

1 2 3 4 5 6 7 8

Jetson Orin Baseboard

github.com/antmicro/jetson-orin-baseboard

A

A

B

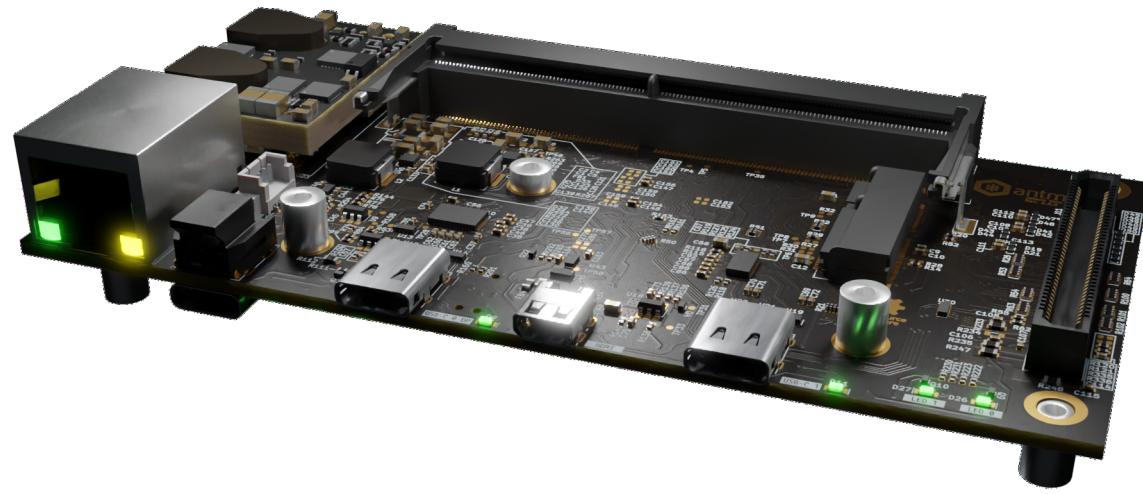
B

C

C

D

D



File: som.kicad_sch



File: m-2.kicad_sch



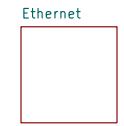
File: usb.kicad_sch



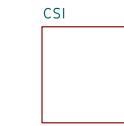
File: usb3.kicad_sch



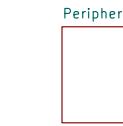
File: hdmi.kicad_sch



File: ethernet.kicad_sch



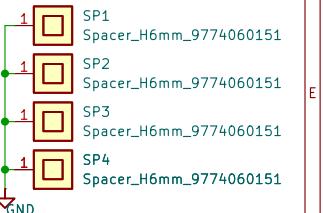
File: csi.kicad_sch



File: peripherals.kicad_sch



File: supply.kicad_sch



www.antmicro.com
Antmicro Ltd

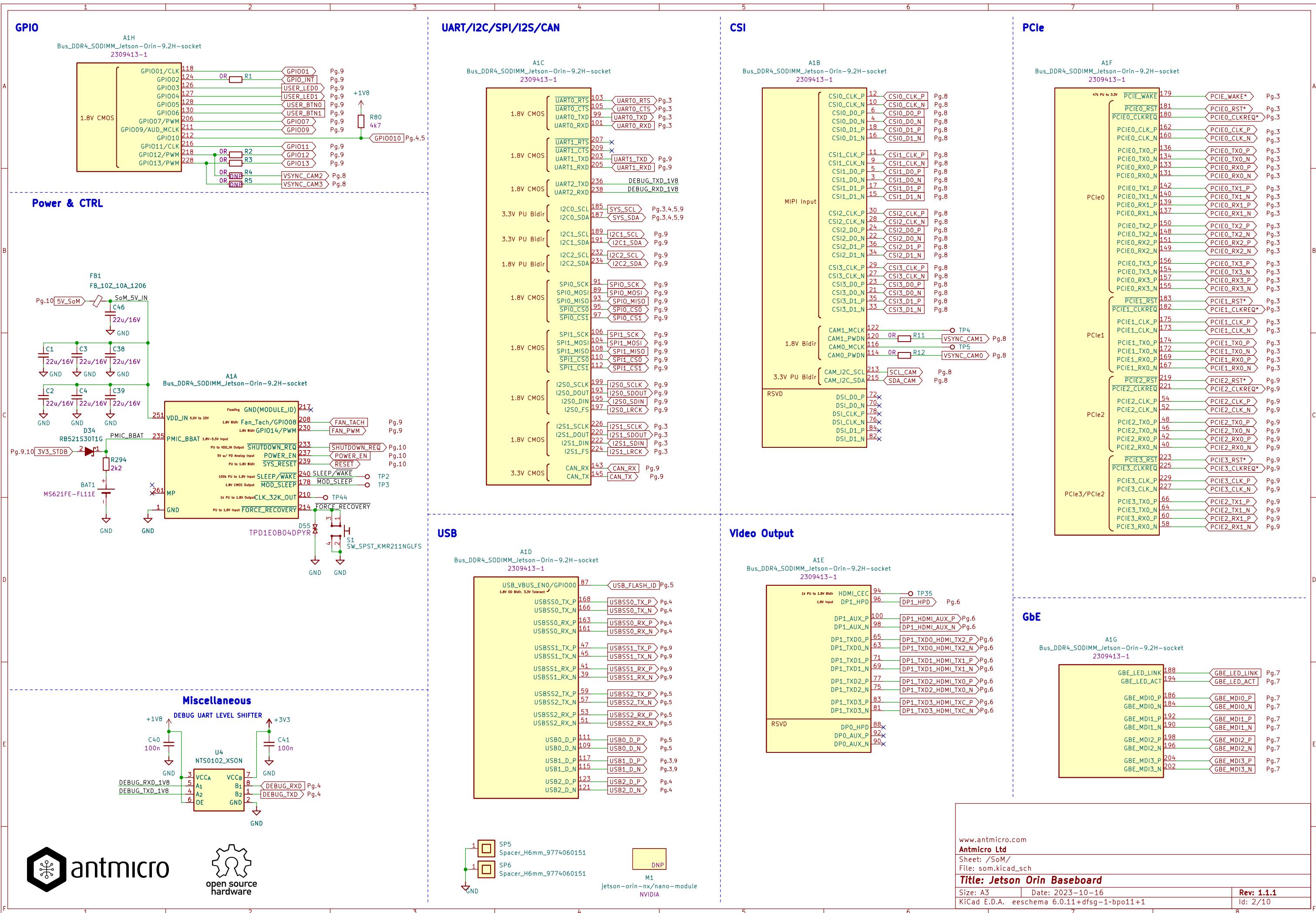
Sheet: / File: jetson-orin-baseboard.kicad_sch

Title: Jetson Orin Baseboard

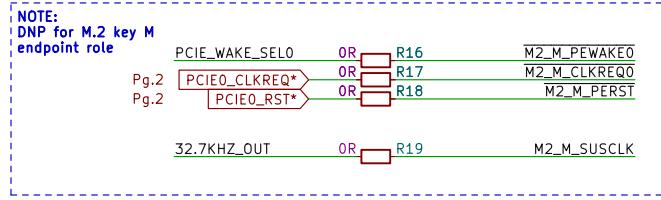
Size: A3 Date: 2023-10-16
KiCad E.D.A. eeschema 6.0.11+dfsg-1-bpo11+1

