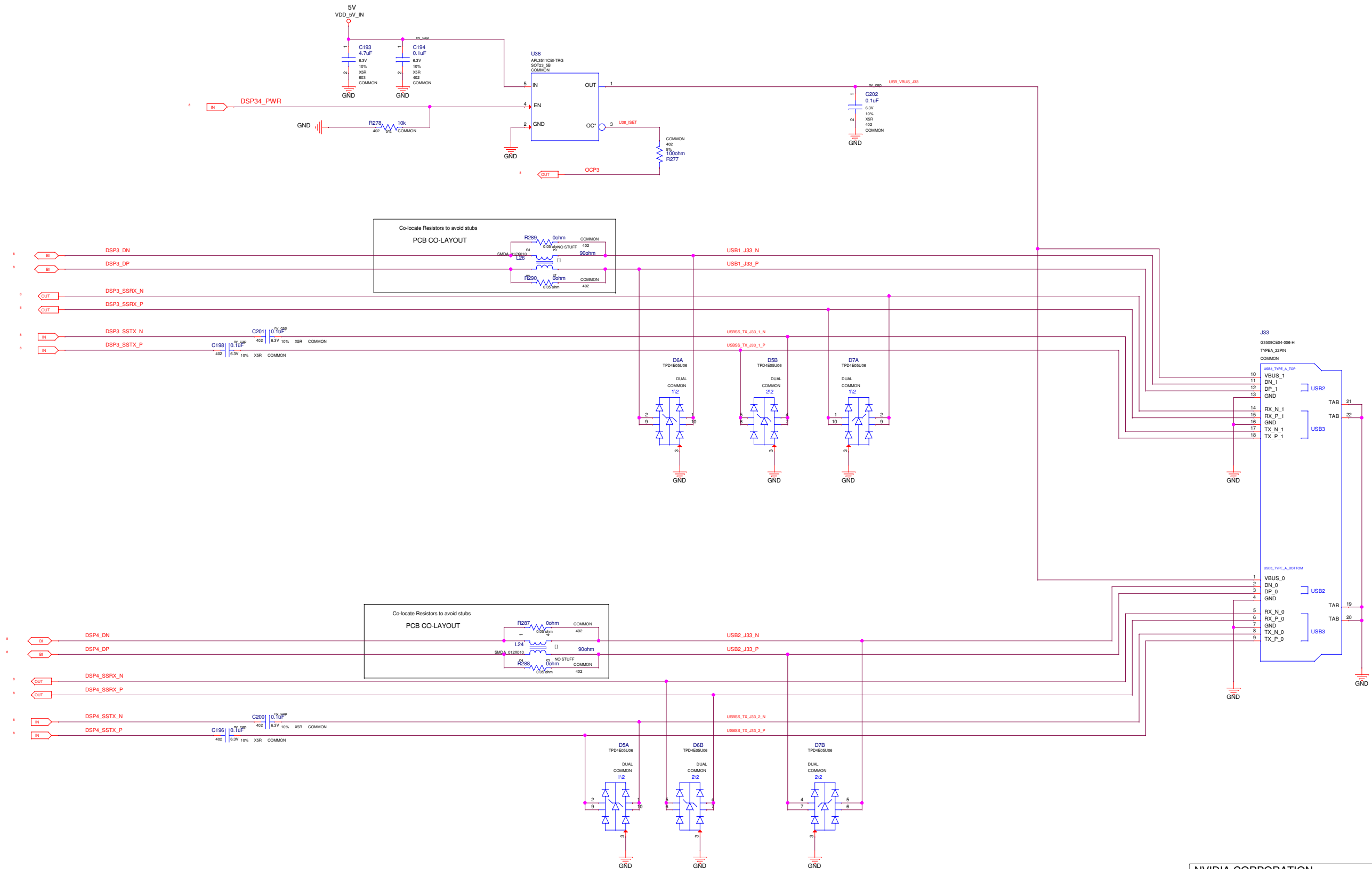


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USB 3.0 TYPE A x2 CONNECTOR (2 OF 2)



ASSEMBLY	<ASSEMBLY_DESCRIPTION>
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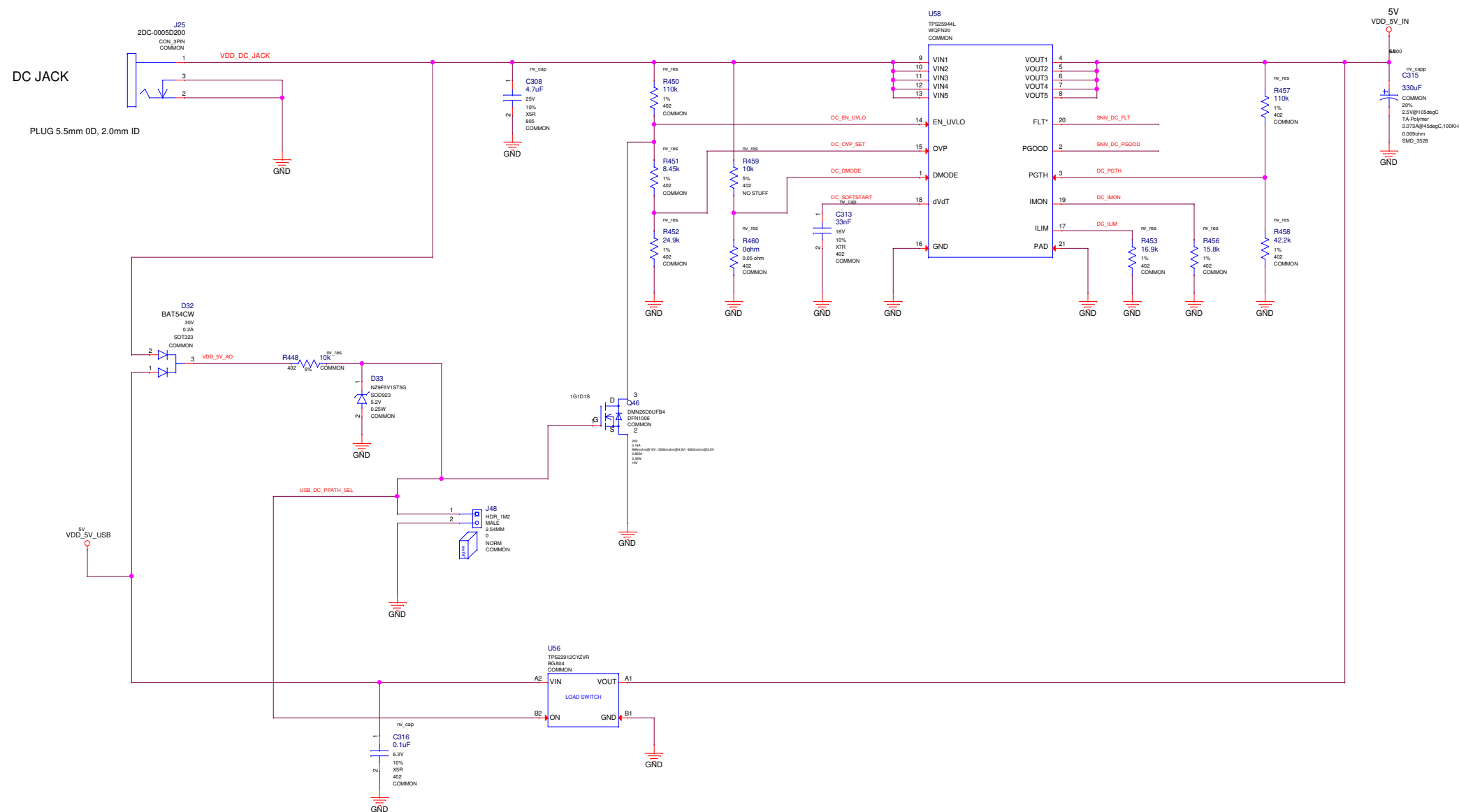
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DC JACK AND uUSB POWER SOURCE SELECTION



