

1 2 3 4 5 6 7 8

# Jetson Orin Baseboard

[github.com/antmicro/jetson-orin-baseboard](https://github.com/antmicro/jetson-orin-baseboard)

A

A

B

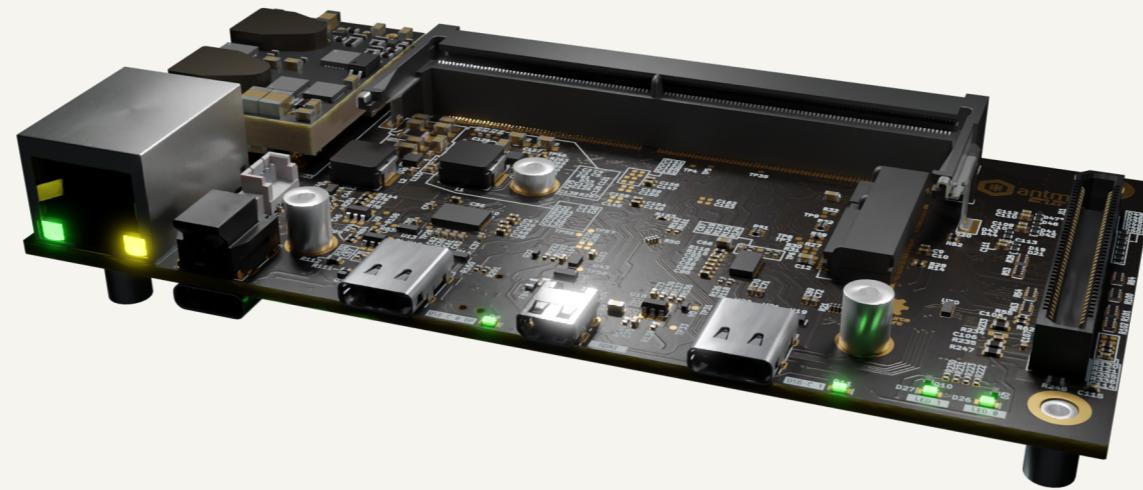
B

C

C

D

D



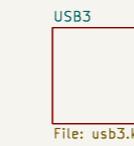
File: som.kicad\_sch



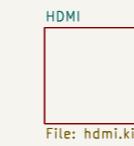
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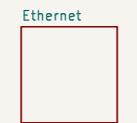
File: usb.kicad\_sch



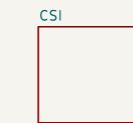
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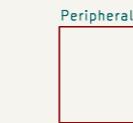
File: hdmi.kicad\_sch



File: ethernet.kicad\_sch



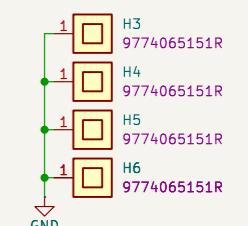
File: csi.kicad\_sch



File: peripherals.kicad\_sch



File: supply.kicad\_sch



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Sheet: / File: jetson-orin-baseboard.kicad\_sch

**Title: Jetson Orin Baseboard**

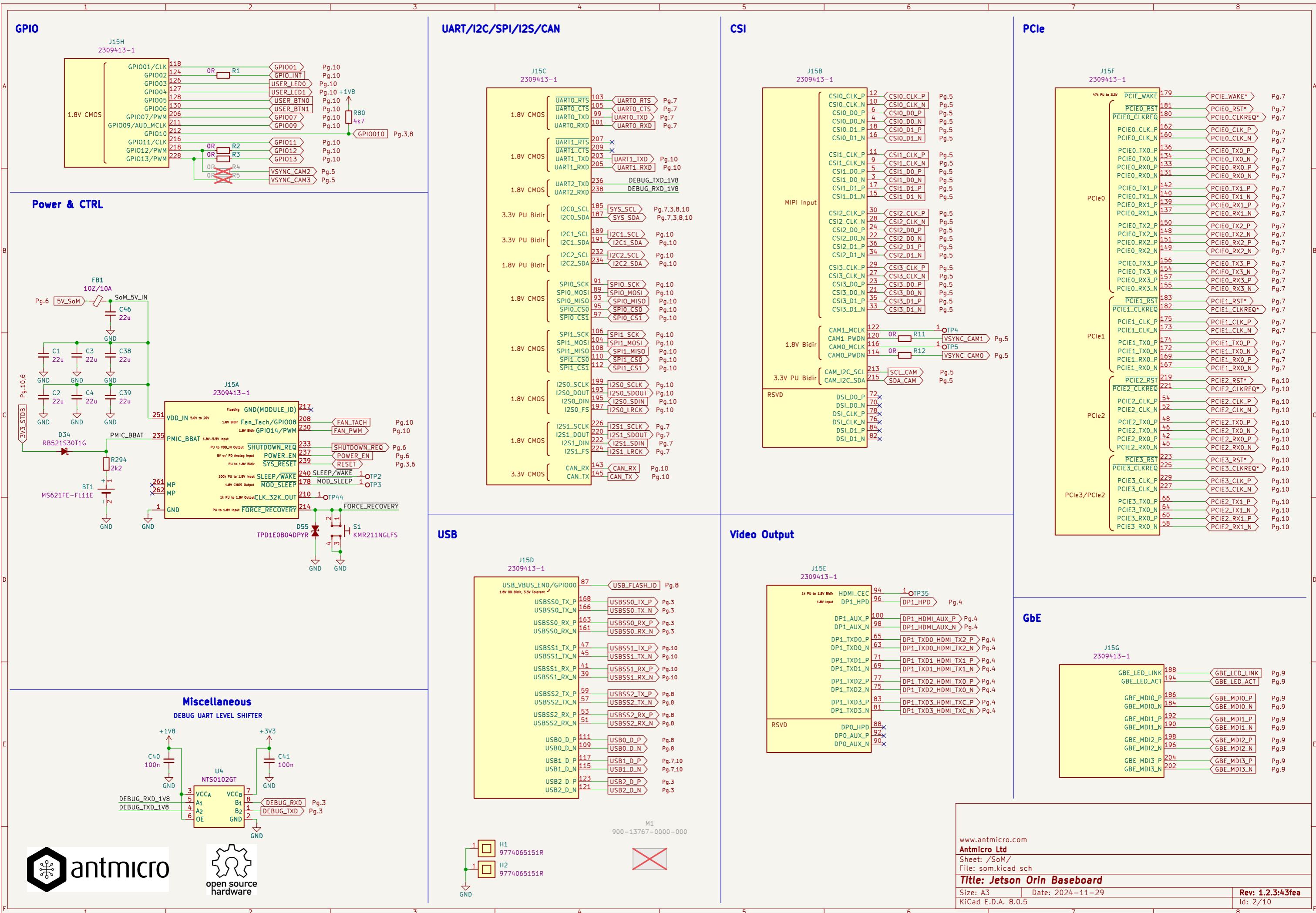
Size: A3 Date: 2024-11-29  
KiCad E.D.A. 8.0.5

Rev: 1.2.3:43fea  
Id: 1/10

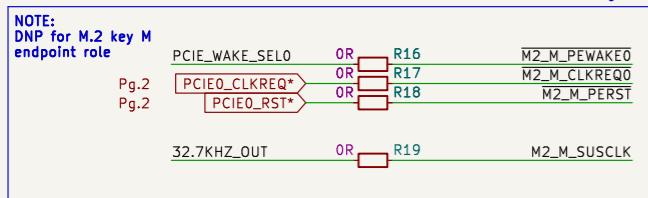
1 2 3 4 5 6 7 8

F

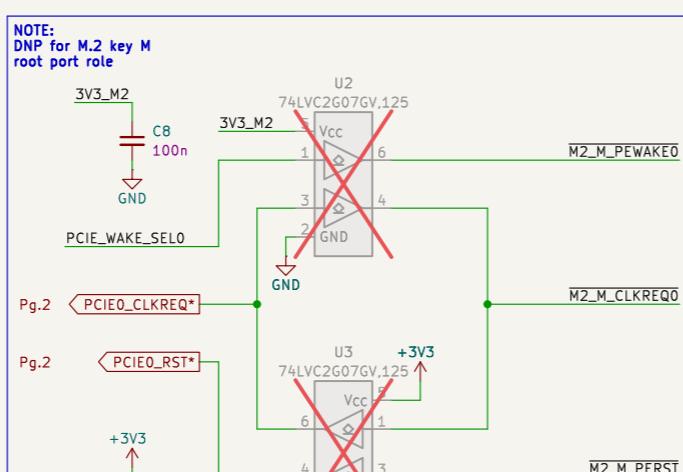
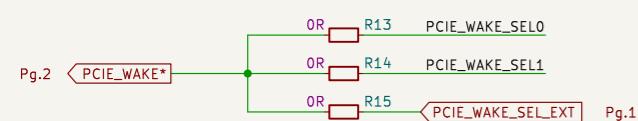
F