Rev: 1.1.1 Id: 1/10

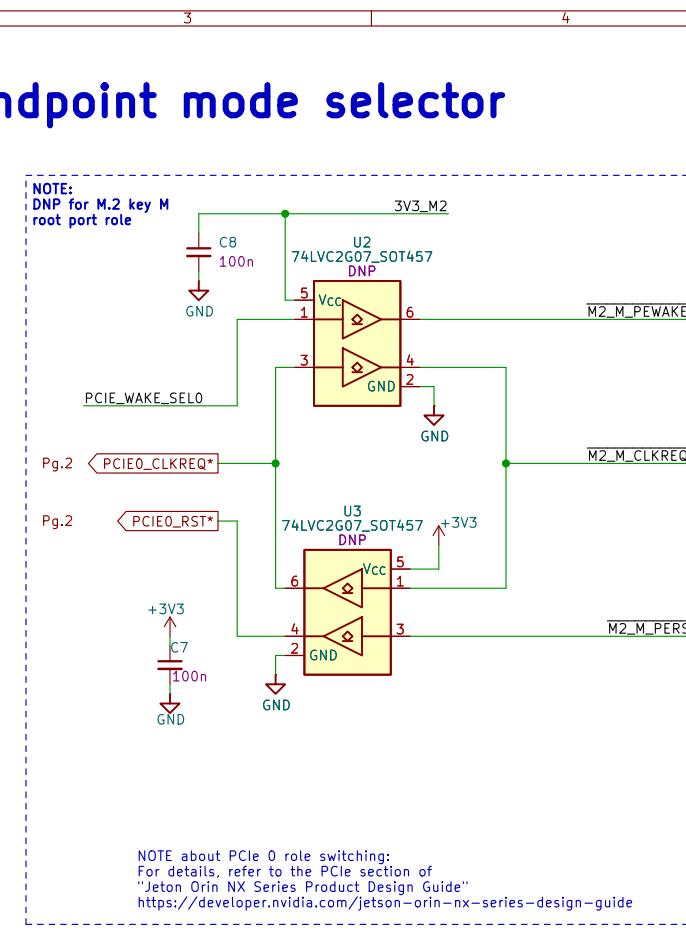
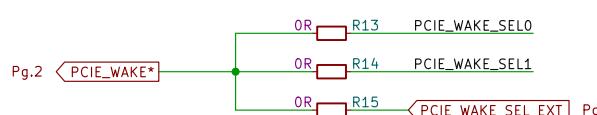
1 2 3 4 5 6 7 8



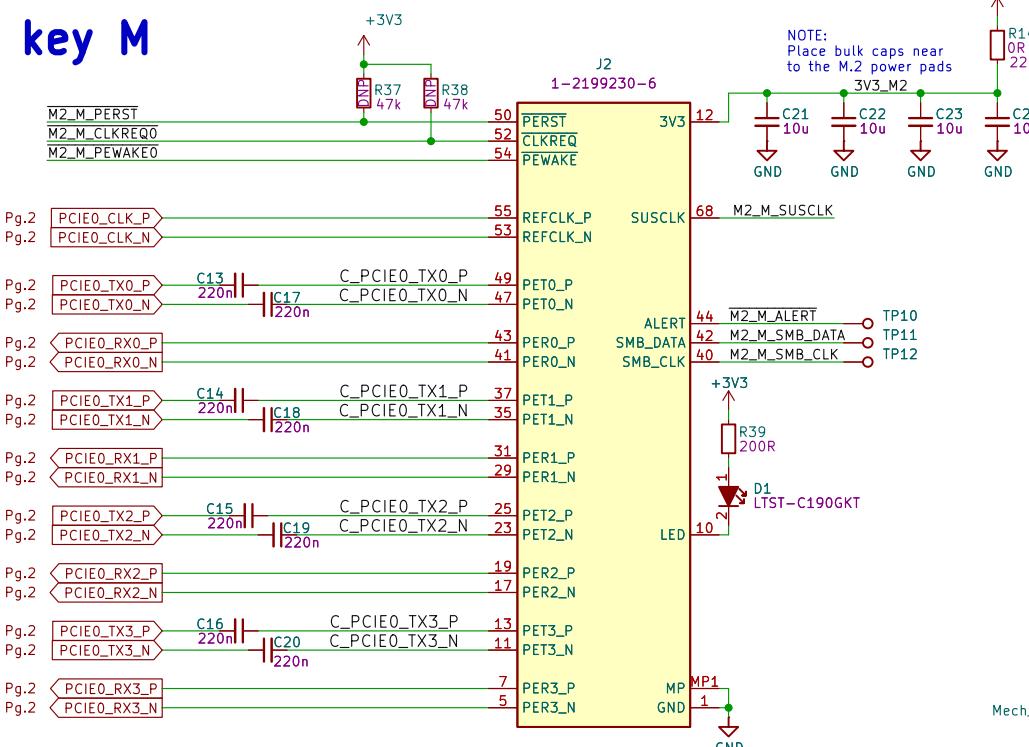
PCIe0 Root Port / Endpoint mode selector