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PAGE DETAIL	DC Jack

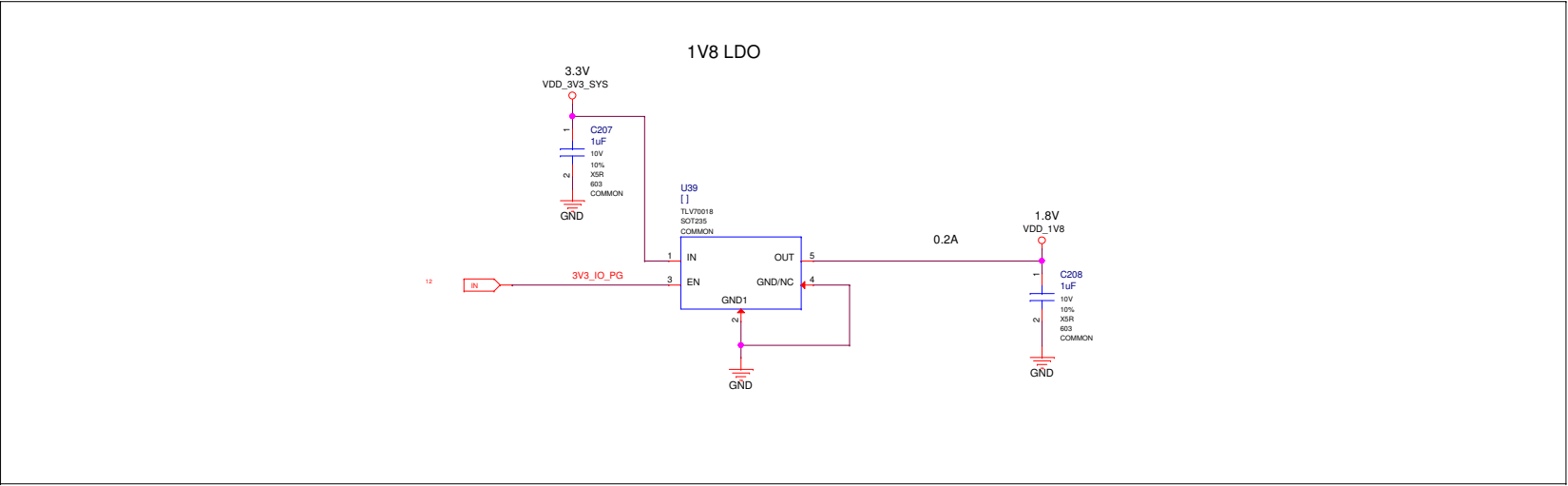
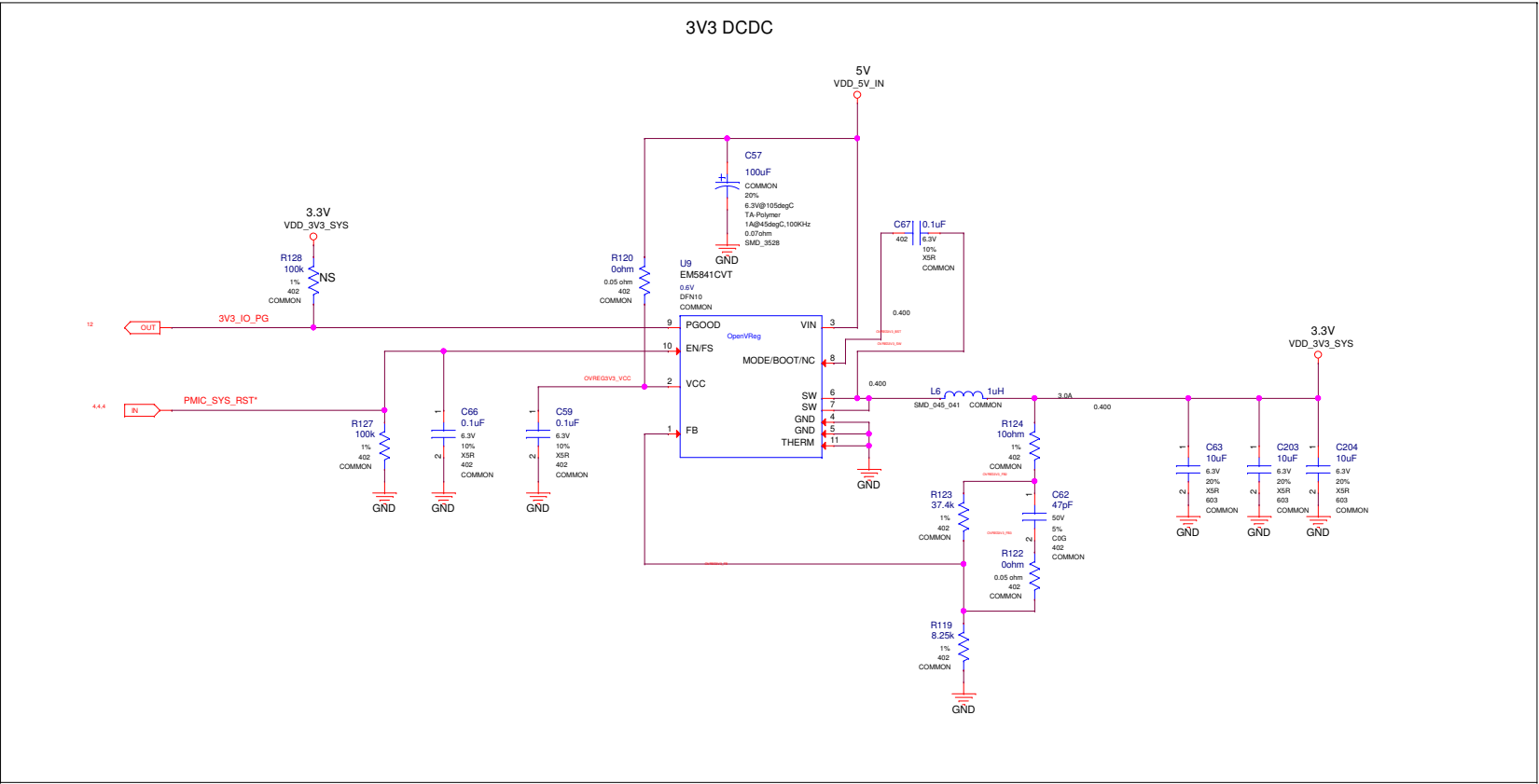
