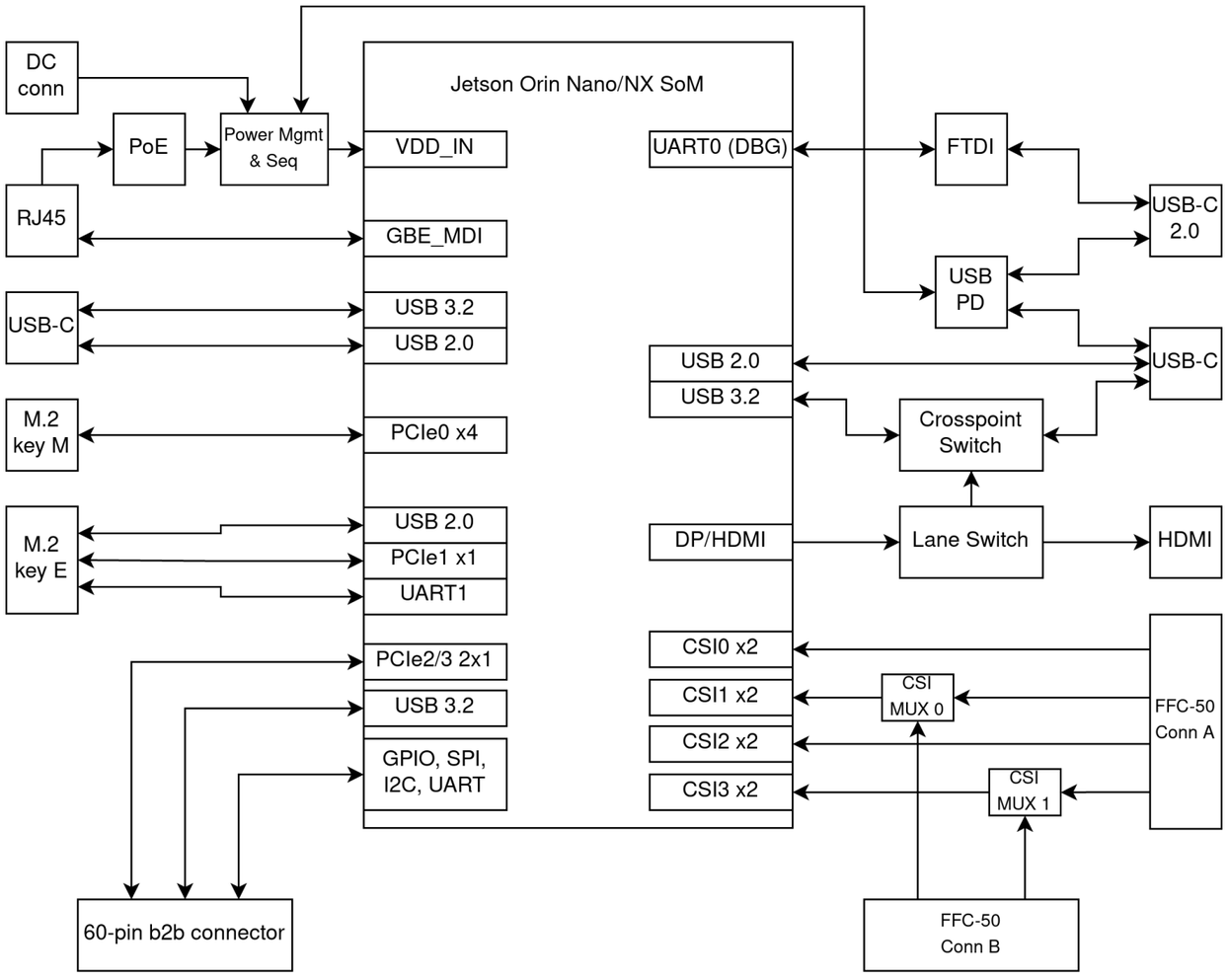

SoM — File: som.kicad_sch

M.2 — File: m-2.kicad_sch

USB Debug, DP — File: usb.kicad_sch

USB3 — File: usb3.kicad_sch

HDMI — File: hdmi.kicad_sch

Ethernet — File: ethernet.kicad_sch

CSI — File: csi.kicad_sch

Peripherals — File: peripherals.kicad_sch

Supply — File: supply.kicad_sch

SP1 9774060151
SP2 9774060151
SP3 9774060151
SP4 9774060151
GND

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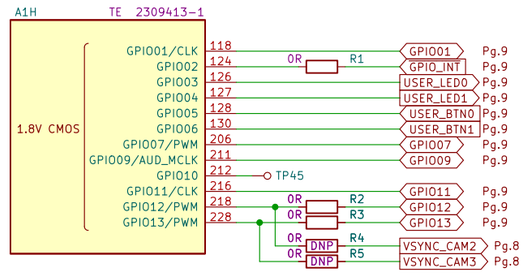
Sheet: /
File: jetson-orin-baseboard.kicad_sch