## PCIe0 Root Port / Endpoint mode selector

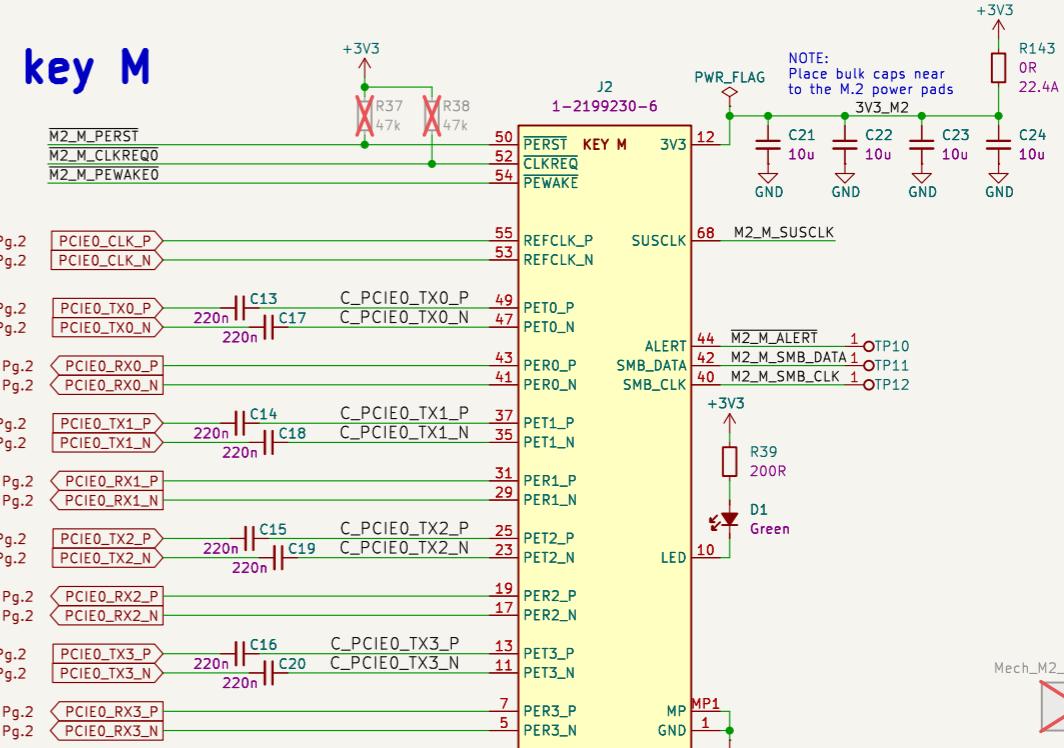


## M.2 PCIE\_WAKE selector

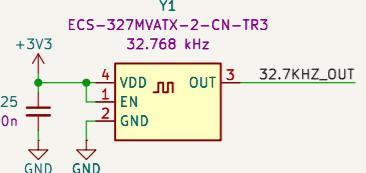


NOTE about PCIe 0 role switching:  
For details, refer to the PCIe section of  
'Jetson Orin NX Series Product Design Guide'  
<https://developer.nvidia.com/jetson-orin-nx-series-design-guide>