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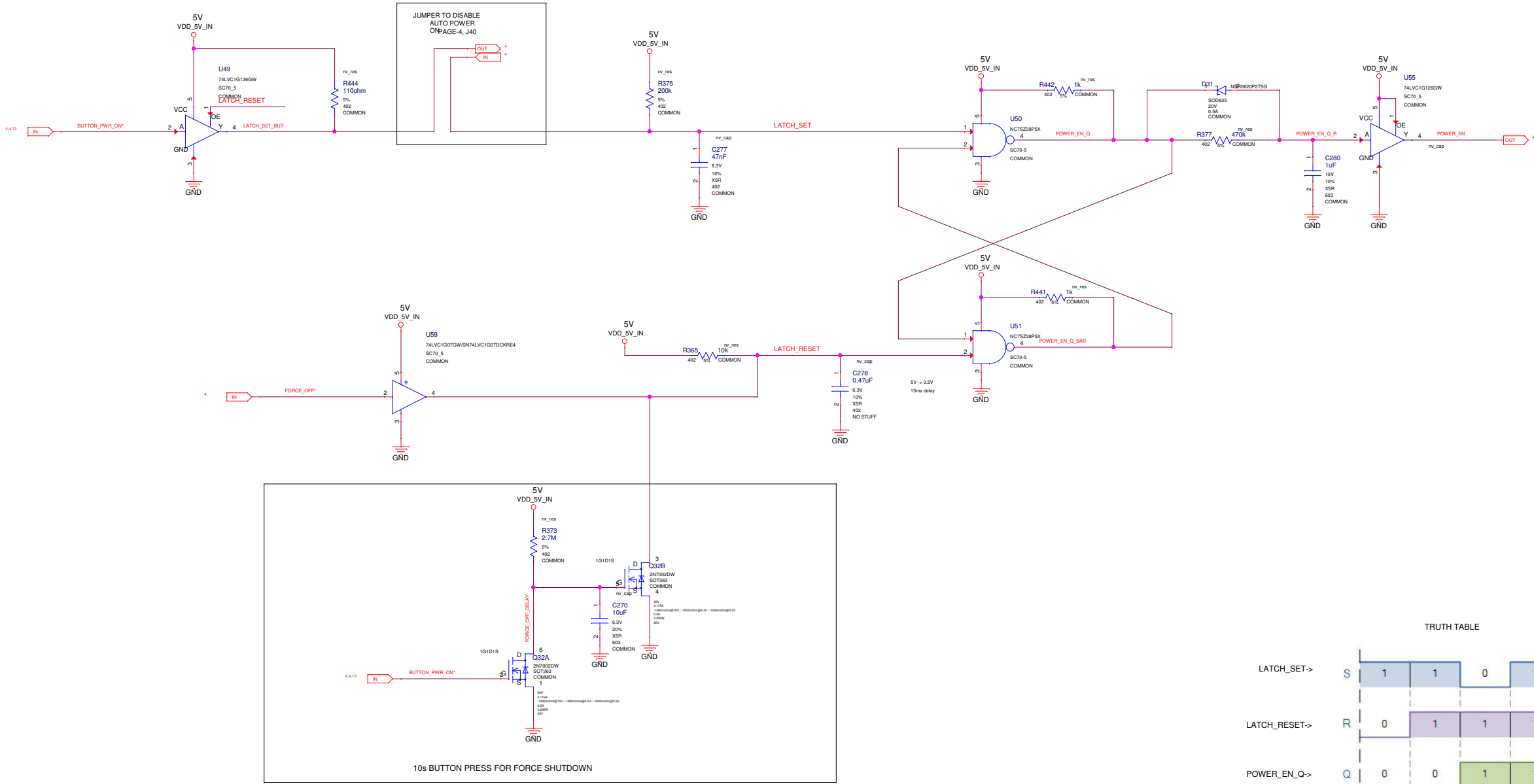
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3V3 & 1V8 POWER SUPPLIES



