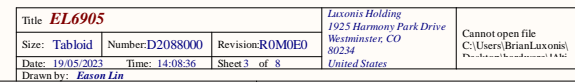
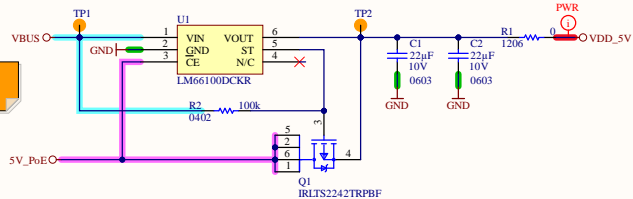


**Project:** *EL6905*  
**Current Revision:** *R0M0E0*

**EL6905**      **Revision History:**

Date	Revision	Reason for Change	Changes Implemented
22/Feb/2023	Initial Release -> R0M0E0		

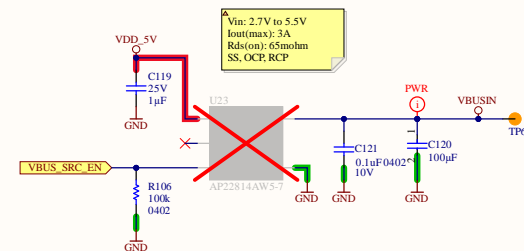




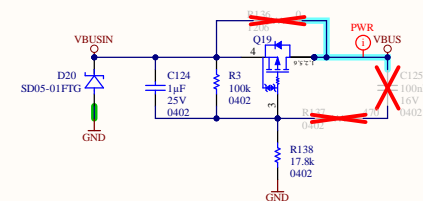
Attached SOM Board	USB Acts As	VBUSIN	VBUS_SRC_I
OAK-SOM-PRO-S3 (KB/RVC3)	Host*	Source	High
OAK-SOM-PRO (MX/RVC2)	Device	Sink	Low

\* OAK-SOM-PRO-S3 will act as the device when it's in flash mode. Thus, when PRO-S3 is attached, the ID pin (connect to GND) shall be implemented