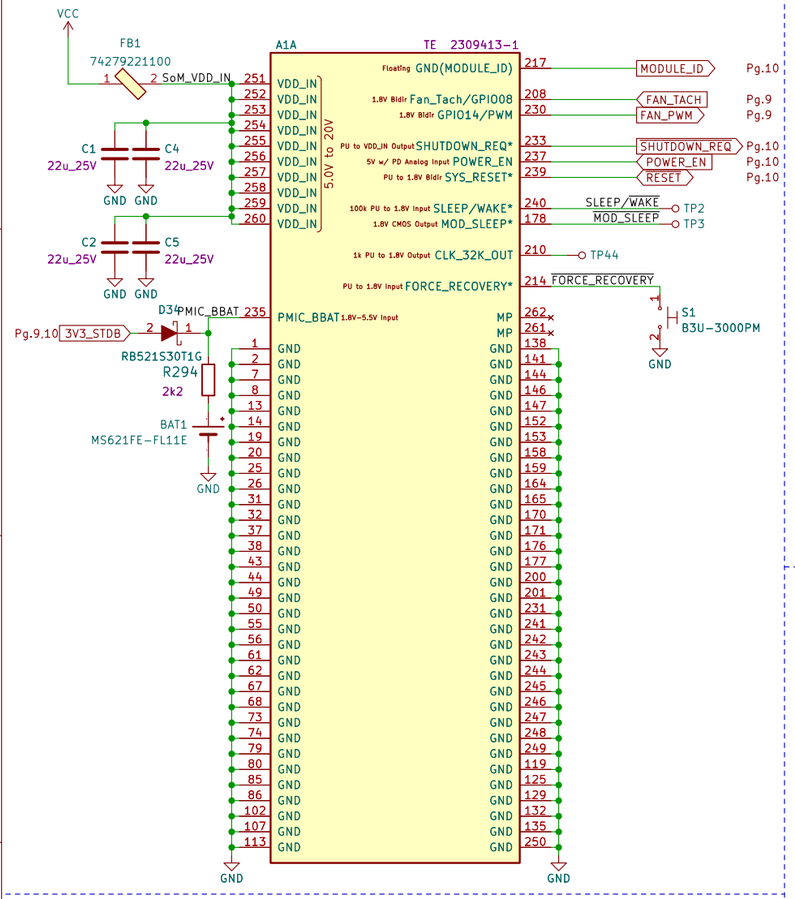
Title: Jetson Orin Baseboard

Size: A3	Date: 2022-10-07	**Rev: 1.0.0**
KiCad E.D.A.	eeschema 6.0.9-8da3e8f707-117-ubuntu22.04.1	Id: 1/10

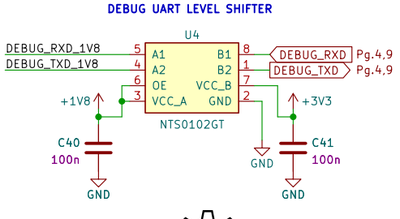
GPIO



Power & CTRL



Miscellaneous



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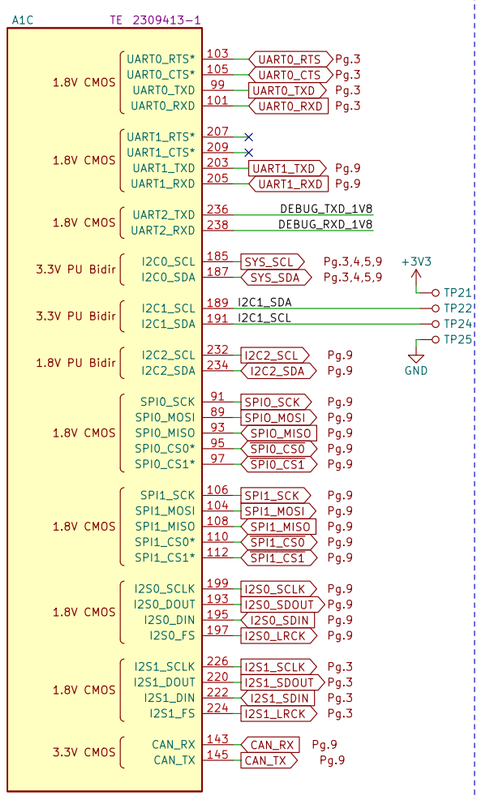
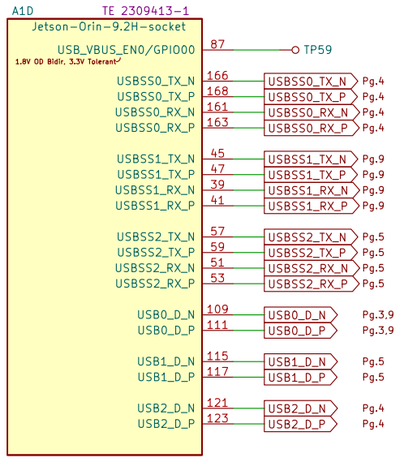
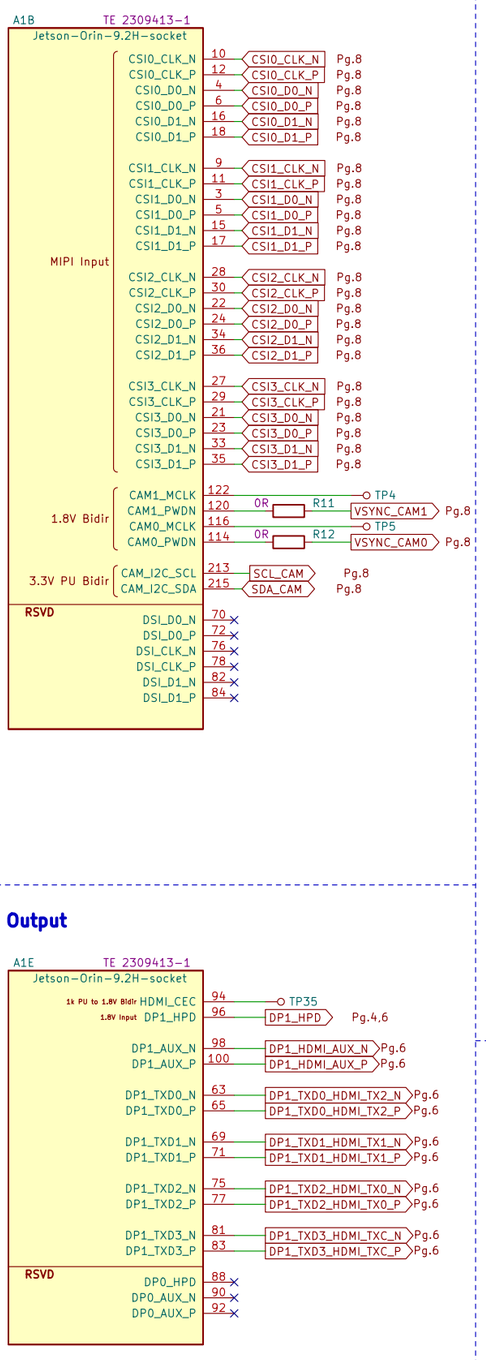
UART/I2C/SPI/I2S/CAN