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Module Power ON/OFF logic



TRUTH TABLE

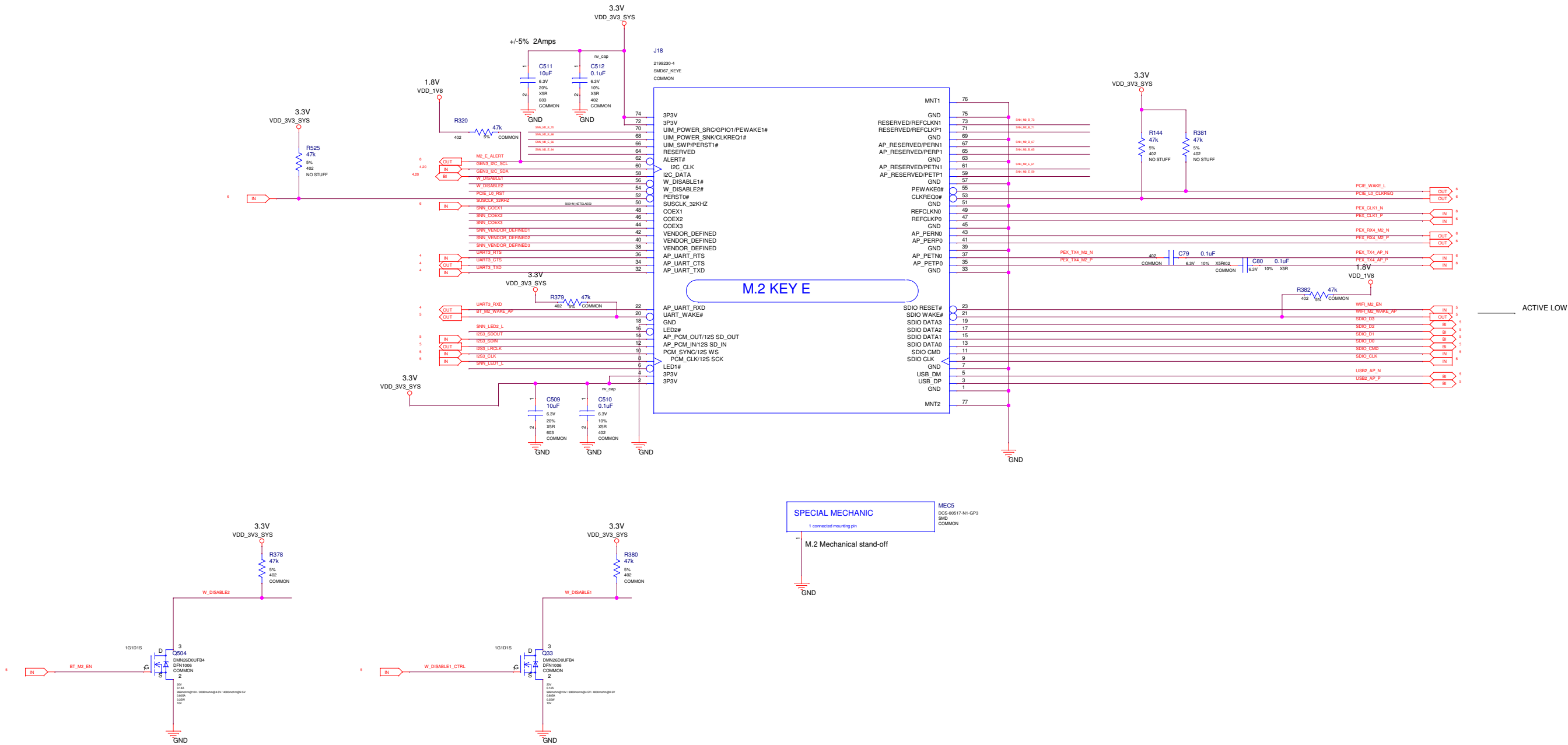
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LATCH_RESET->	R	0	1	1	1	0	1
POWER_EN_Q->	Q	0	0	1	1	1 or 0	?
	Q̄	1	1	0	0	1 or 0	?
		Set	No Change	Reset	No Change	Invalid	Unknown States

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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
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M.2 KEY E