### USB ACTS AS HOST (KB)

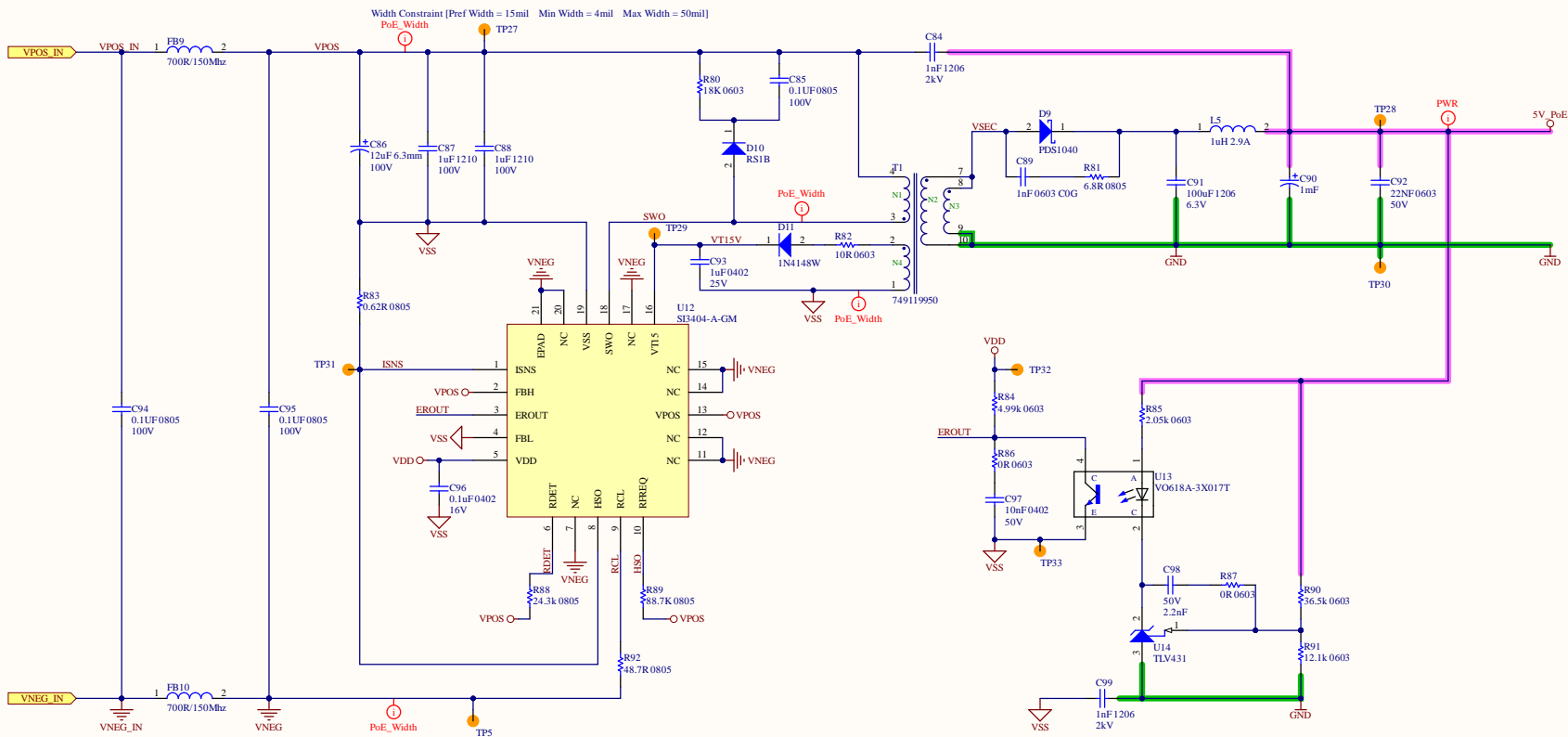
**VBUS: SOURCE**

## USB ACTS AS DEVICE (MX)

**VBUS: SINK**

Title <b>EL6905</b>			Luxonis Holding 1925 Harmony Park Drive	Cannot open file C:\Users\Brian.Luxonis\ Production\6905\6905
Size: <b>Tabloid</b>	Number: <b>D2088000</b>	Revision: <b>R0M0E0</b>	Westminster, CO 80234	
Date: <b>19/05/2023</b>	Time: <b>14:08:36</b>	Sheet <b>4</b> of <b>8</b>	<b>United States</b>	
Drawn by: <b>Eason Lin</b>				