USB

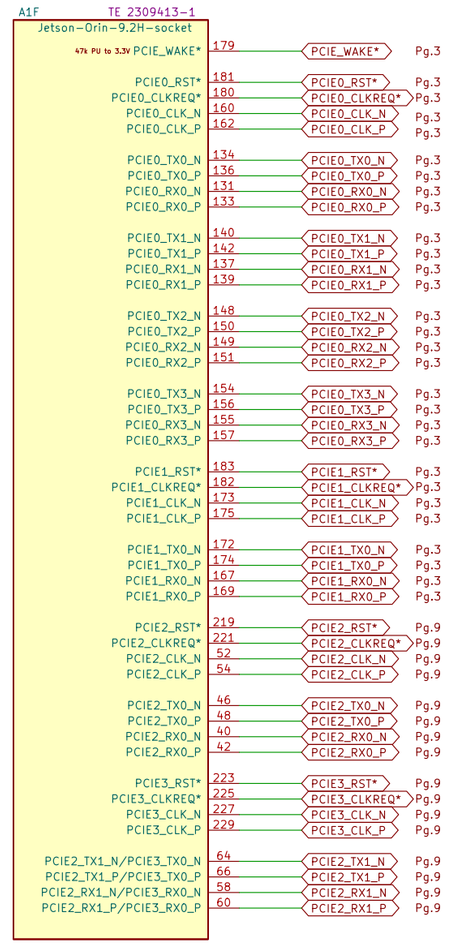


CSI

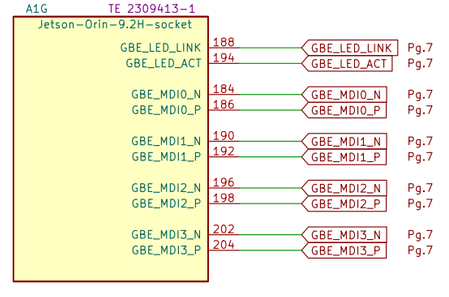


Video Output

PCIe



GbE



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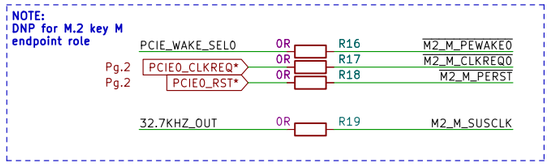
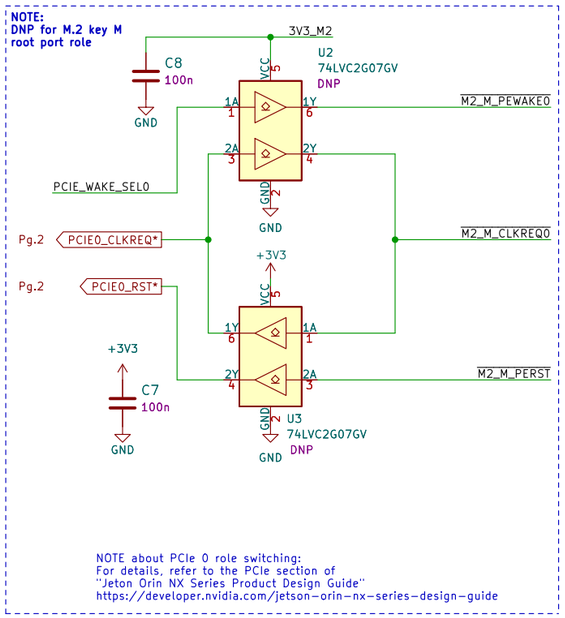
Sheet: /SoM/
File: som.kicad_sch

Title: Jetson Orin Baseboard

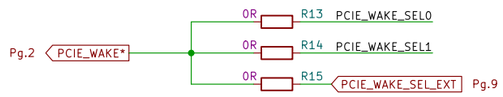
Size: A3	Date: 2022-10-07	**Rev: 1.0.0**
KiCad E.D.A. eeschema 6.0.9-8da3e8f707-117-ubuntu22.04.1		Id: 2/10