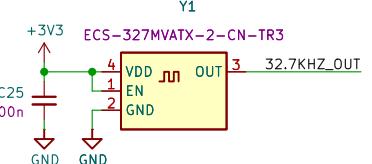
M.2 PCIE_WAKE selector



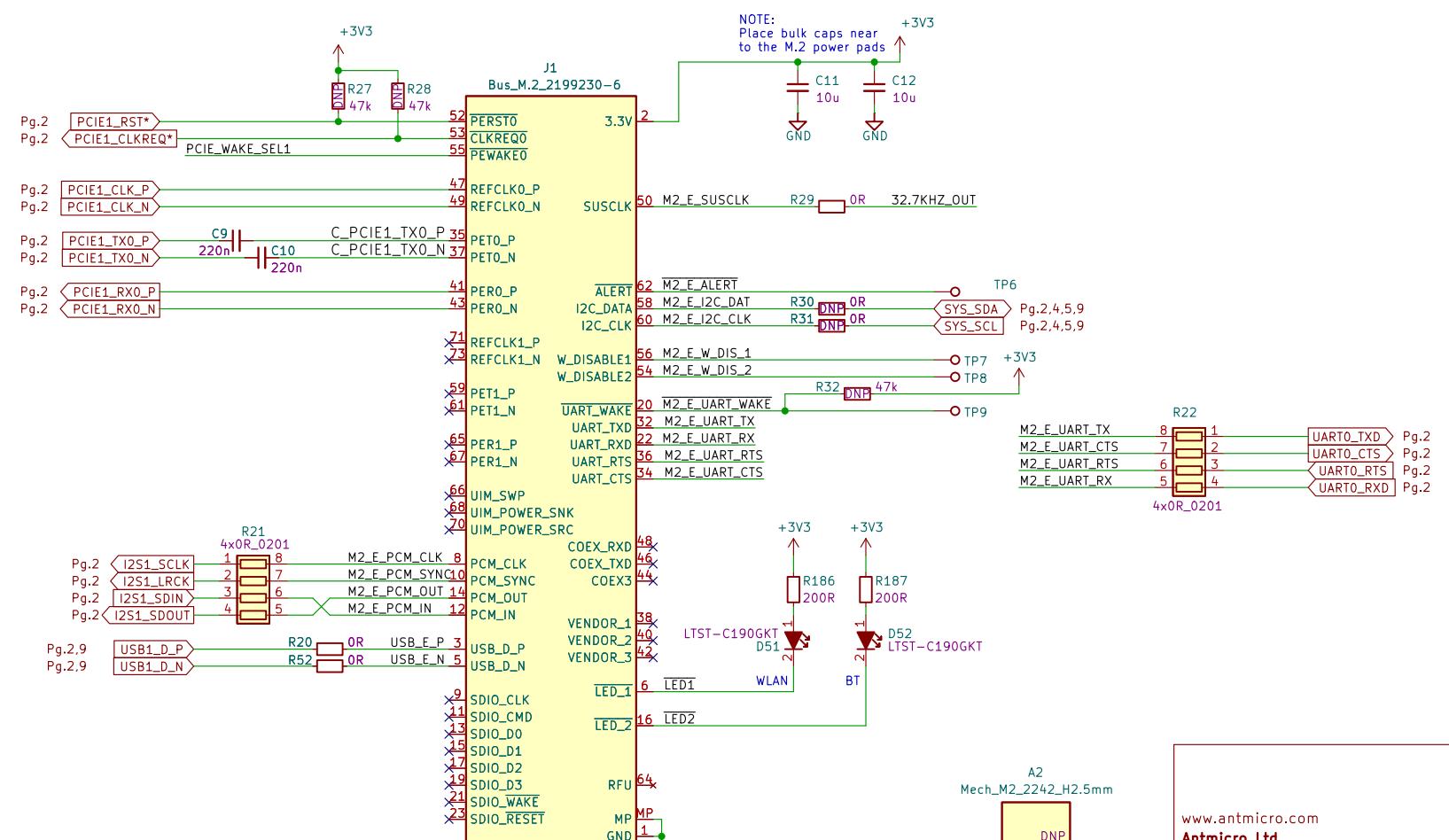
PCIe0 1x4 key M



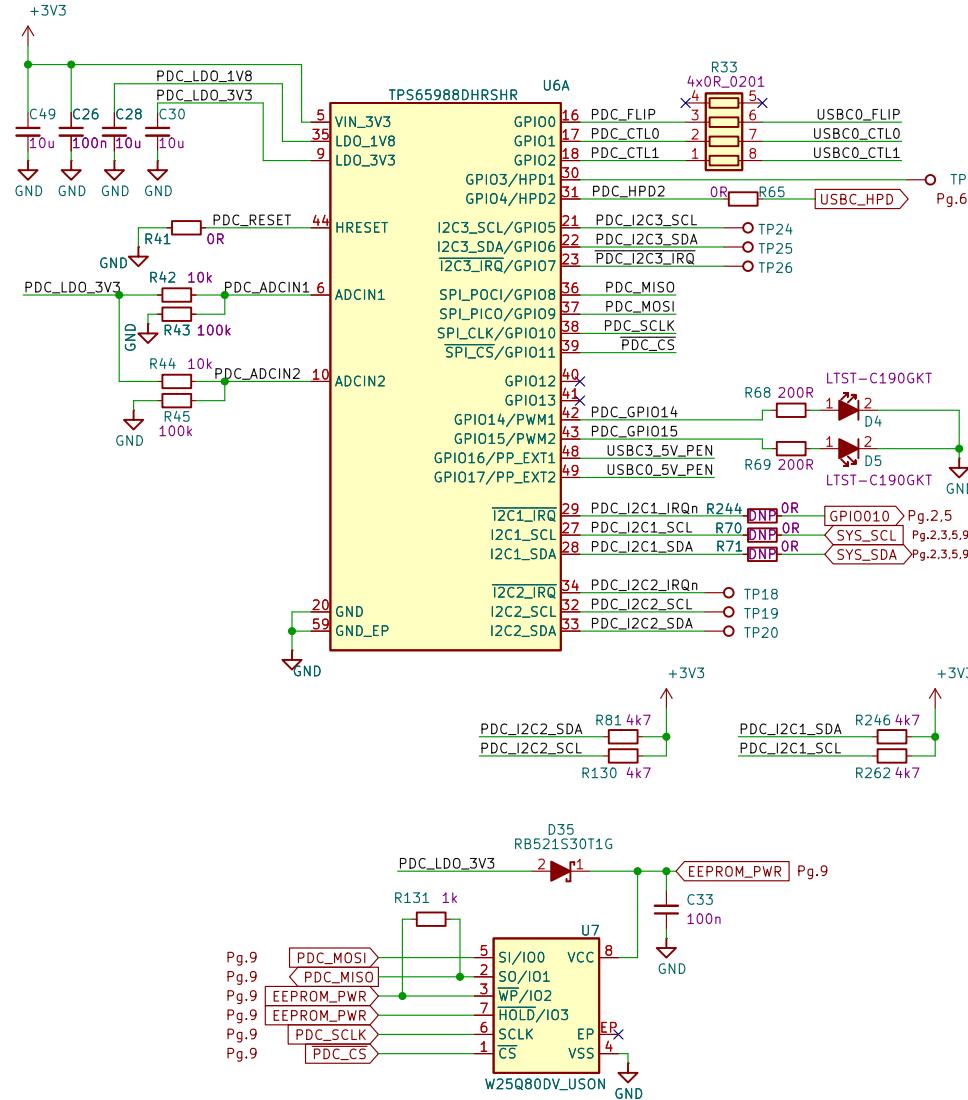
SUSCLK SOURCE



PCIe1 1x1 key E

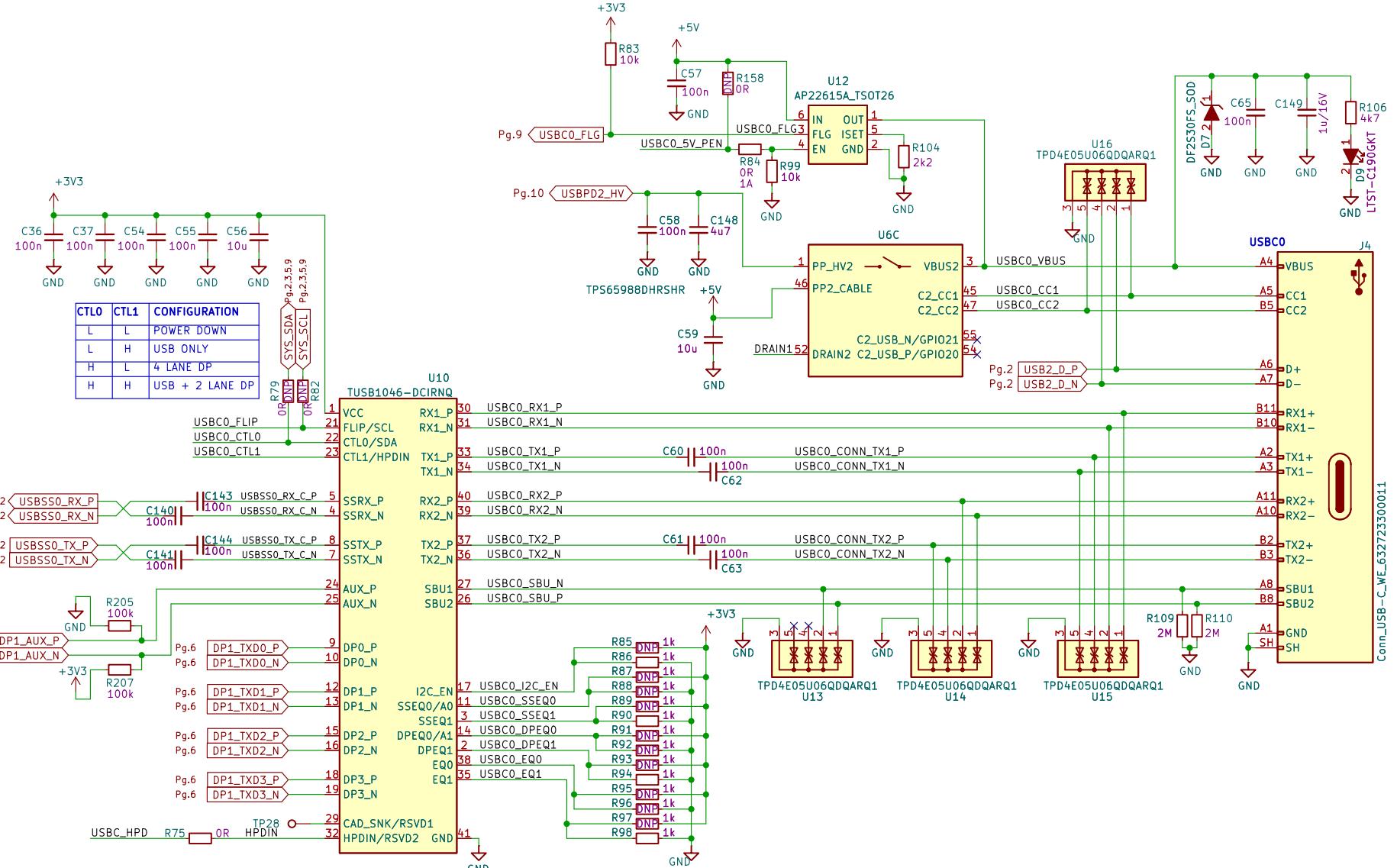


USB PD Controller