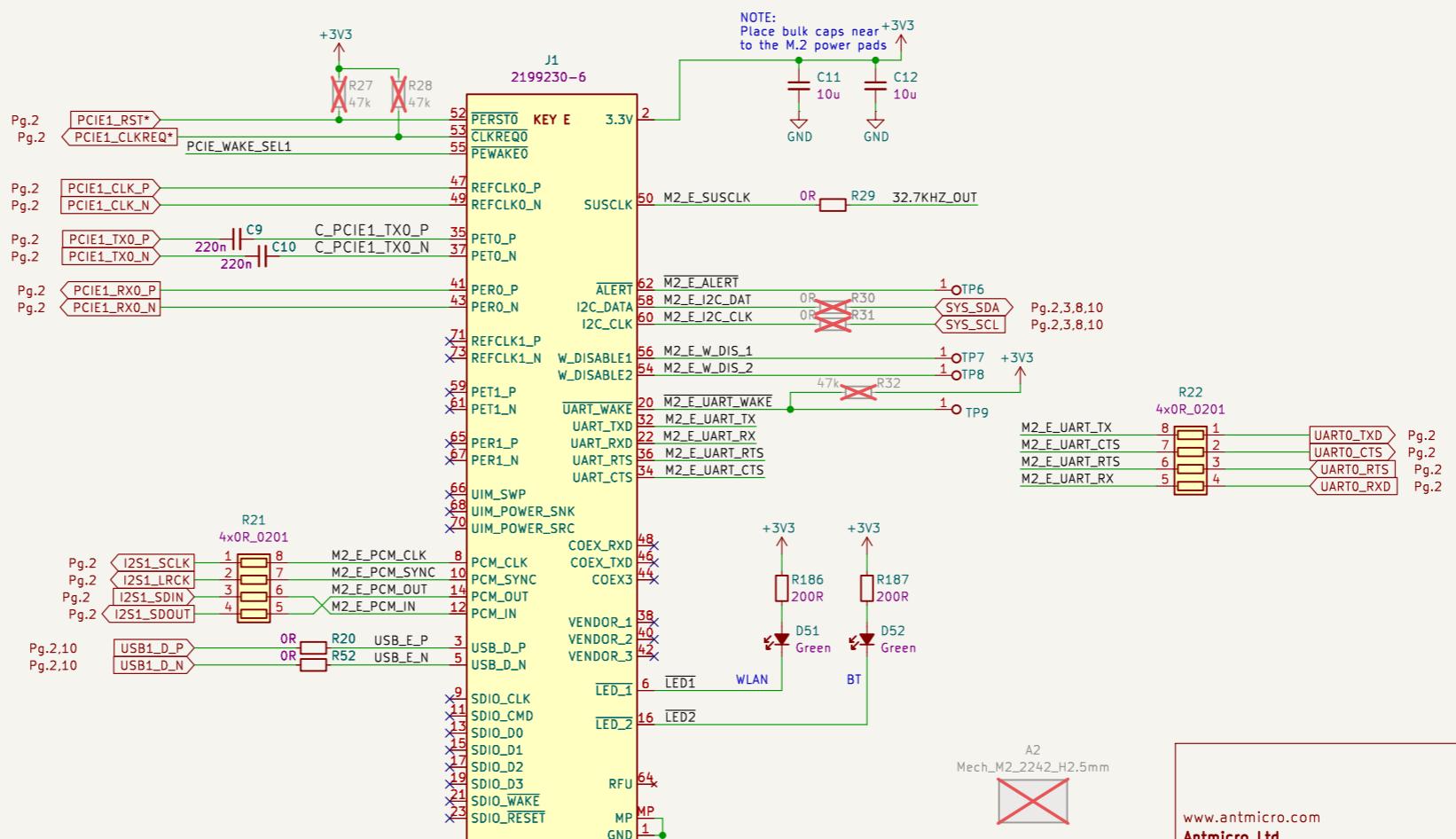
## PCIe0 1x4 key M



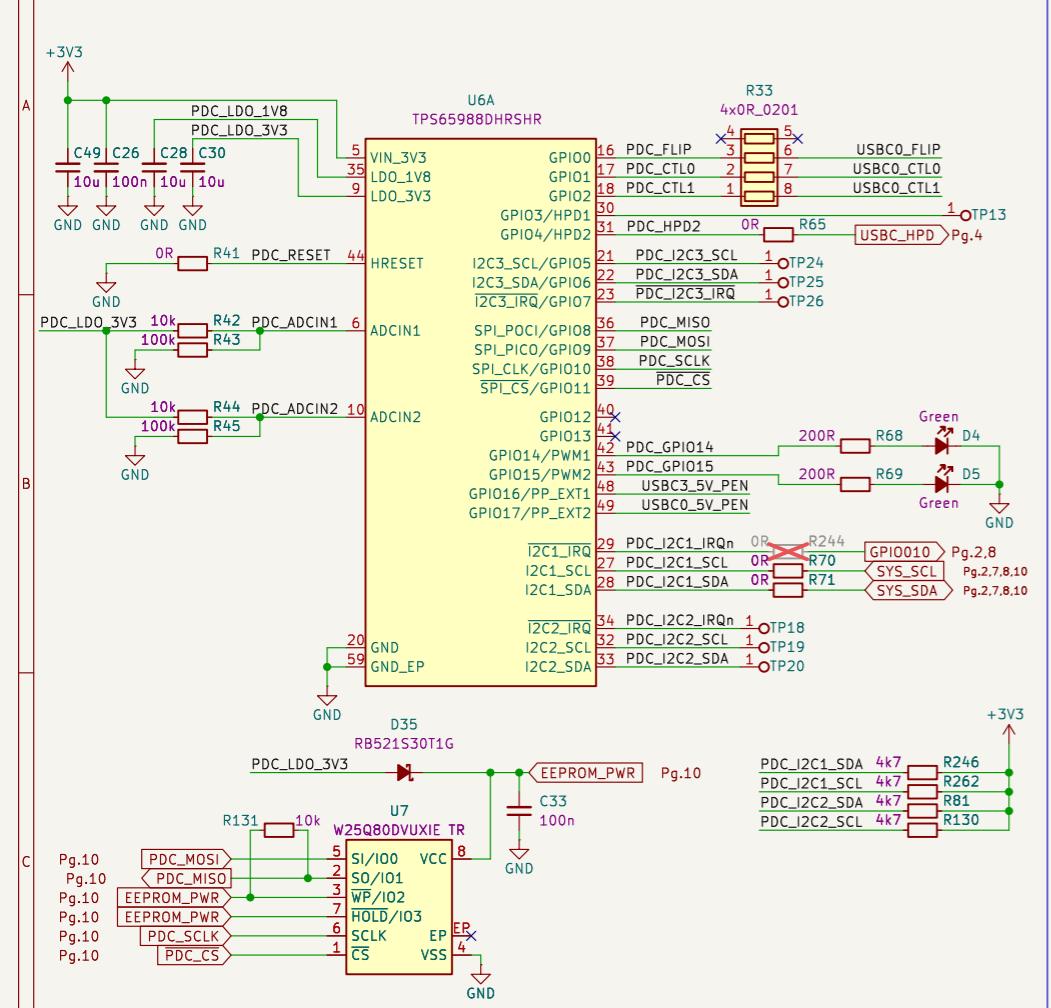
## SUSCLK SOURCE



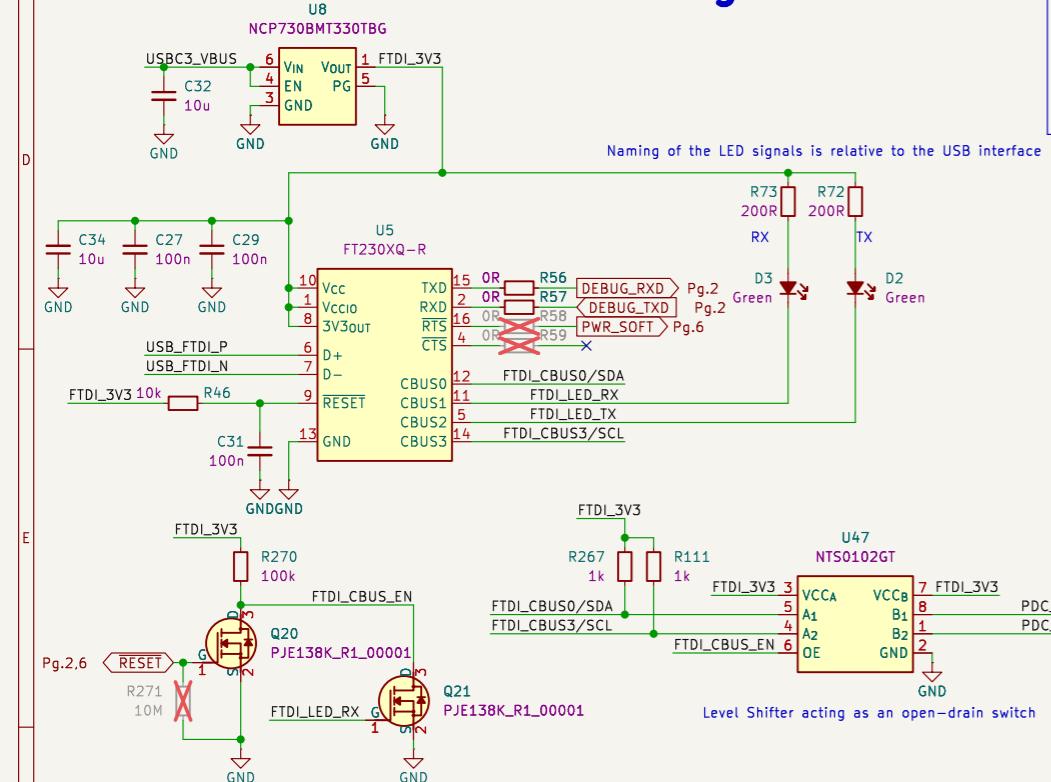
## PCIe1 1x1 key E



# USB PD Controller

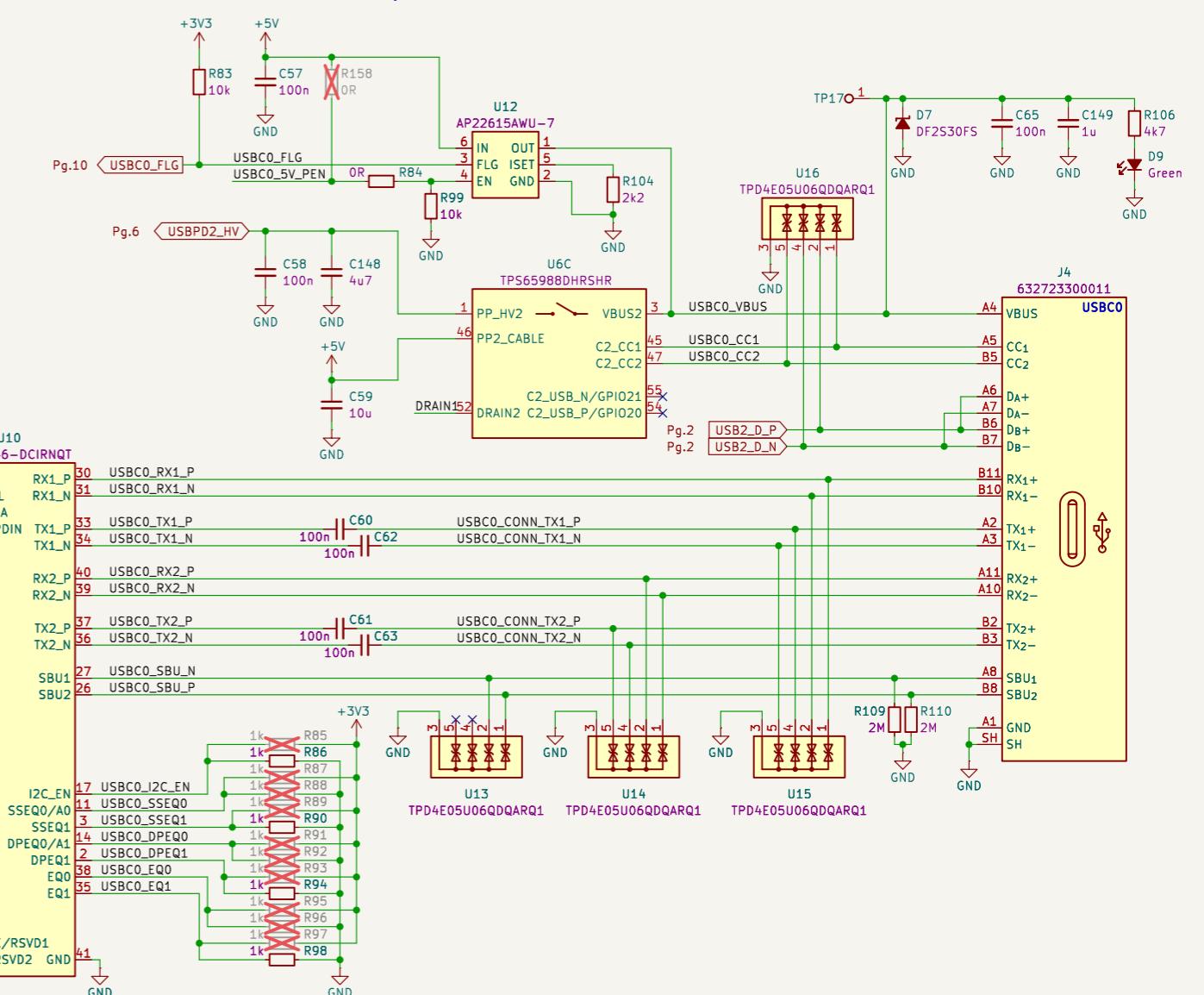


# USB–UART Bridge



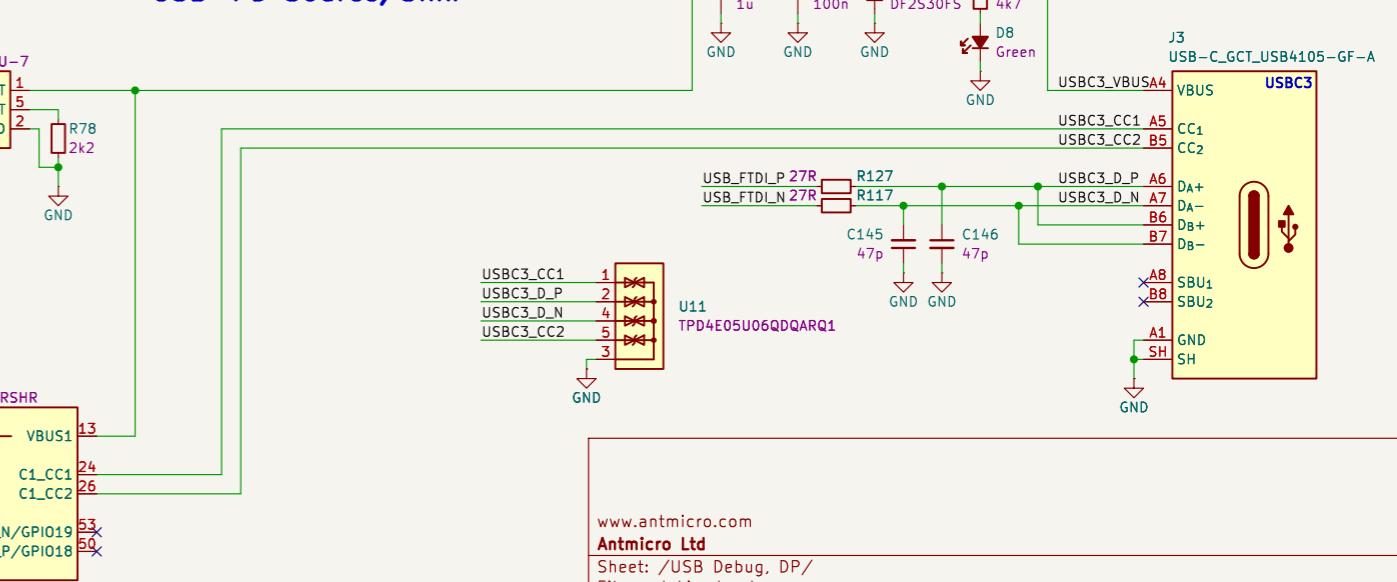