5V\_PoE  
GND

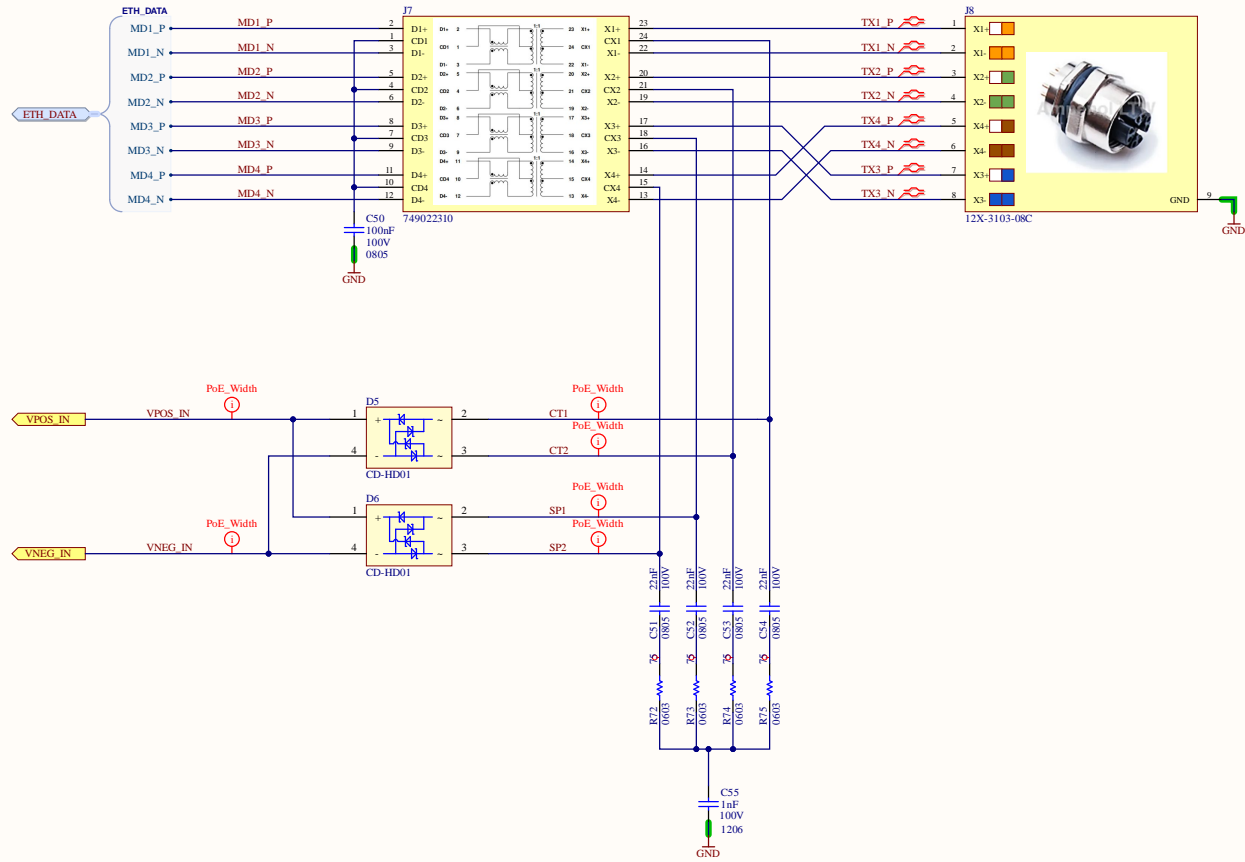


VNEG is a thermal plane as well as ESD and EMI. Use thermal vias to at least 1 inch square plane on backside.

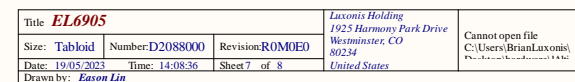
Schematic based on the reference design for the SI3404 PoE.

Title <b>EL6905</b>			Luxonis Holding 1925 Harmony Park Drive Westminster, CO 80234	Cannot open file C:\Users\Brian.Luxonis\Documents\EL6905
Size: <b>Tabloid</b>	Number: <b>D2088000</b>	Revision: <b>ROM0E0</b>		
Date: 19/05/2023	Time: 14:08:36	Sheet 5 of 8	United States	
Drawn by: <b>Eason Lin</b>				

GND



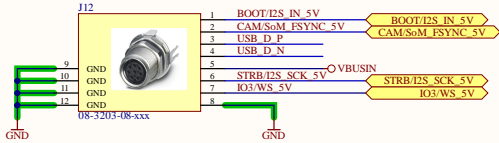
Title <b>EL6905</b>			Luxonis Holding 1925 Harmony Park Drive Westminster, CO 80234	Cannot open file C:\Users\Brian.Luxonis\Documents\EL6905
Size: <b>Tablet</b>	Number: <b>D2088000</b>	Revision: <b>ROM0E0</b>		
Date: <b>19/05/2023</b>	Time: <b>14:08:36</b>	Sheet <b>6</b> of <b>8</b>	<b>United States</b>	
Drawn by: <b>Eason Lin</b>				



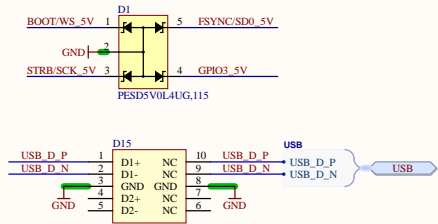


AUX CONNECTOR

When KB is in flash mode, please make sure the external power is still available (PoE).



10k pull-up resistor on the AUX\_GPIO\_M8 net, at the startup, puts the device in USB boot mode.



Title <b>EL6905</b>			Luxonis Holding 1925 Harmony Park Drive Westminster, CO 80234		Cannot open file C:\Users\Brian.Luxonis\Documents\EL6905
Size: <b>Tabletoid</b>	Number: <b>D2088000</b>	Revision: <b>ROM0E0</b>	United States		
Date: <b>19/05/2023</b>	Time: <b>14:08:36</b>	Sheet <b>8</b> of <b>8</b>			
Drawn by: <b>Eason Lin</b>					