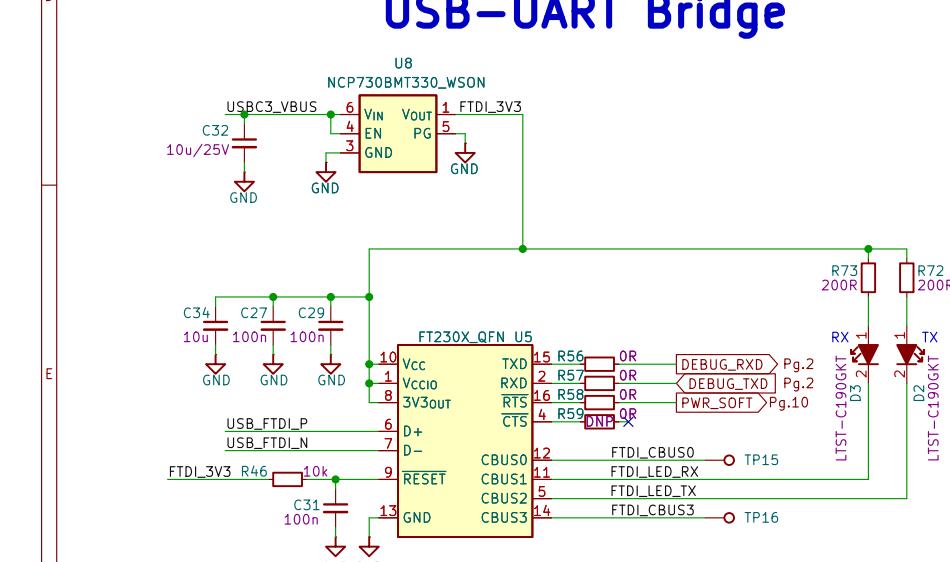


USB-C 0 Display Port alt mode

USB-PD Source/Sink

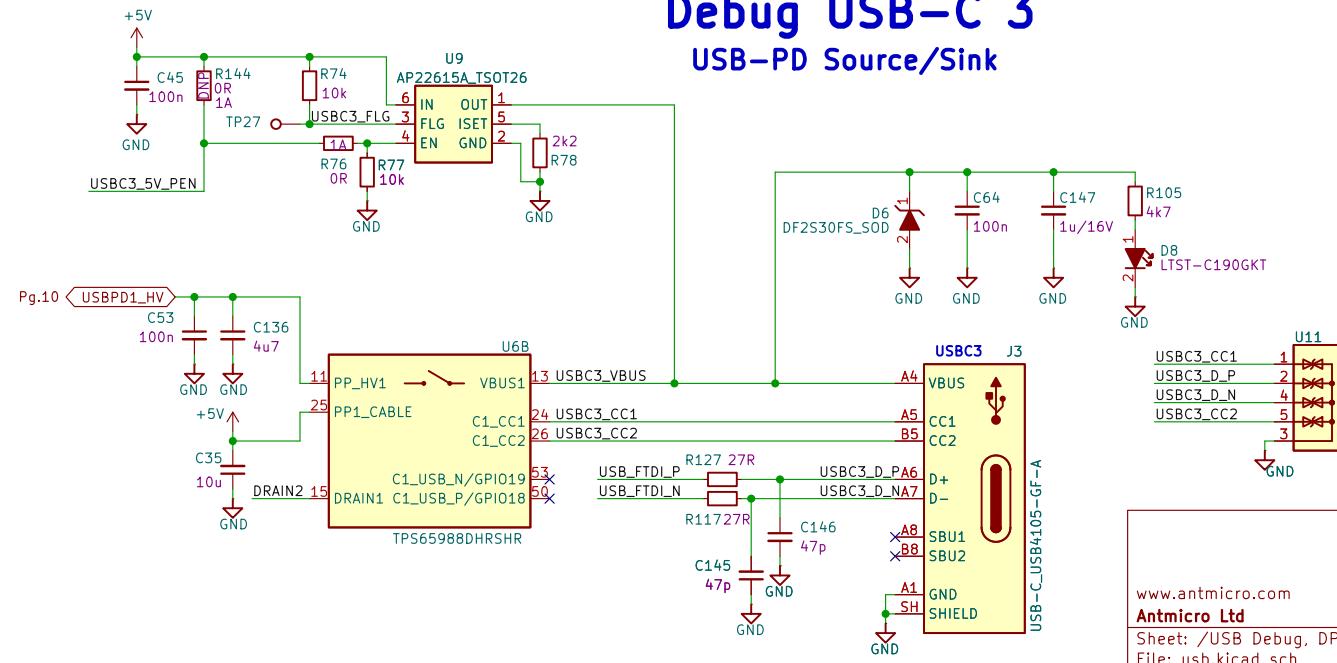


USB-UART Bridge

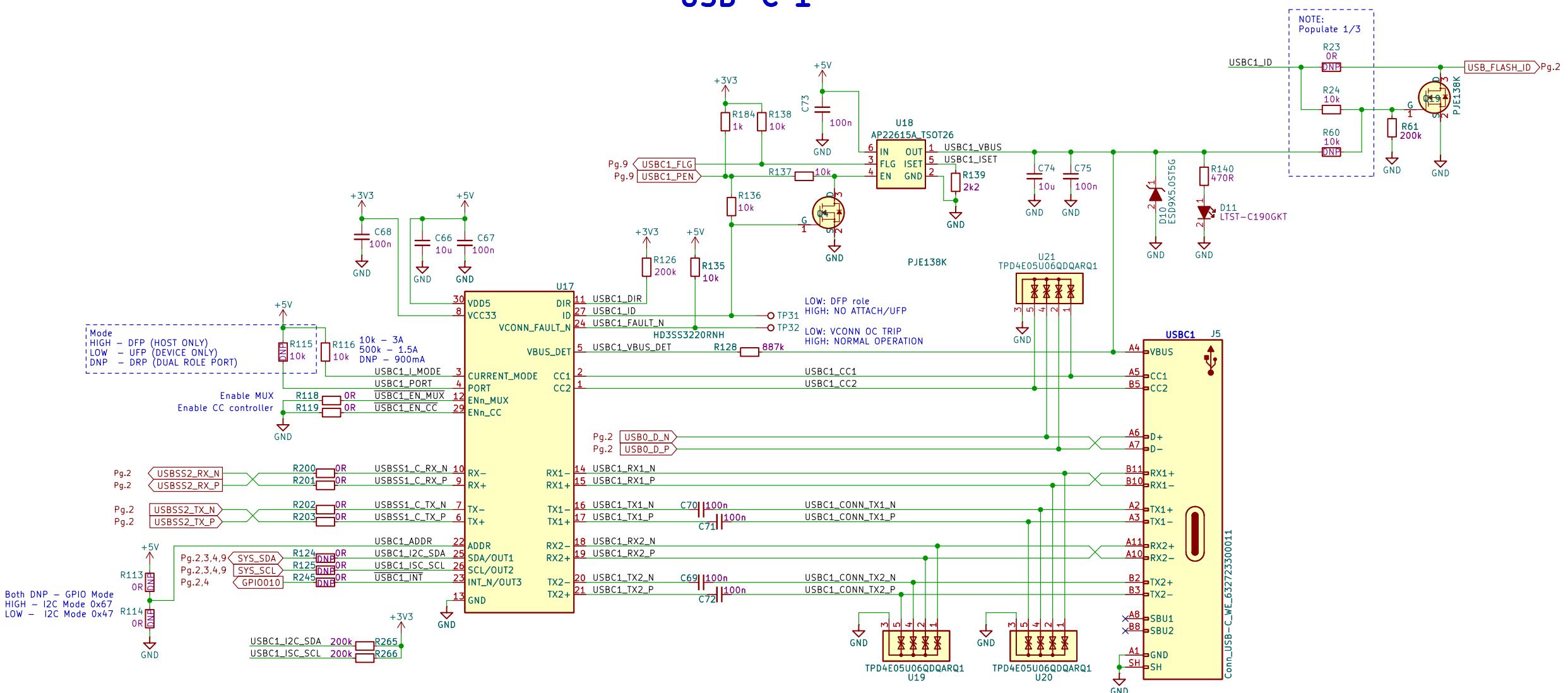


Debug USB-C 3

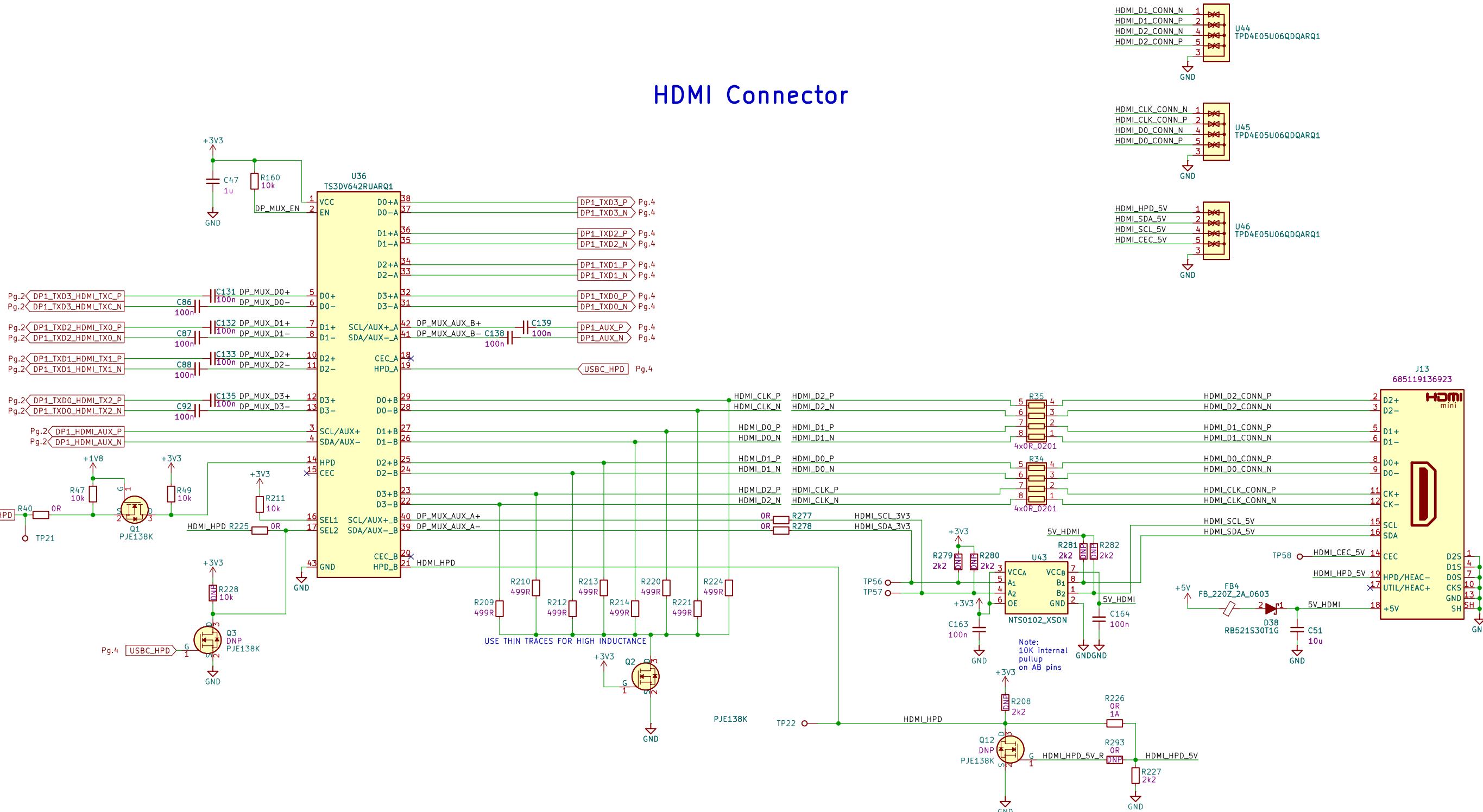
USB-PD Source/Sink



USB-C 1