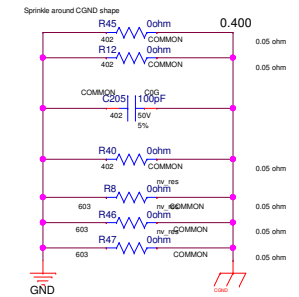
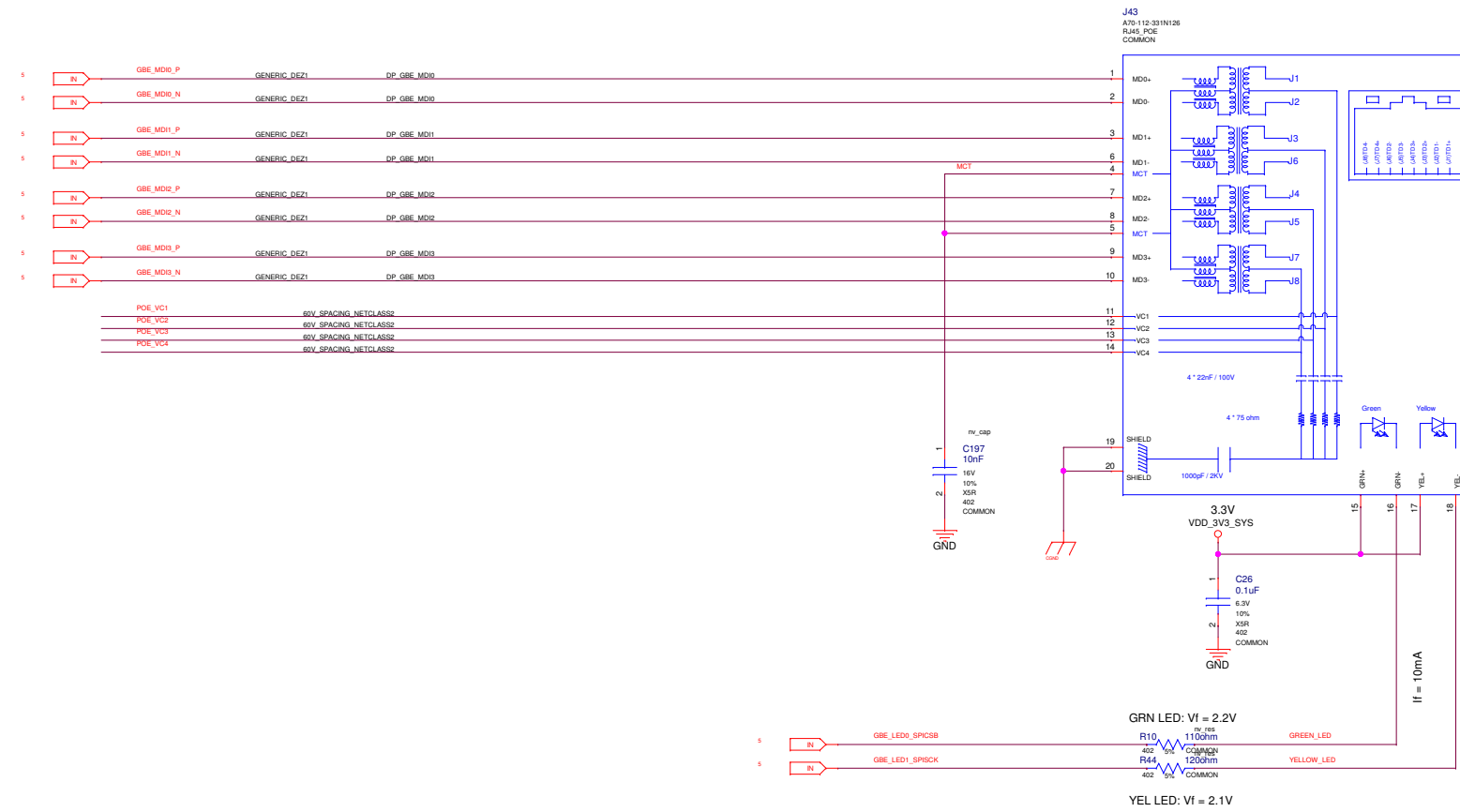
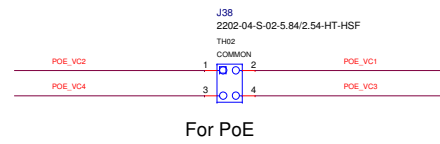