## USB-C 0 Display Port alt mode

USB-PD Source/Sink



Debug USB-C 3

USB-PD Source/Sink



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Sheet: /USB Debug, DP/

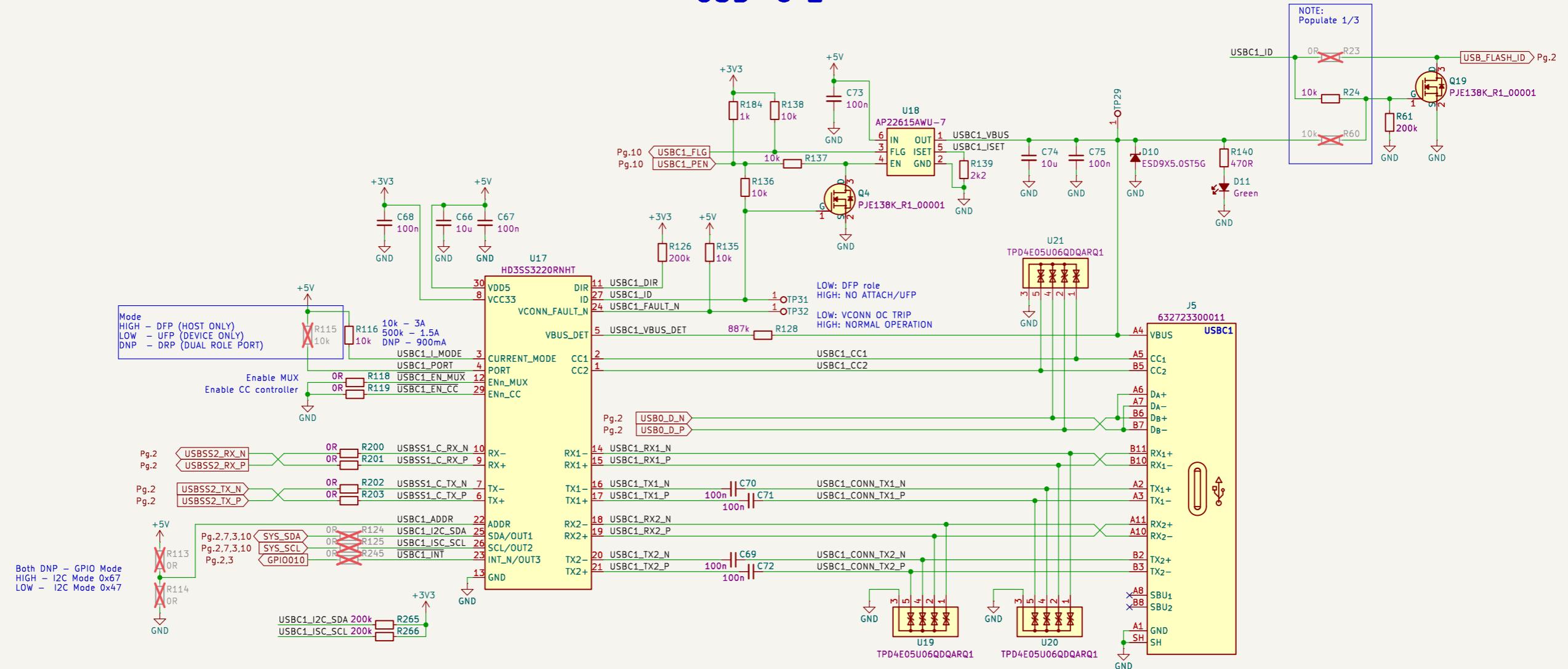
File: usb.kicad\_sch

Title: Jetson Urin Baseboard

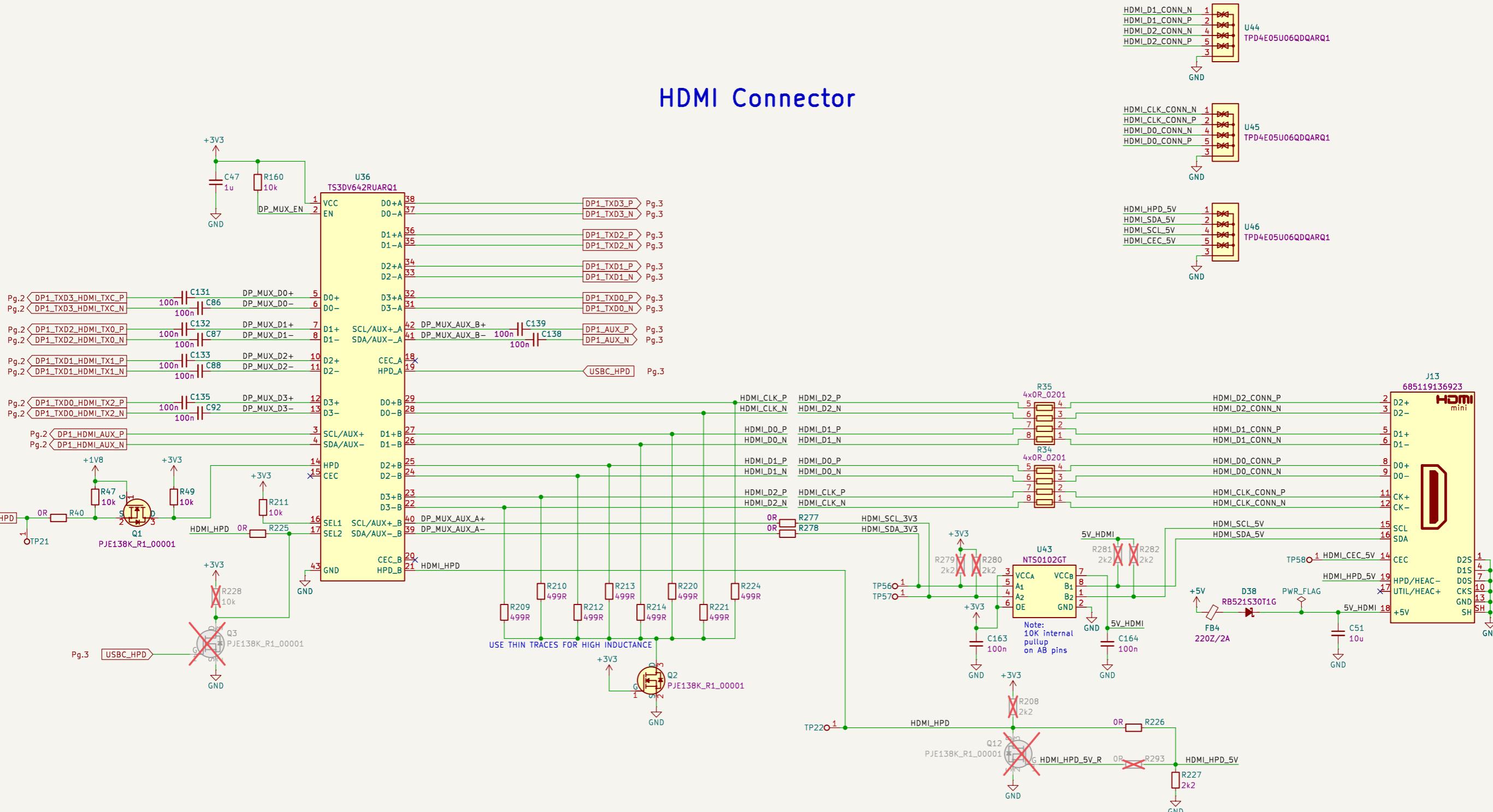