HDMI Connector



www.antmicro.com

Antmicro Ltd

Sheet: /HDMI/

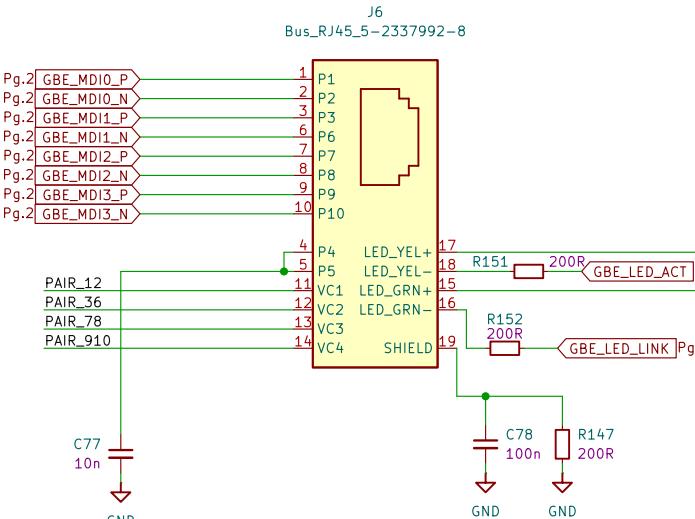
File: hdmi.kicad_sch

Title: Jetson Orin Baseboard

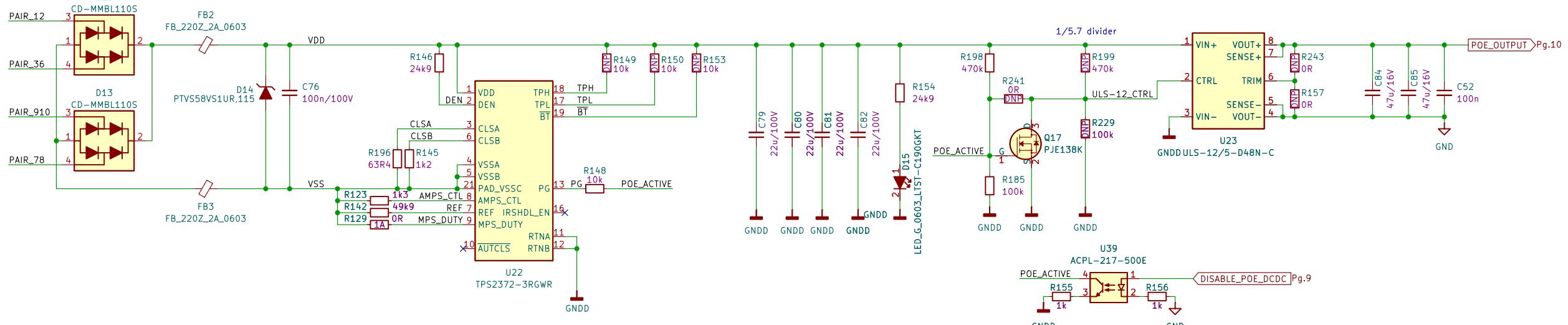
Size: A3 | Date: 2023-10-16
KiCad E.D.A. eeschema 6.0.11+dfsg-1-bpo11+1