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Gigabit Ethernet with PoE



ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	Gigabit Ethernet POE

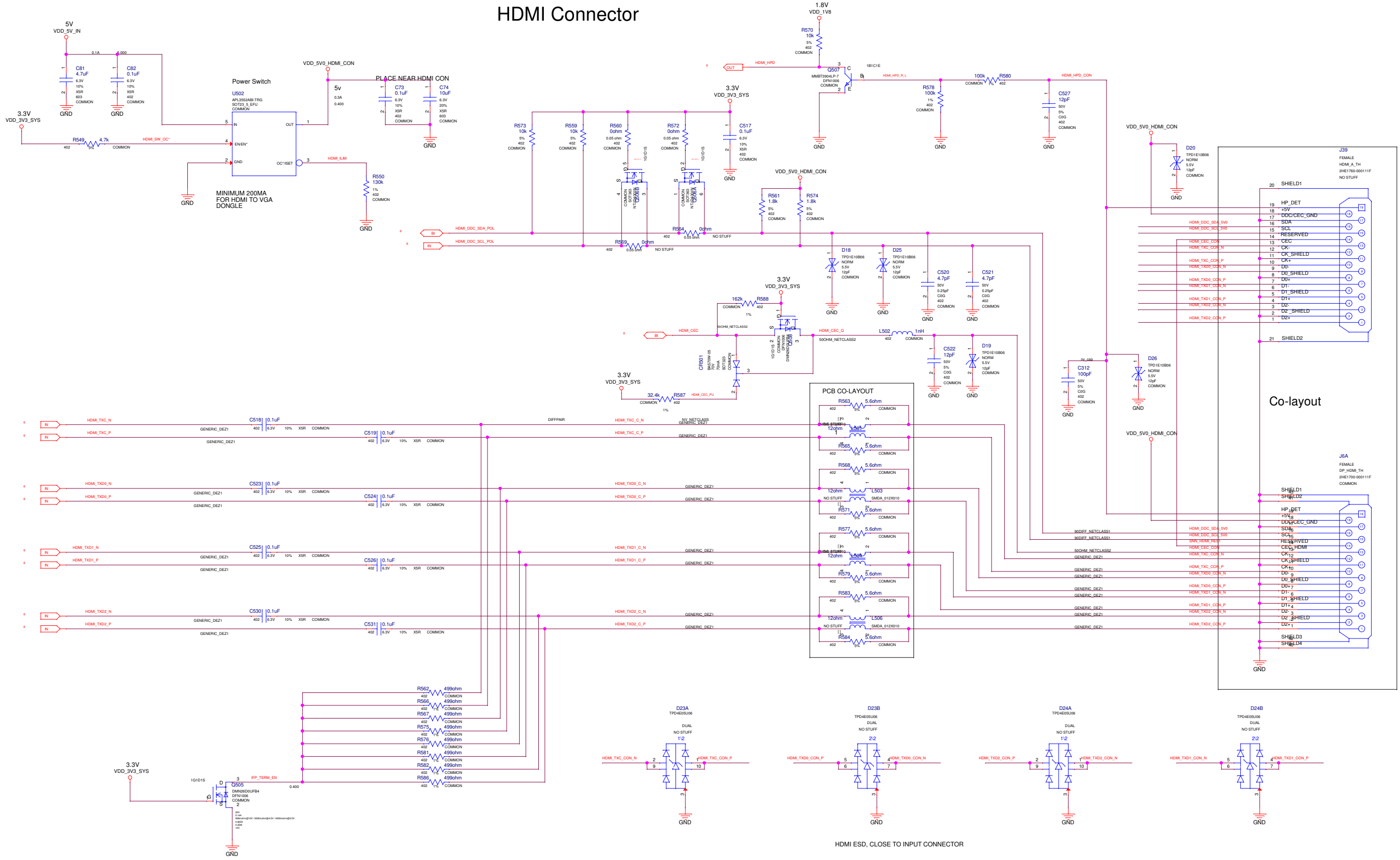
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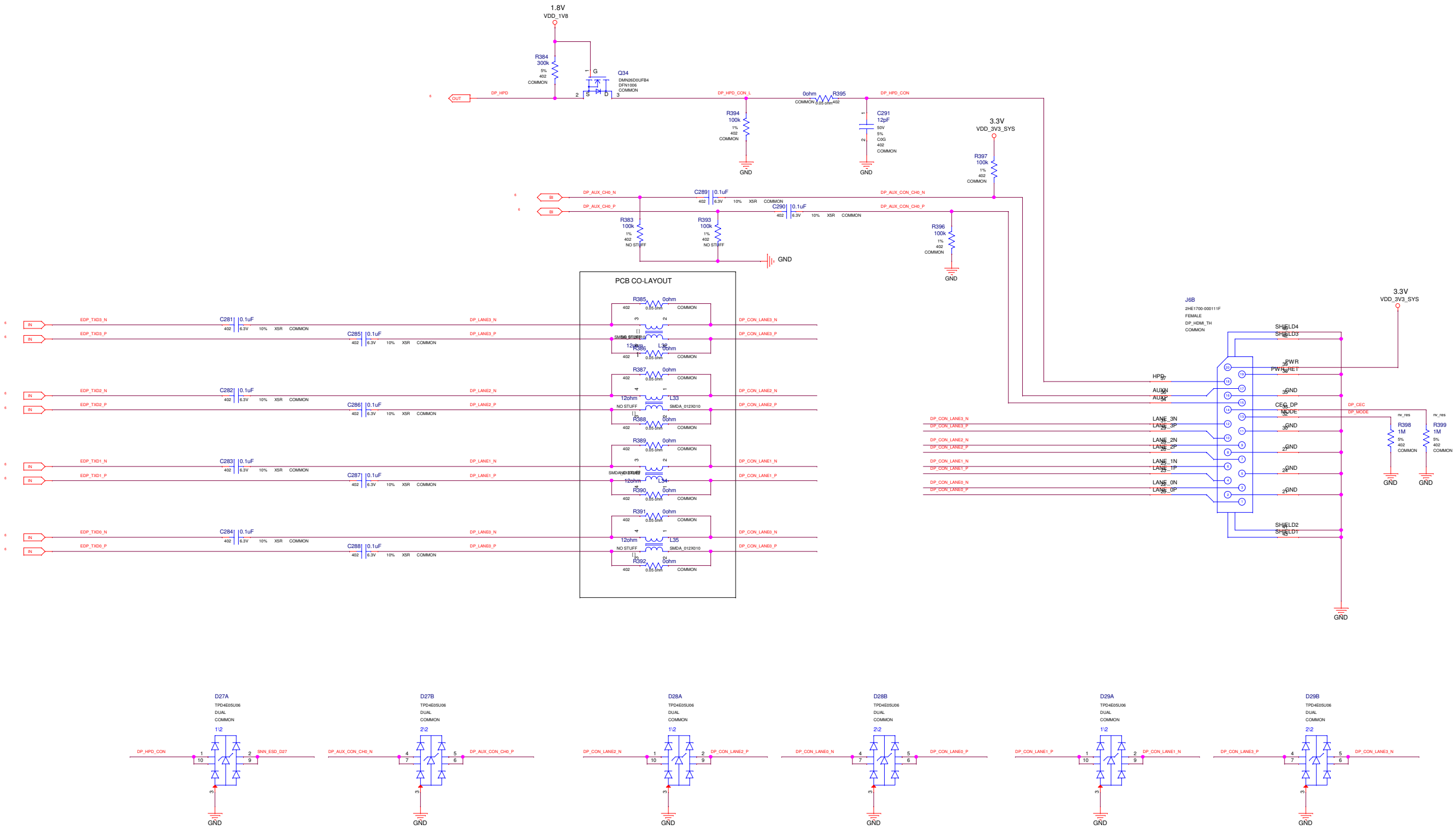
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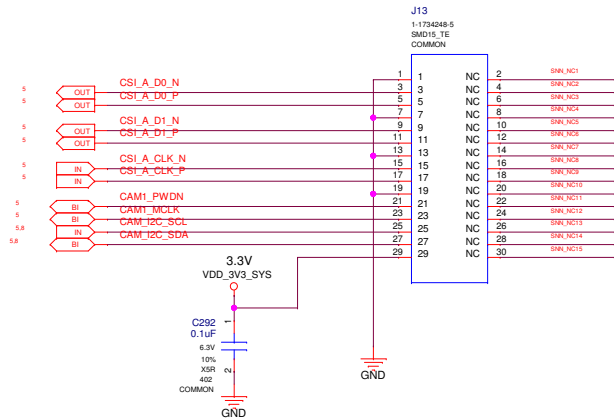
ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	HDMI