PCIe0 Root Port / Endpoint mode selector

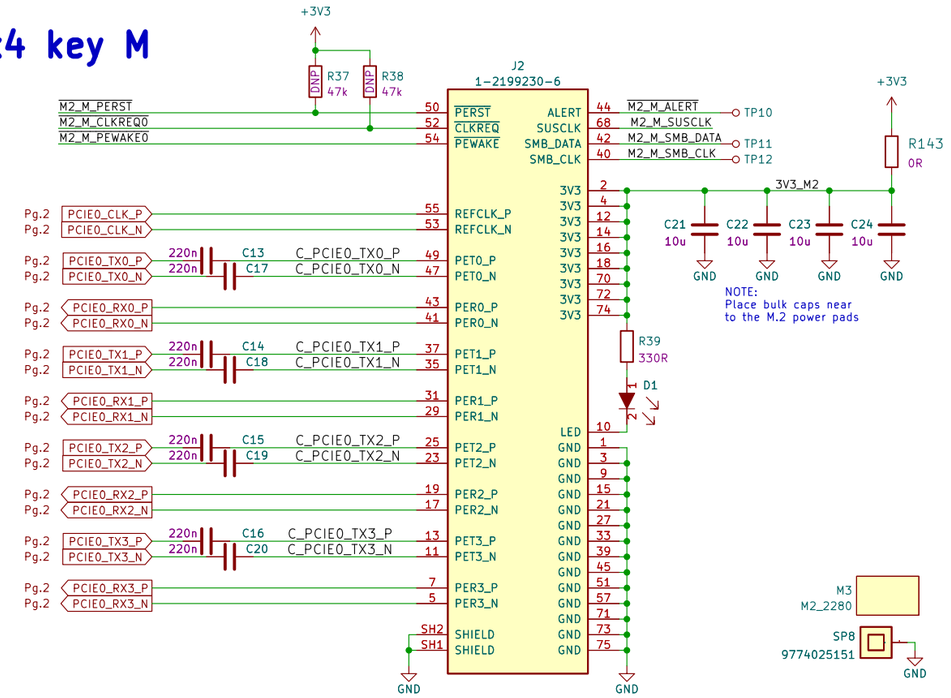




M.2 PCIE_WAKE selector

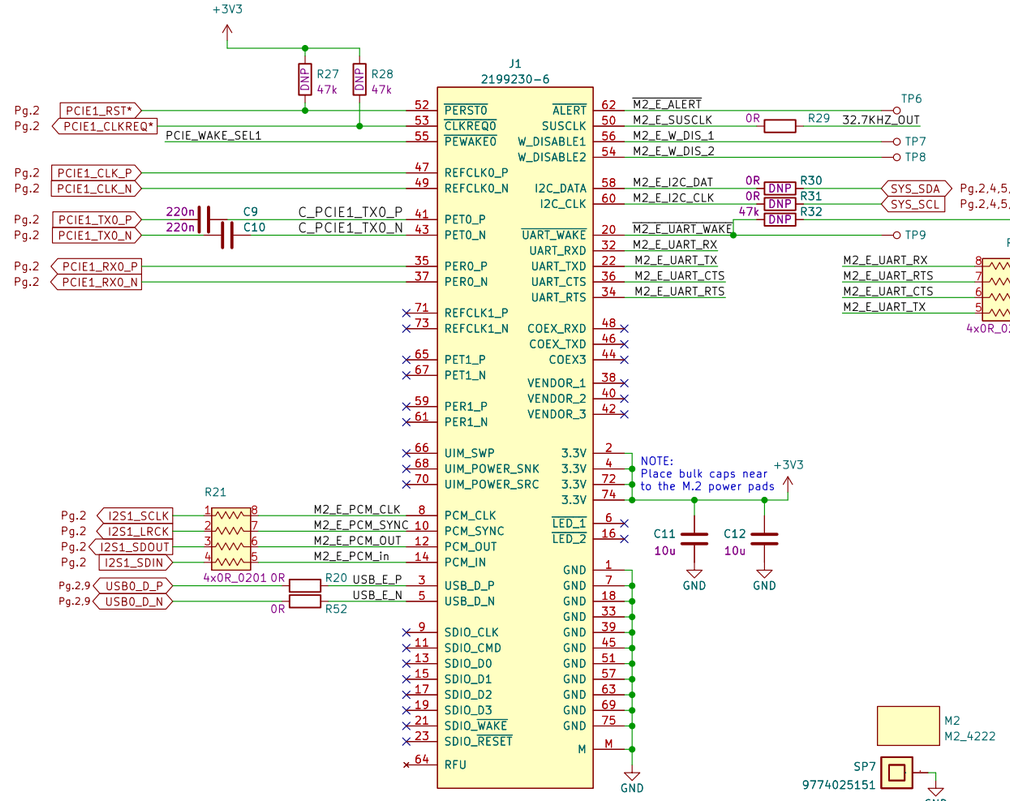


PCIe0 1x4 key M



SUSCLK SOURCE

PCIe1 1x1 key E



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Sheet: /M.2/
File: m-2.kicad_sch

Title: Jetson Orin Baseboard

Size: A3	Date: 2022-10-07	Rev: 1.0.0
KiCad E.D.A. eeschema 6.0.9-8da3e8f707-117-ubuntu22.04.1		Id: 3/10

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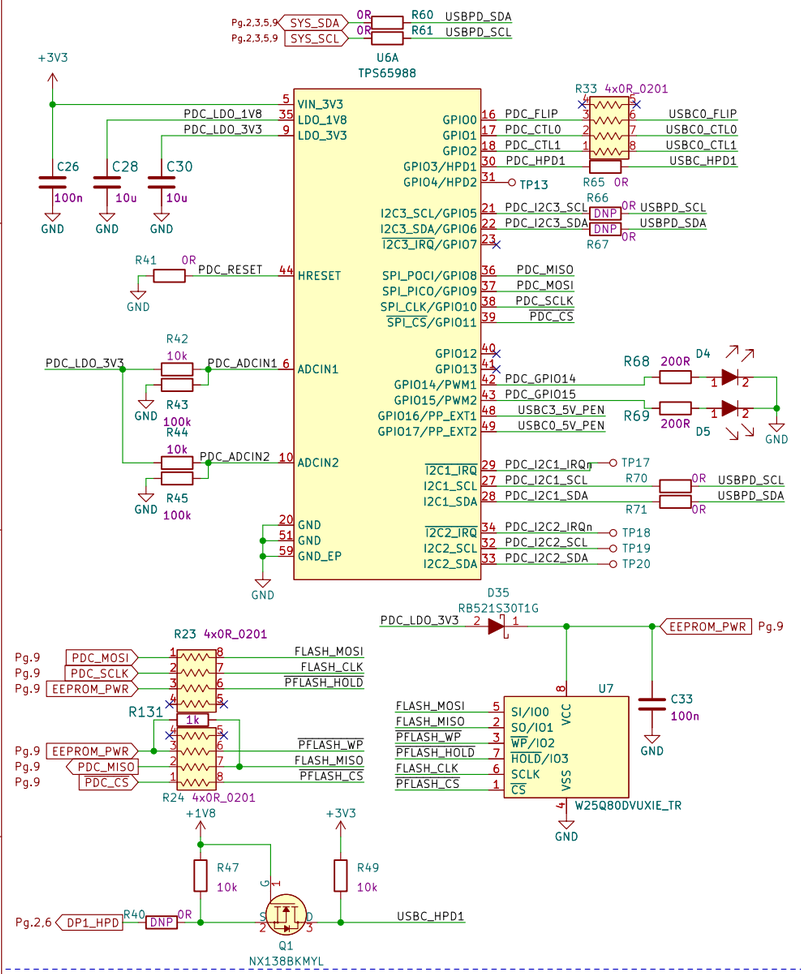
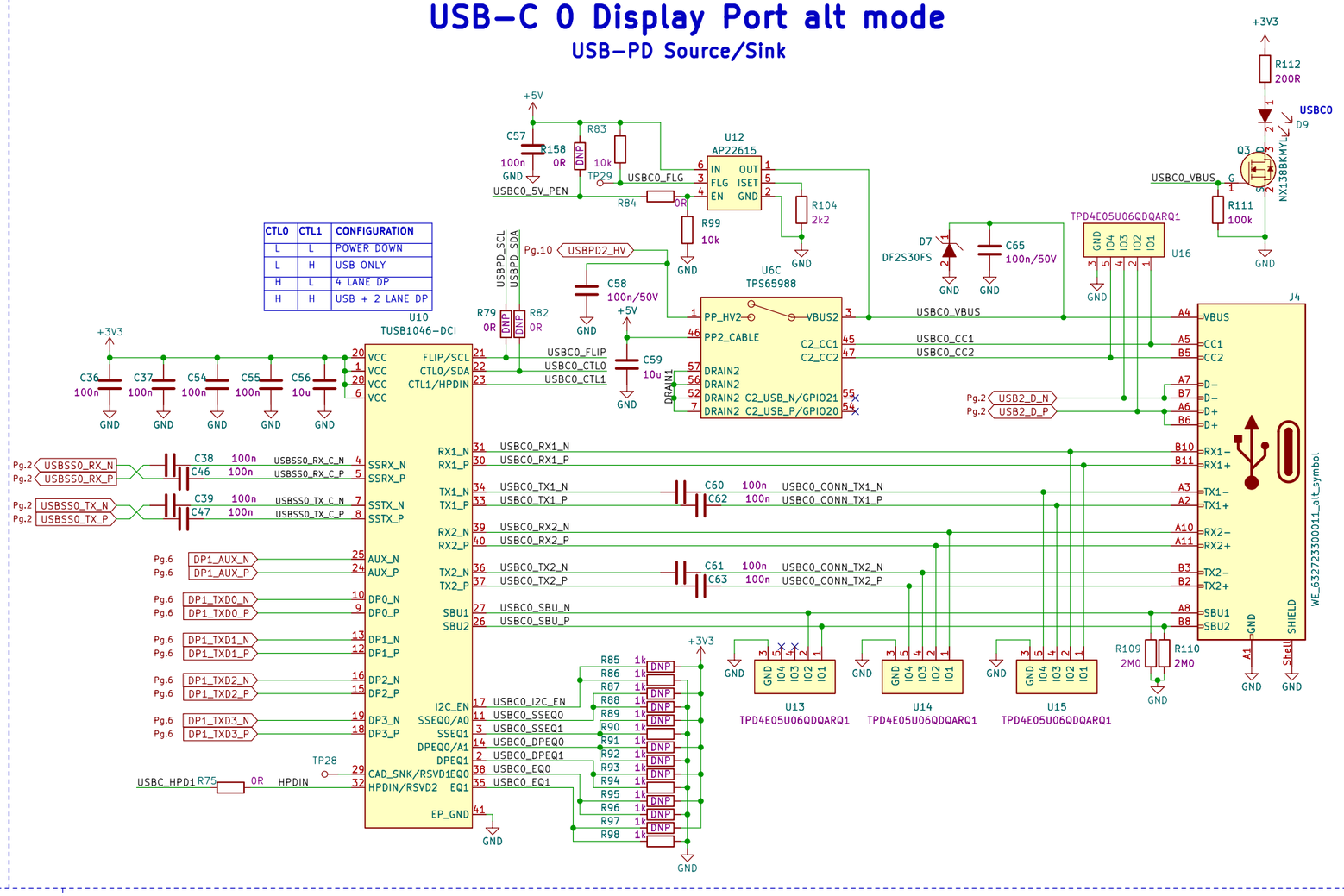
USB PD Controller