KiCad EDA 8.0.5

Rev: 1.2.3:43fea  
Id: 4/10

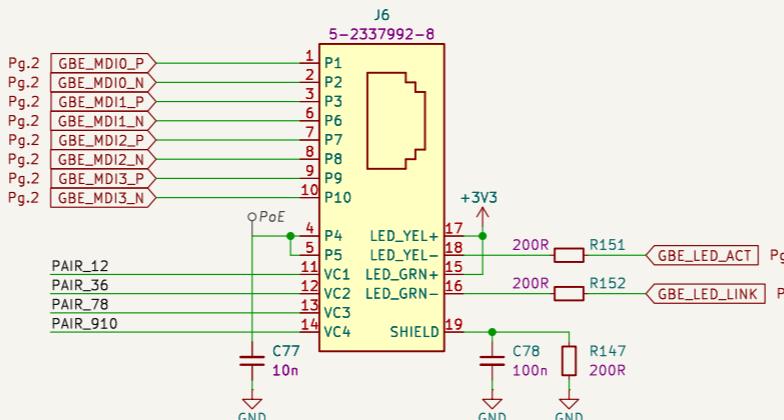
# USB-C 1



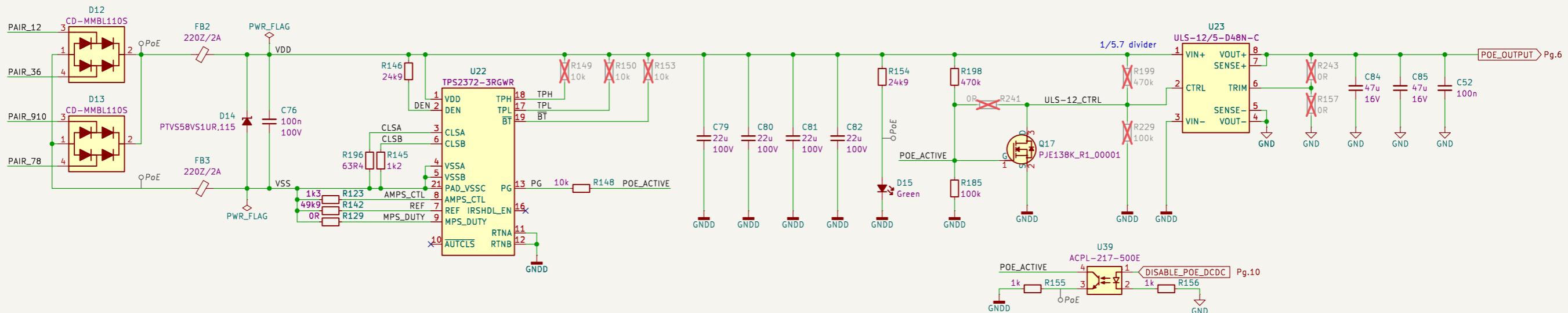
## HDMI Connector

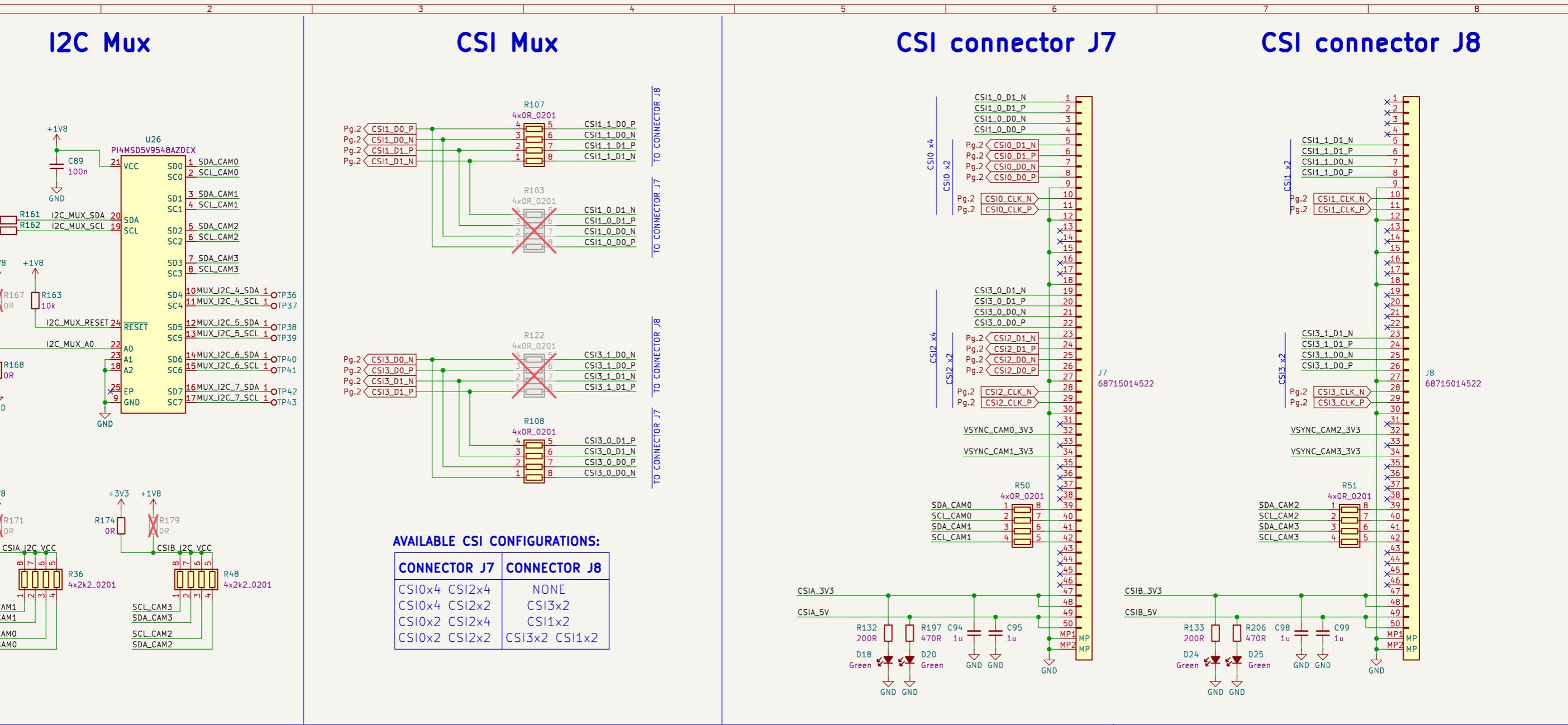


## Ethernet Connector

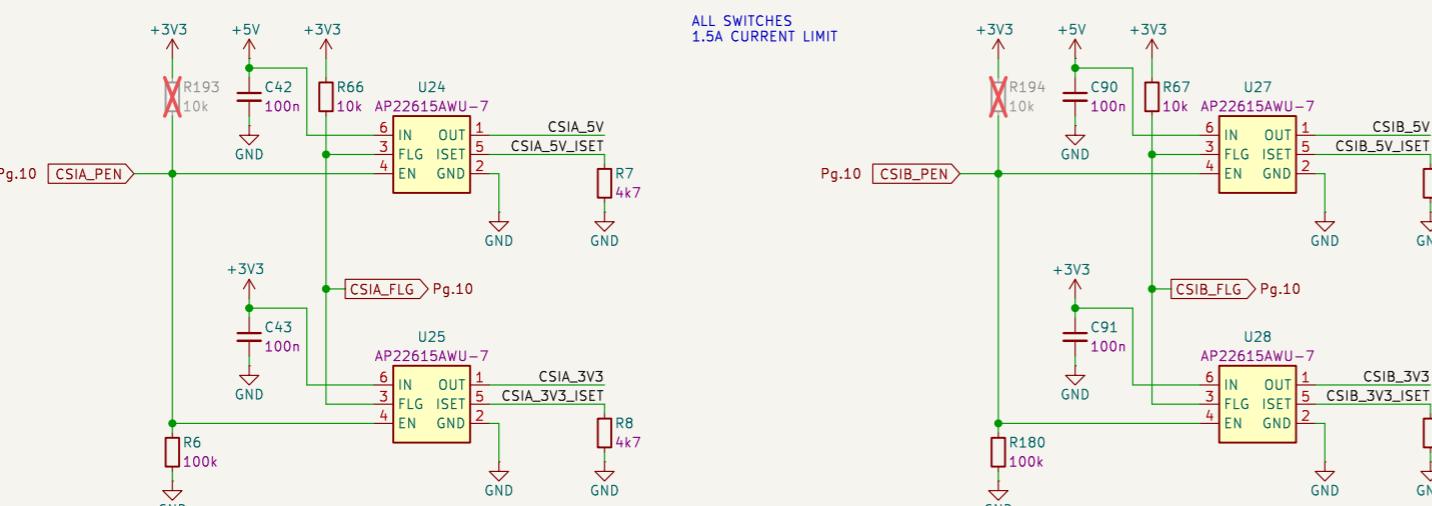