Rev: 1.1.1 | Id: 6/10

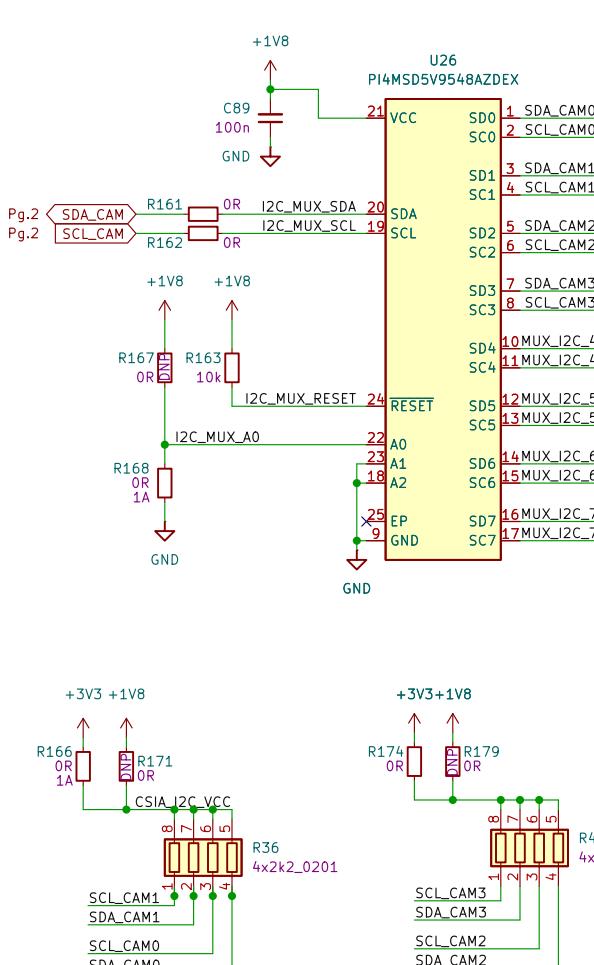
Ethernet Connector



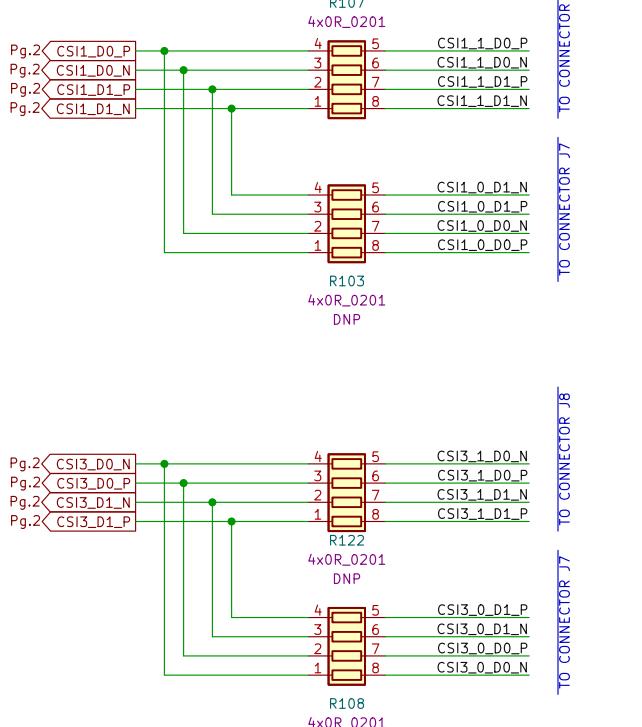
Power over Ethernet



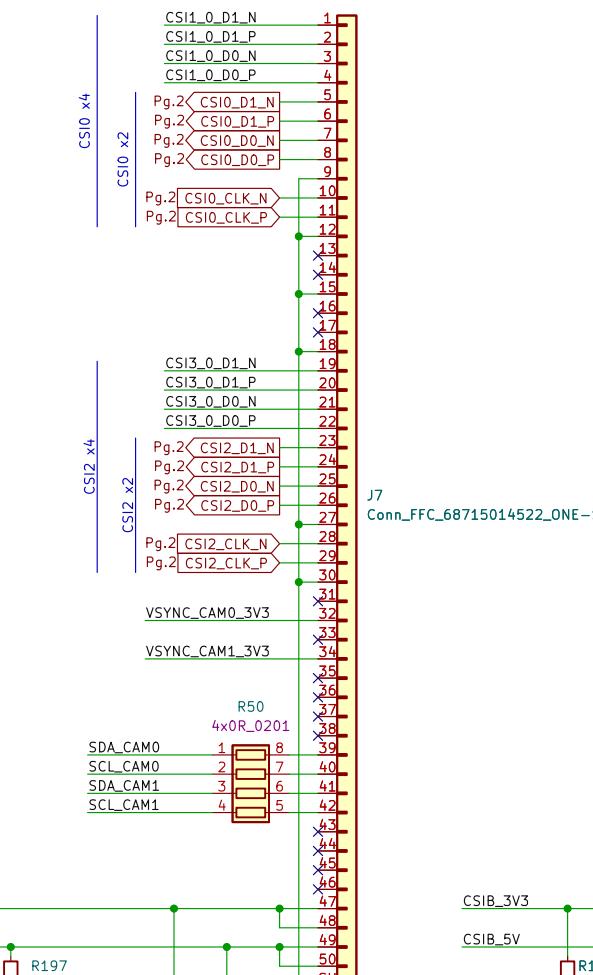
I2C Mux



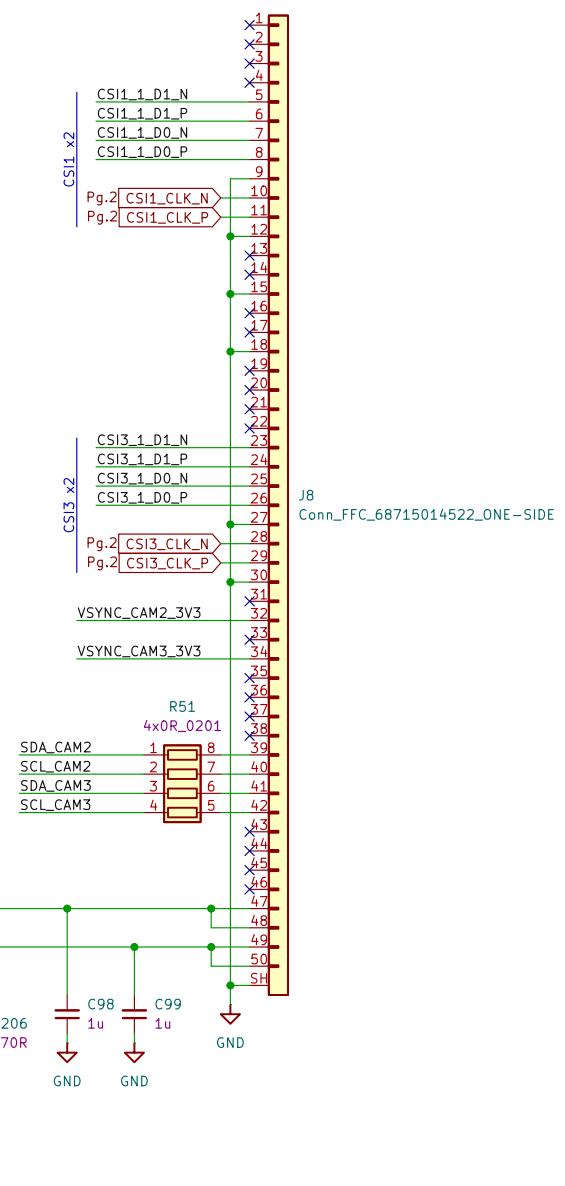
CSI Mux