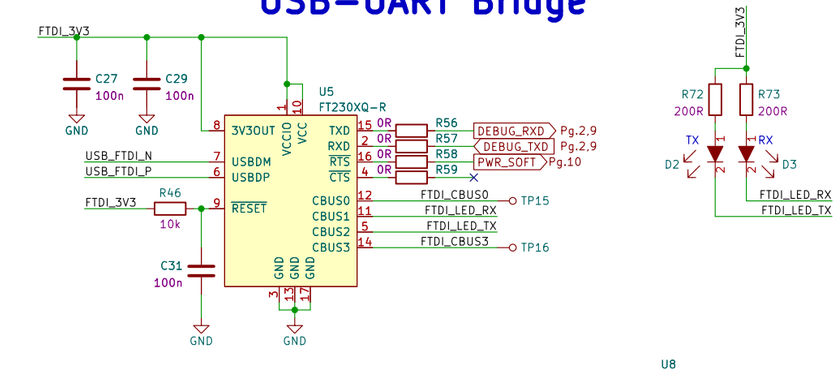
USB-C 0 Display Port alt mode

USB-PD Source/Sink



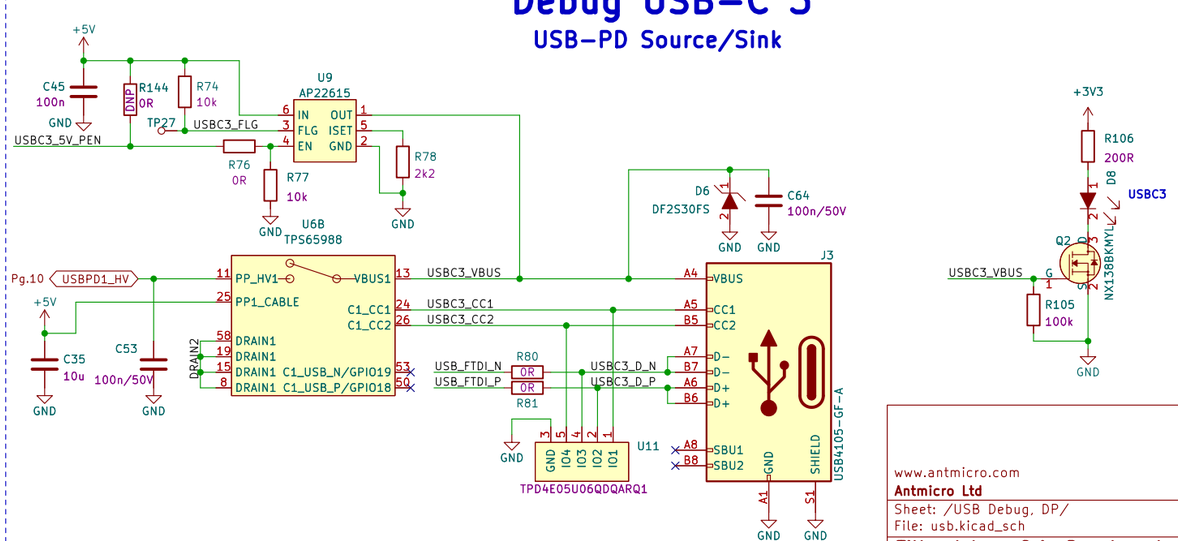
CTL0	CTL1	CONFIGURATION
L	L	POWER DOWN
L	H	USB ONLY
H	L	4 LANE DP
H	H	USB + 2 LANE DP

USB-UART Bridge



Debug USB-C 3

USB-PD Source/Sink



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Sheet: /USB Debug, DP/
File: usb.kicad_sch