## Power over Ethernet

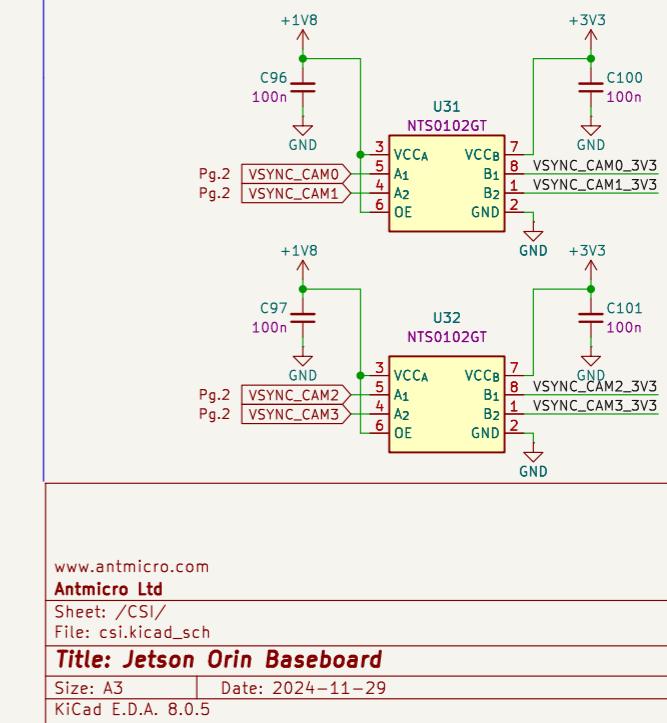




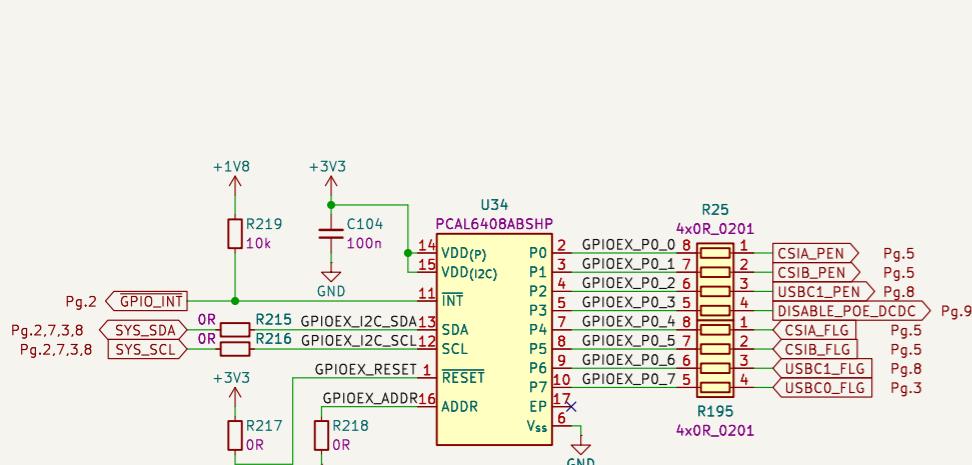
## Power switches



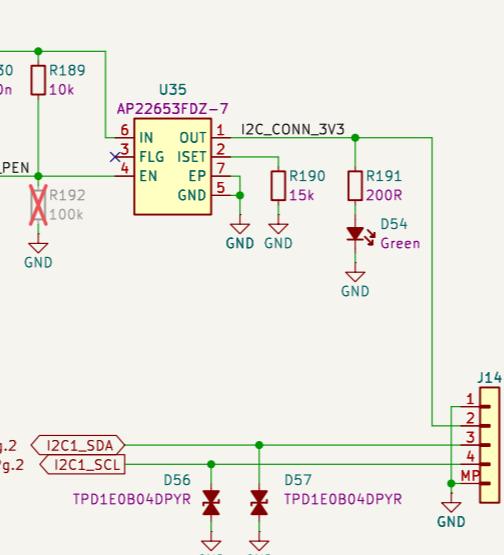
## Level shifters



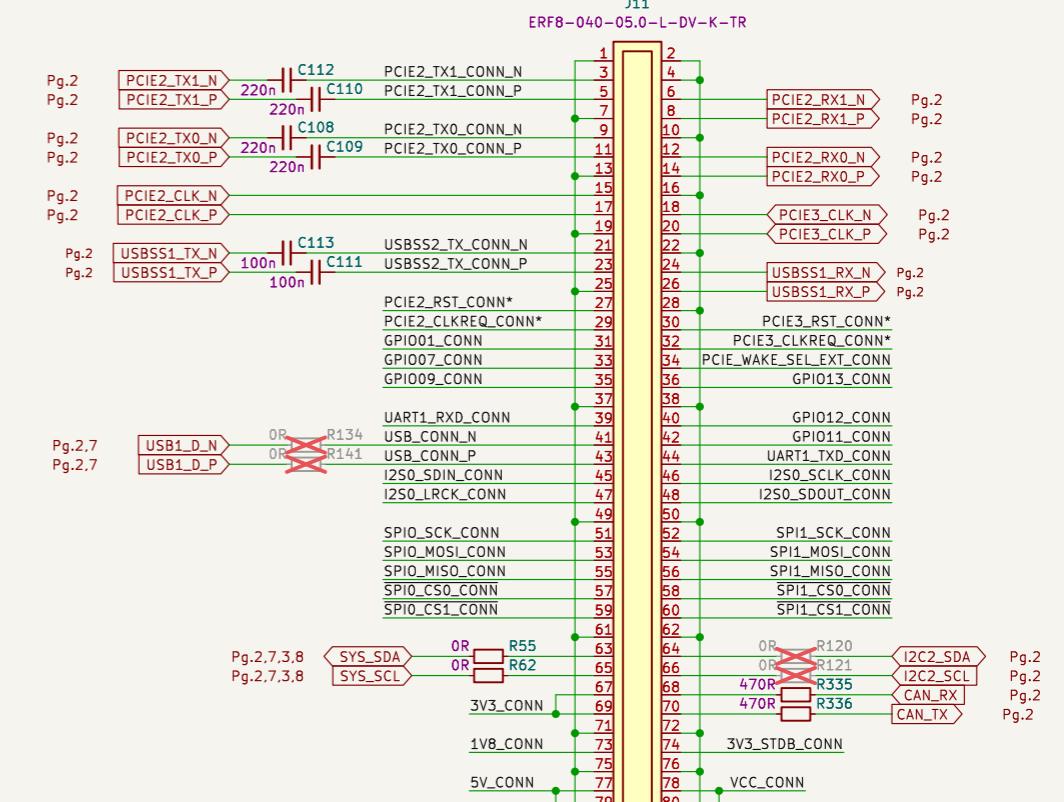
## GPIO expander



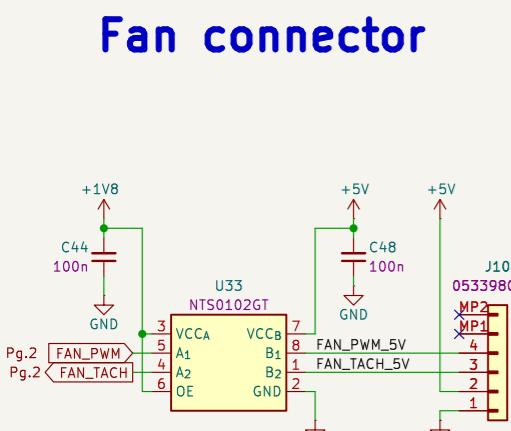
## I2C connector



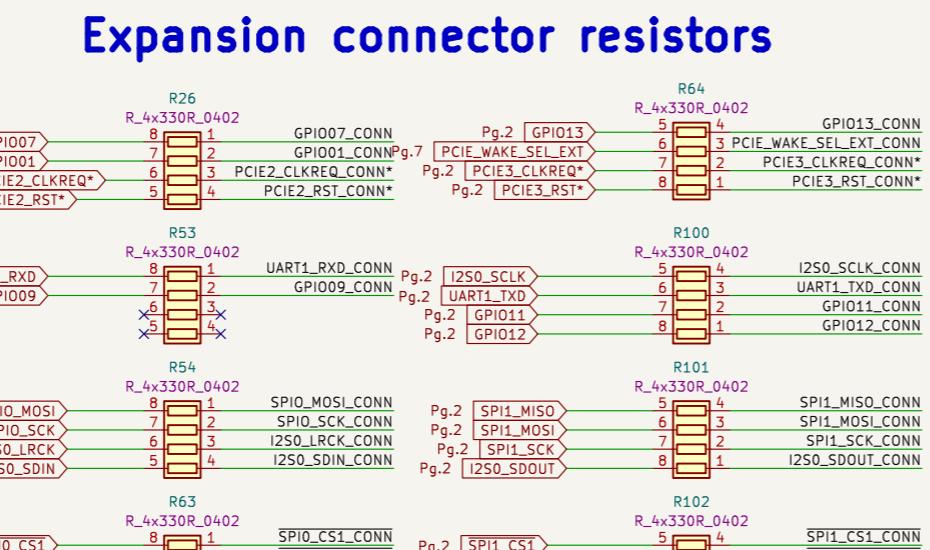