CSI connector J7



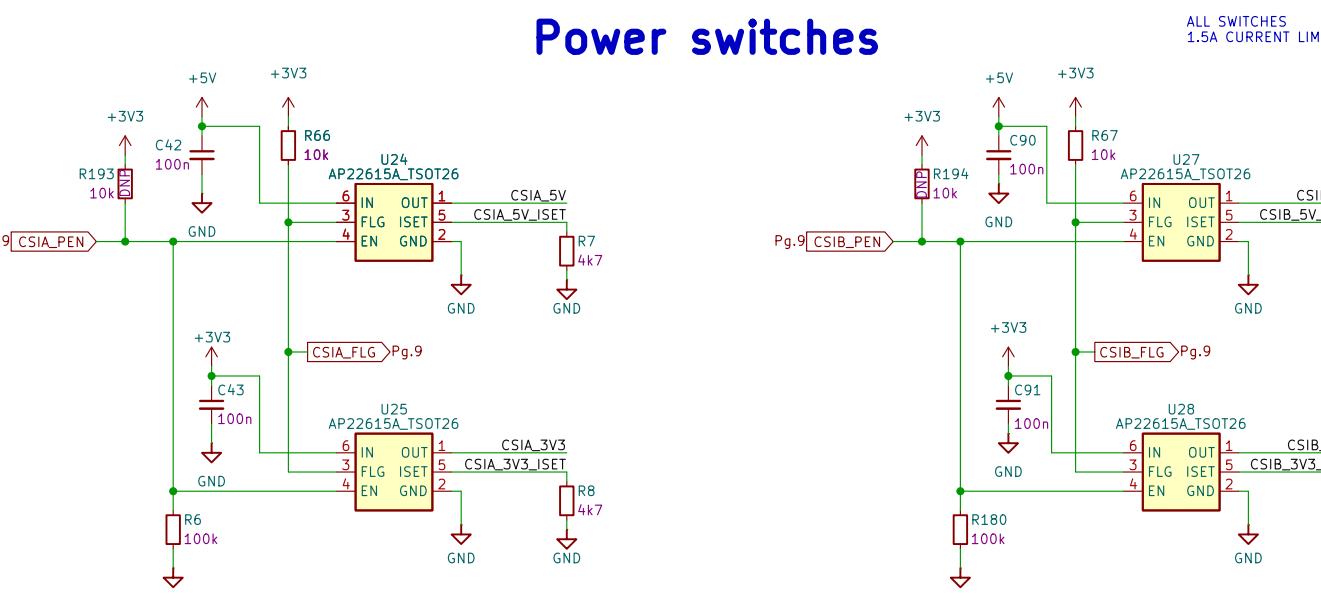
CSI connector J8



AVAILABLE CSI CONFIGURATIONS:

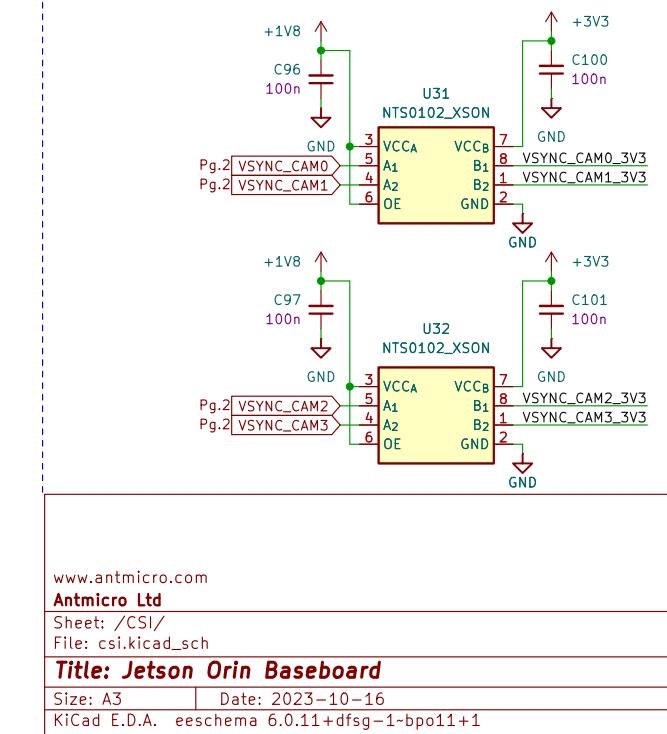
CONNECTOR J7	CONNECTOR J8
CSI0x4	CSI2x4
CSI0x4	CSI2x2
CSI0x2	CSI2x4
CSI0x2	CSI2x2
CSI3x2	CSI1x2