Title: Jetson Orin Baseboard

Size: A3	Date: 2022-10-07	**Rev: 1.0.0**
KiCad E.D.A.	eeschema 6.0.9-8da3e8f707-117-ubuntu22.04.1	Id: 4/10

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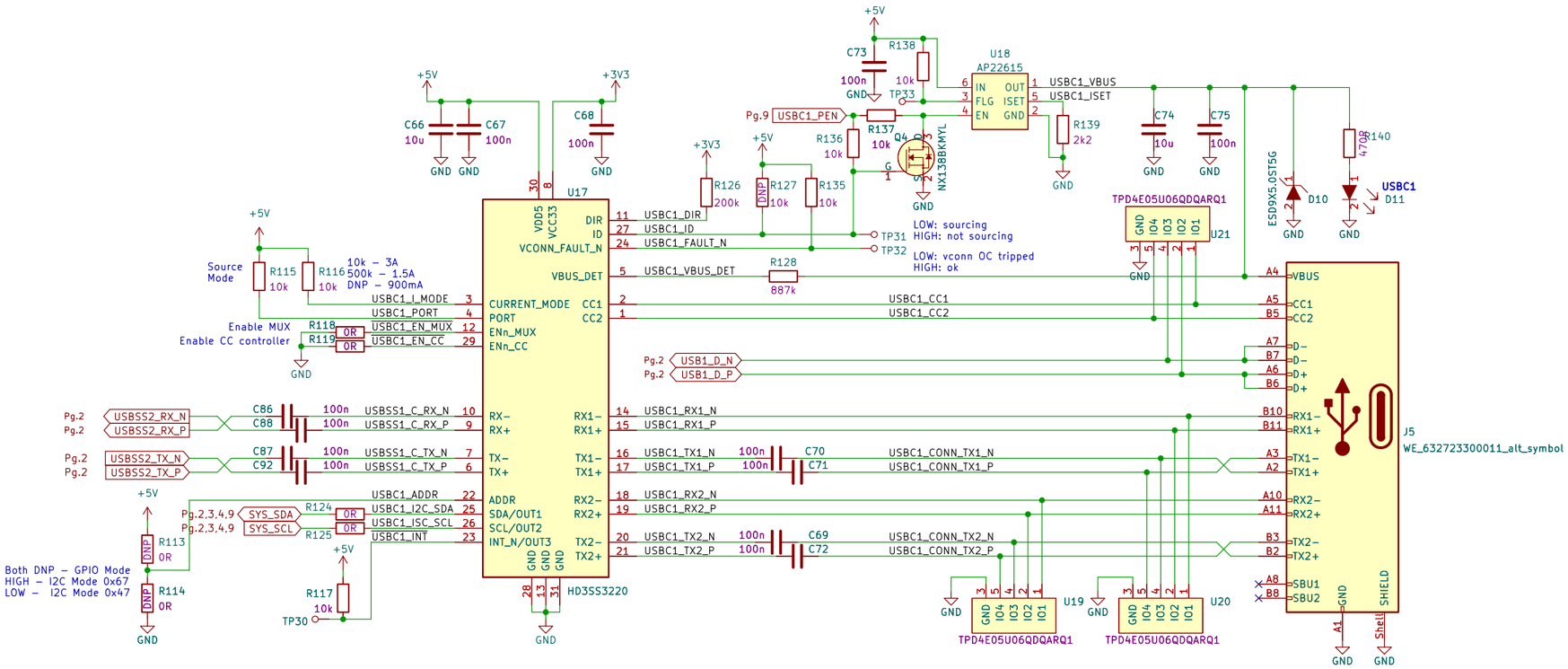
USB-C 1



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Sheet: /USB3/
File: usb3.kicad_sch

Title: Jetson Orin Baseboard

Size: A3	Date: 2022-10-07	**Rev: 1.0.0**
KiCad E.D.A.	eeschema 6.0.9-8da3e8f707-117-ubuntu22.04.1	Id: 5/10

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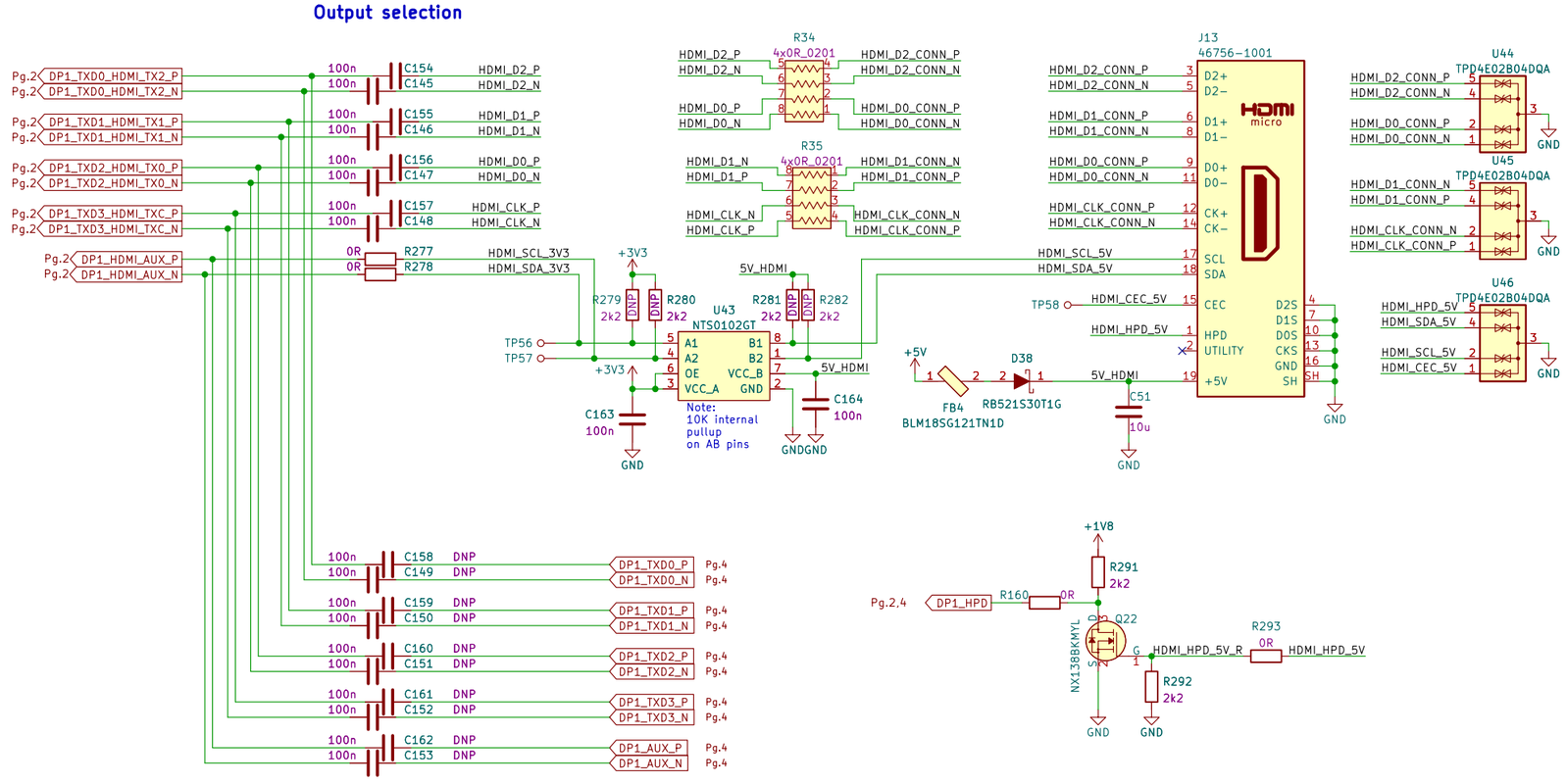
HDMI Connector