## Expansion connector



## Fan connector

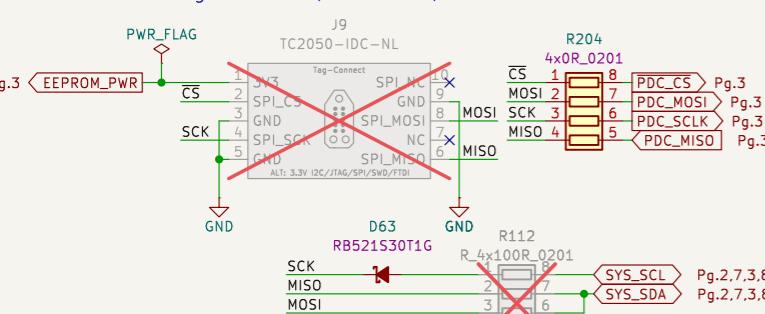


## Expansion connector resistors

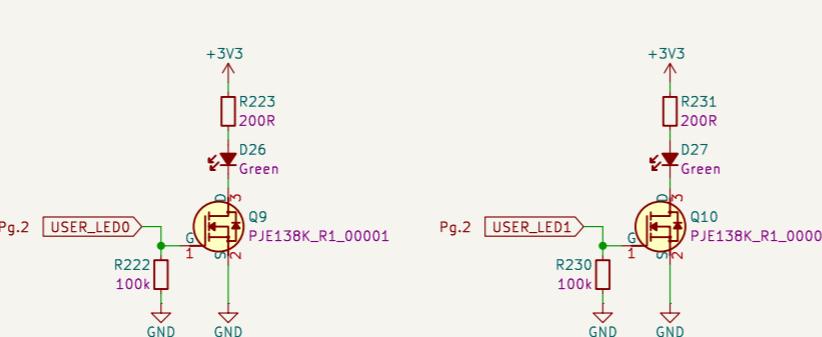


## Debug connector

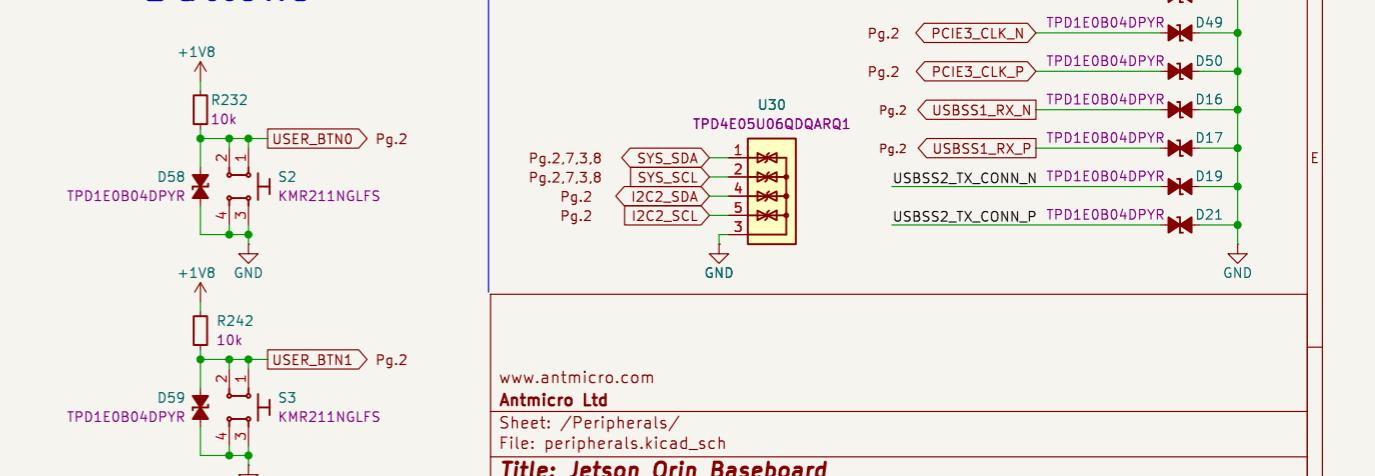
pinout compatible with  
www.github.com/antmicro/ftdi-toolkit