DisplayPort Connector



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CSI CAM CONNECTOR



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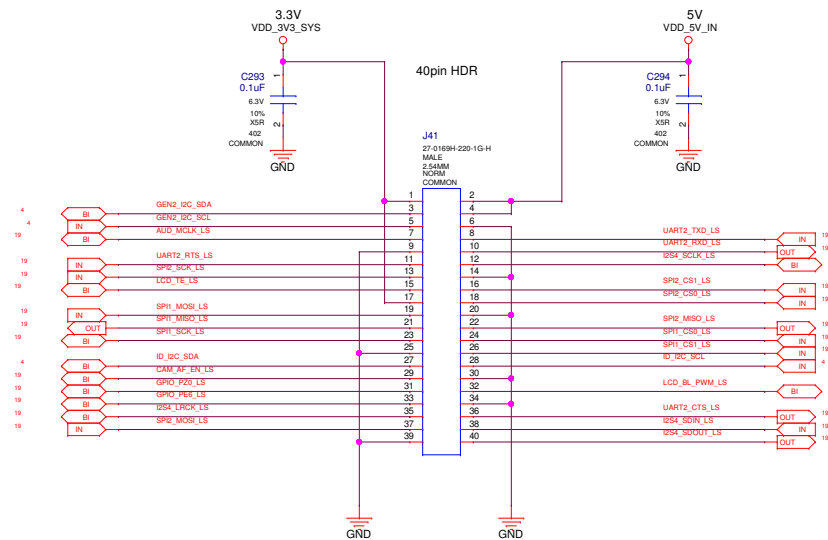
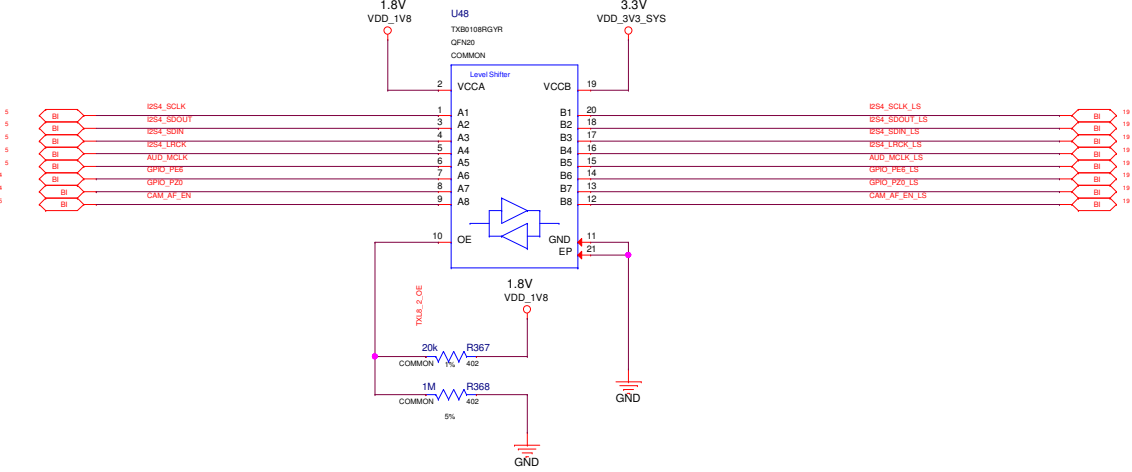
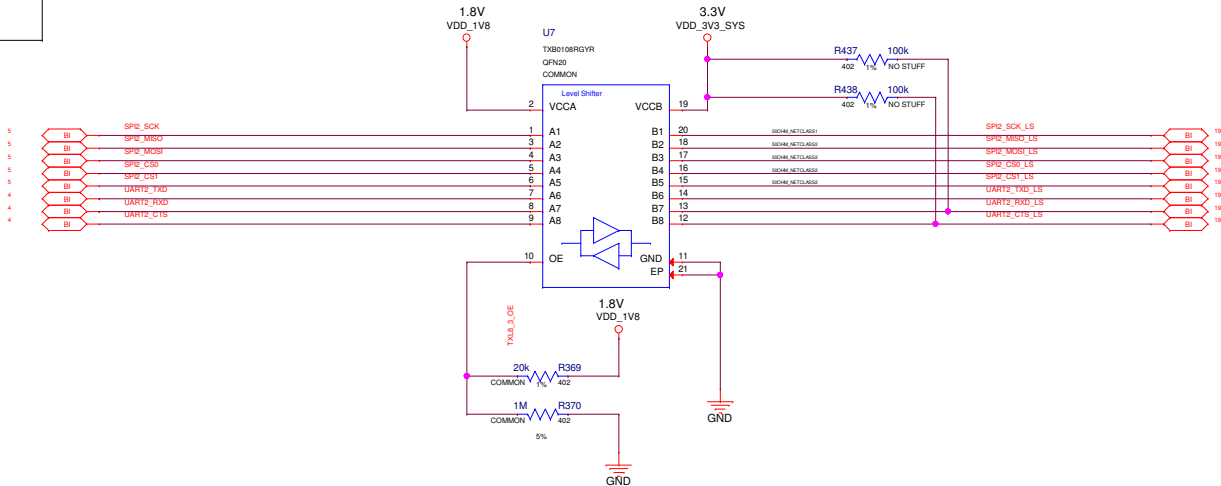
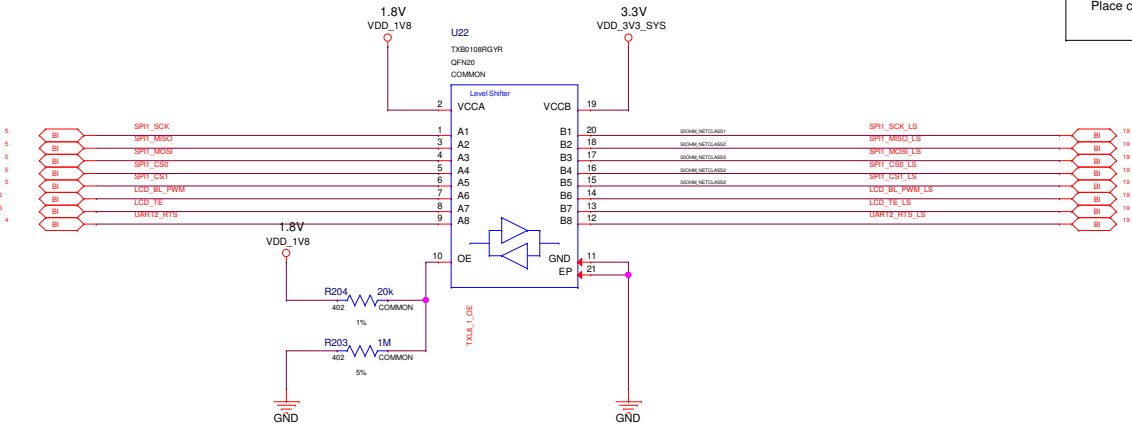
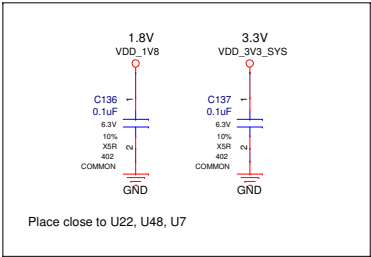
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40PIN GPIO EXPANSION HEADER & LEVEL SHIFTERS