Output selection



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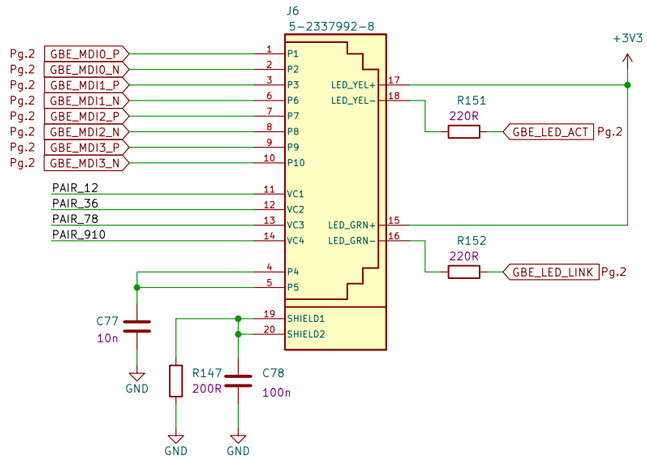
Sheet: /HDMI/
File: hdmi.kicad_sch

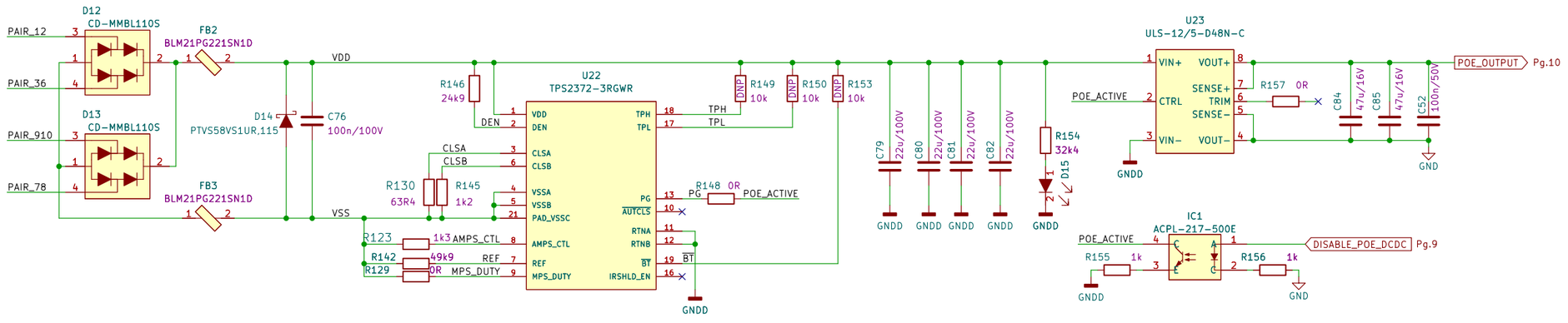
Title: Jetson Orin Baseboard

Size: A3	Date: 2022-10-07	**Rev: 1.0.0**
KiCad E.D.A. eeschema 6.0.9-8da3e8f707-117-ubuntu22.04.1		Id: 6/10

Ethernet Connector



Power over Ethernet



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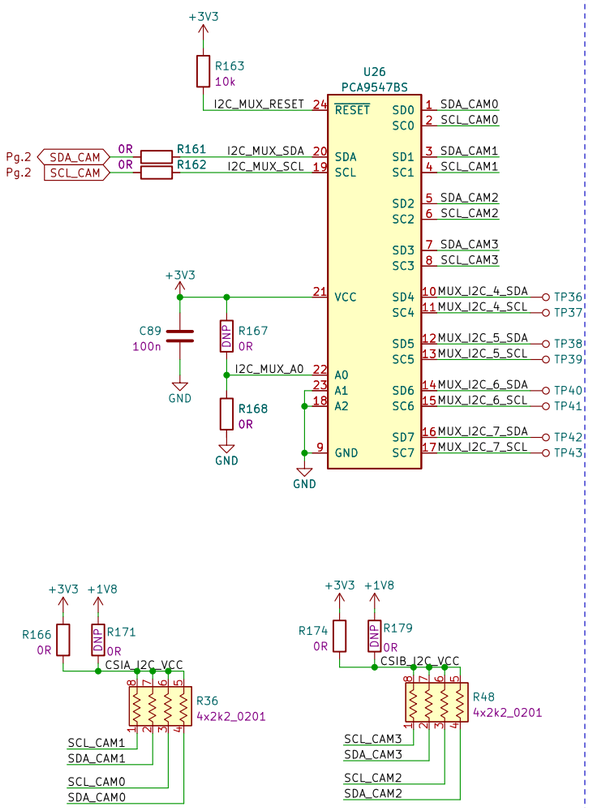
Sheet: /Ethernet/
File: ethernet.kicad_sch