Power switches



ALL SWITCHES 1.5A CURRENT LIMIT

Level shifters



GPIO expander

I2C connector

Expansion connector

Fan connector

Expansion connector resistors

Debug connector

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

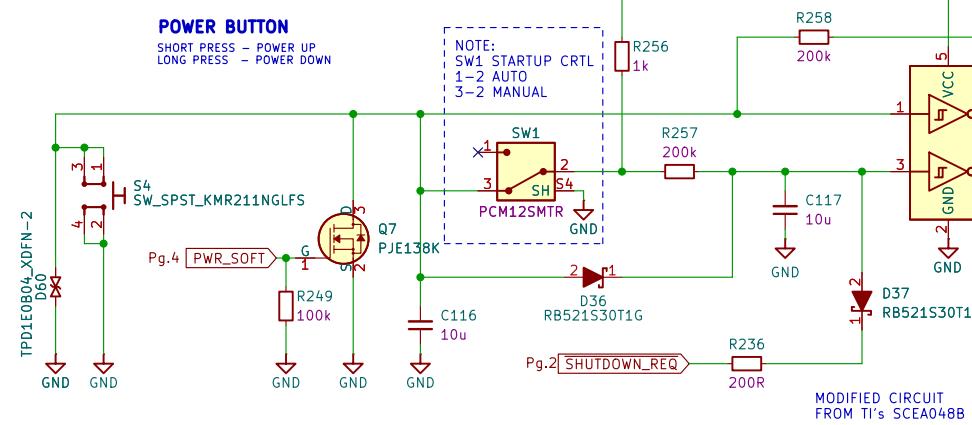
LED indicators

Buttons

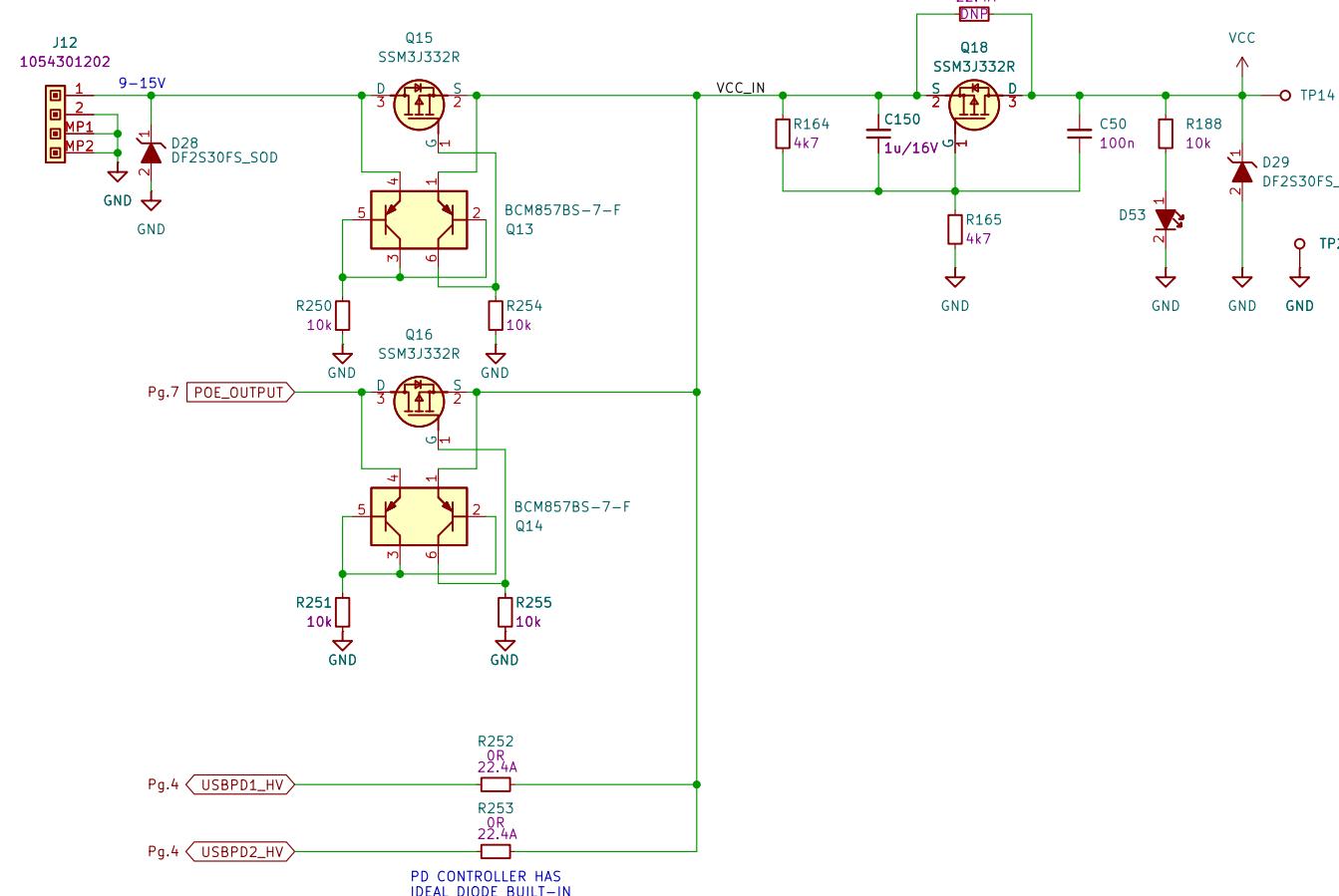
POWER-UP AND RESET CIRCUITY

POWER BUTTON

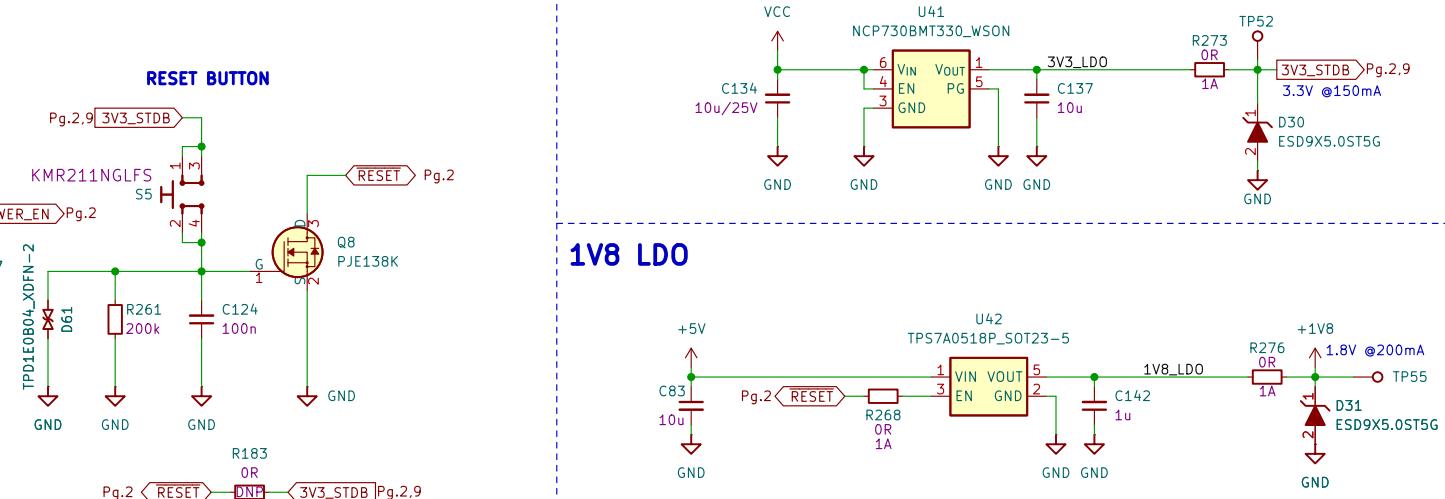
SHORT PRESS - POWER UP
LONG PRESS - POWER DOWN



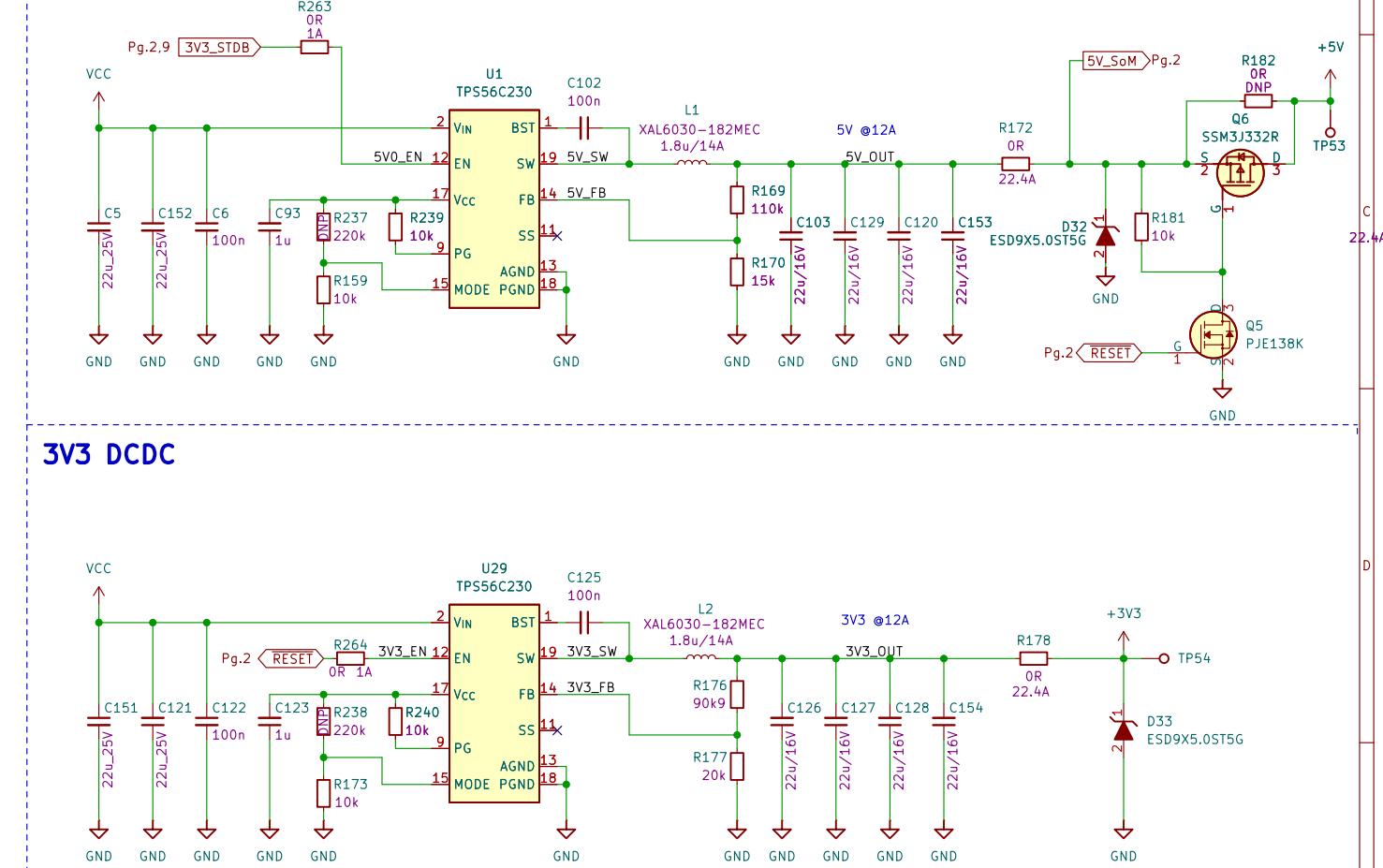
INPUT SELECTOR AND SOFT START



3V3 STANDBY LDO



5V DCDC



3V3 DCDC