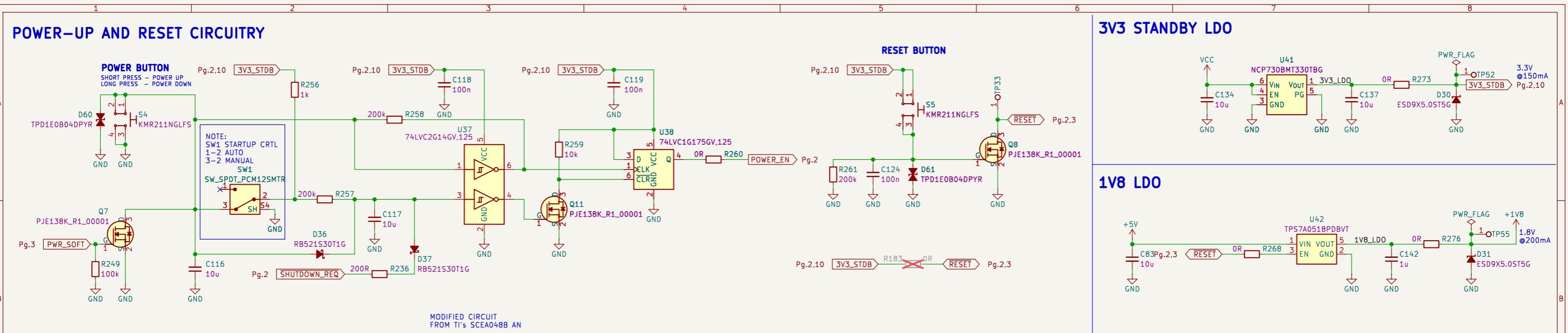


## LED indicators

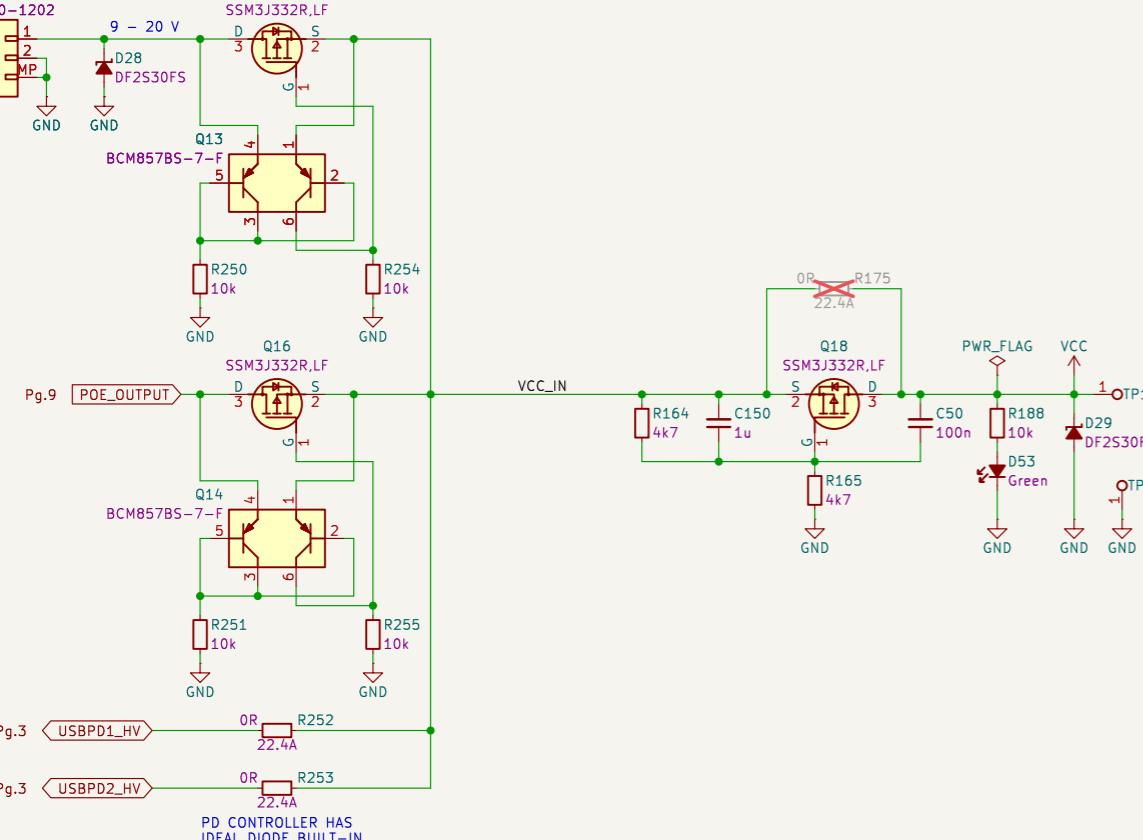


## Buttons

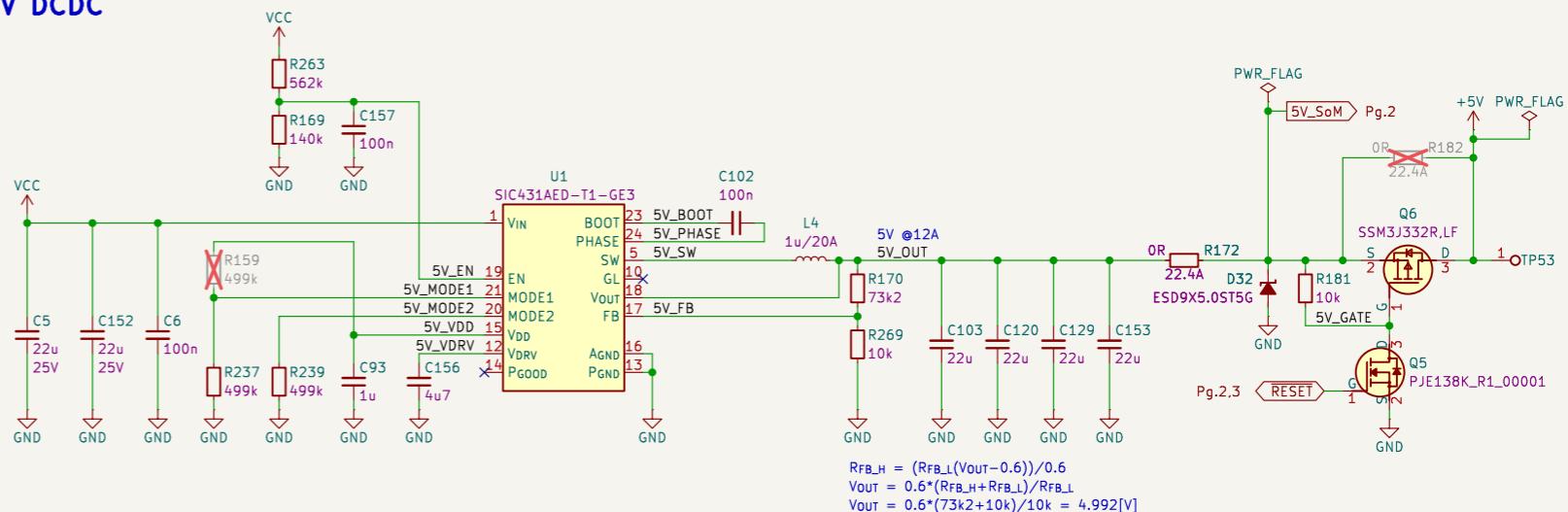




## INPUT SELECTOR AND SOFT START



5V DCDC



3V3 DCDC