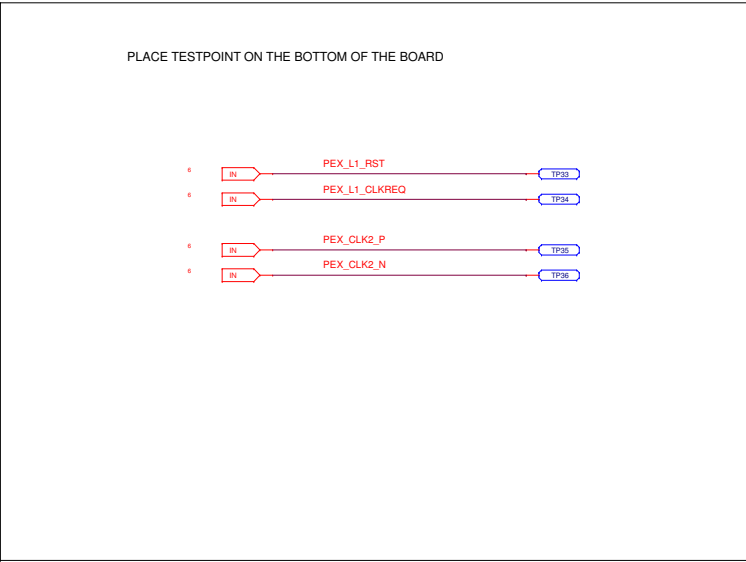
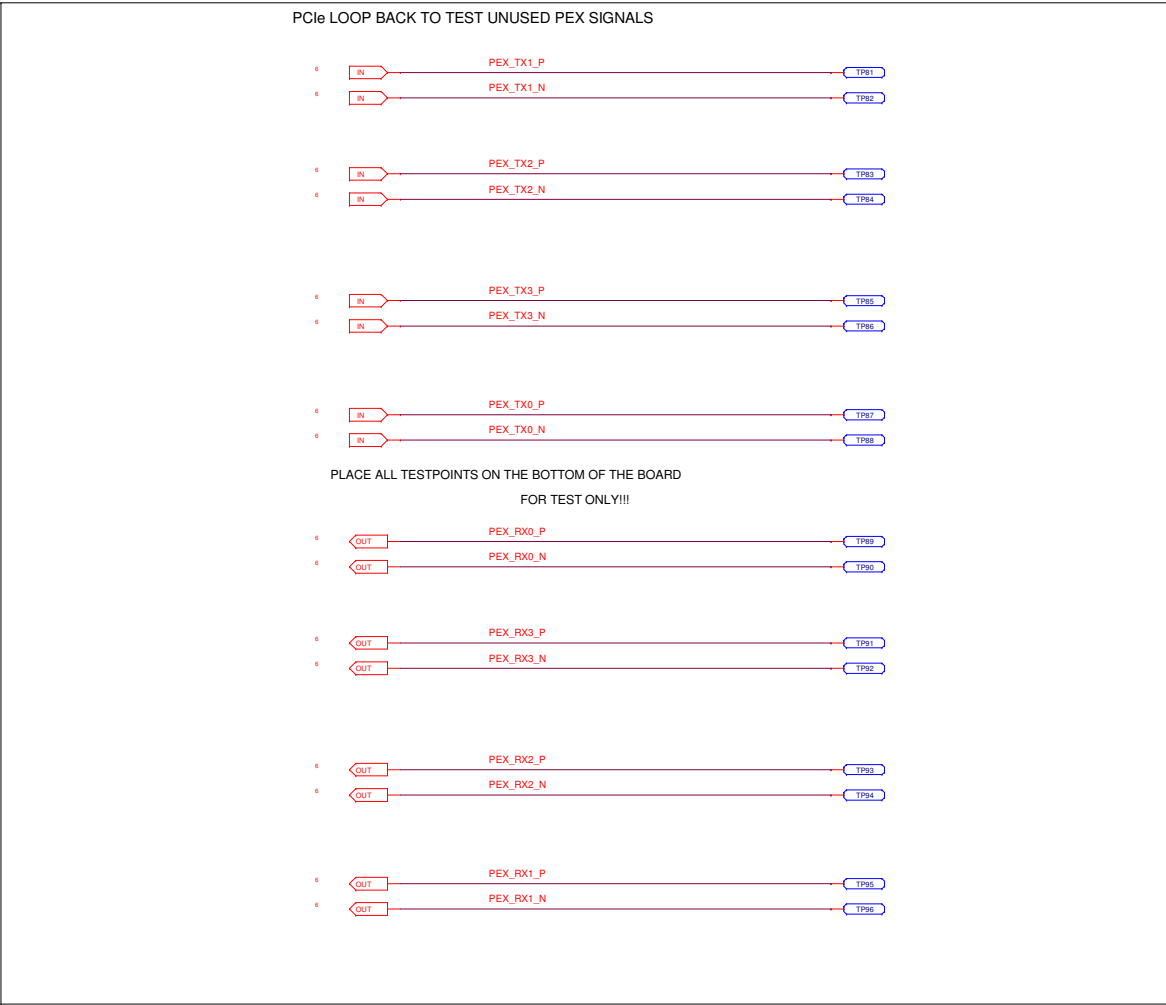


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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	40Pin GPIO expansion header

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PROVISION FOR LOOP BACK TEST OF UNUSED PEX SIGNALS

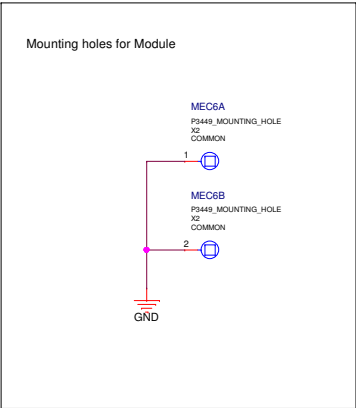


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ASSEMBLY	<ASSEMBLY_DESCRIPTION>
PAGE DETAIL	Loop Back Test

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Mechanical



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ASSEMBLY	<ASSEMBLY DESCRIPTION>
PAGE DETAIL	REVISION HISTORY

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