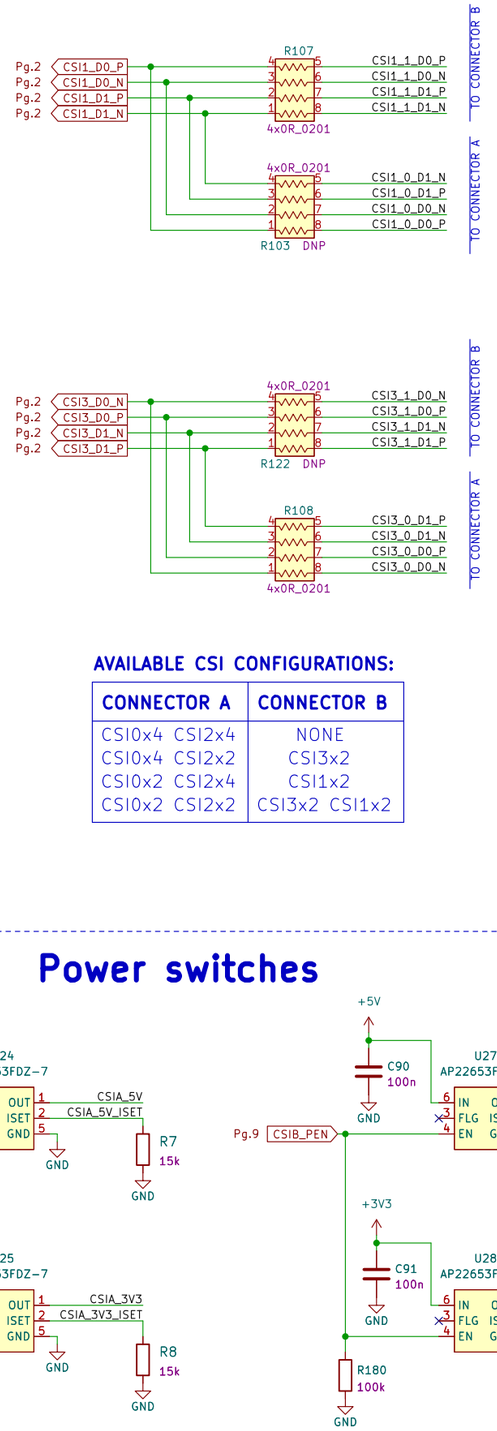
Title: Jetson Orin Baseboard

Size: A3	Date: 2022-10-07	**Rev: 1.0.0**
KiCad E.D.A.	eeschema 6.0.9-8da3e8f707-117-ubuntu22.04.1	Id: 7/10

I2C Mux



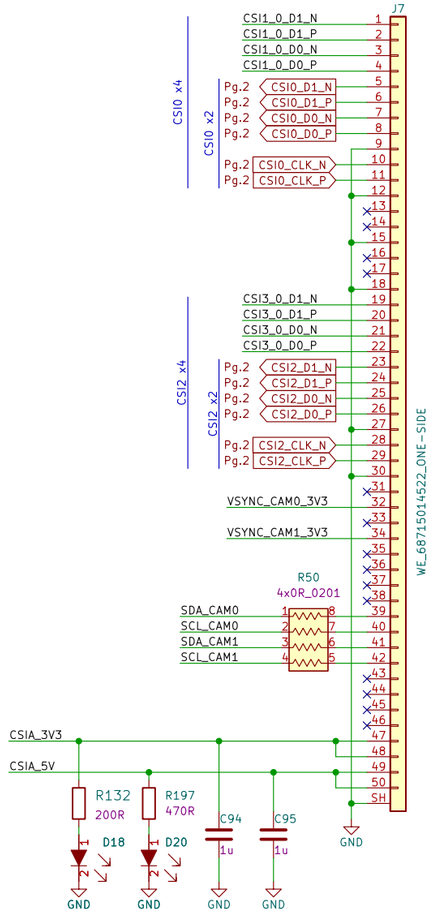
CSI Mux



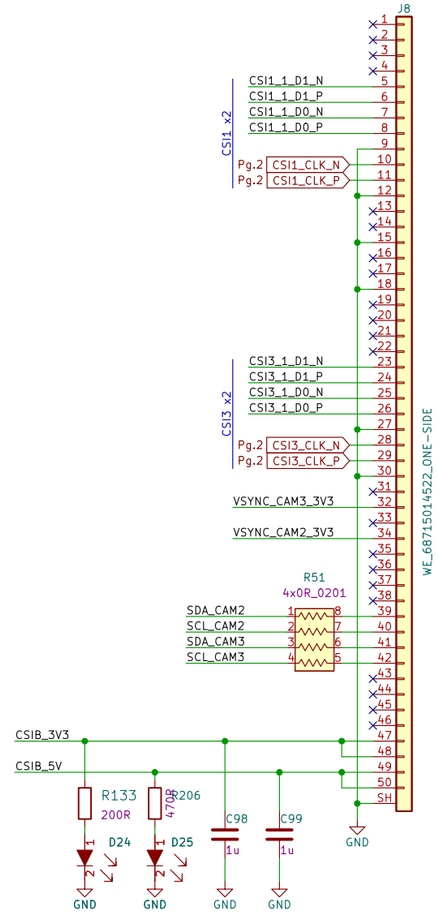
AVAILABLE CSI CONFIGURATIONS:

CONNECTOR A	CONNECTOR B
CSI0x4 CSI2x4	NONE
CSI0x4 CSI2x2	CSI3x2
CSI0x2 CSI2x4	CSI1x2
CSI0x2 CSI2x2	CSI3x2 CSI1x2

CSI connector A



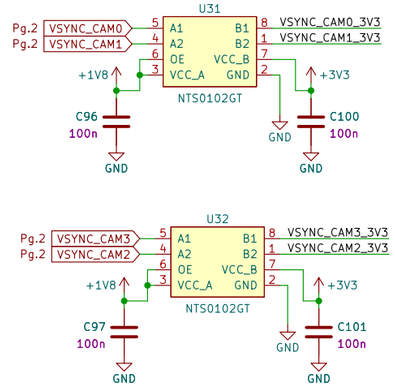
CSI connector B



Power switches

ALL SWITCHES
1.7A CURRENT LIMIT

Level shifters



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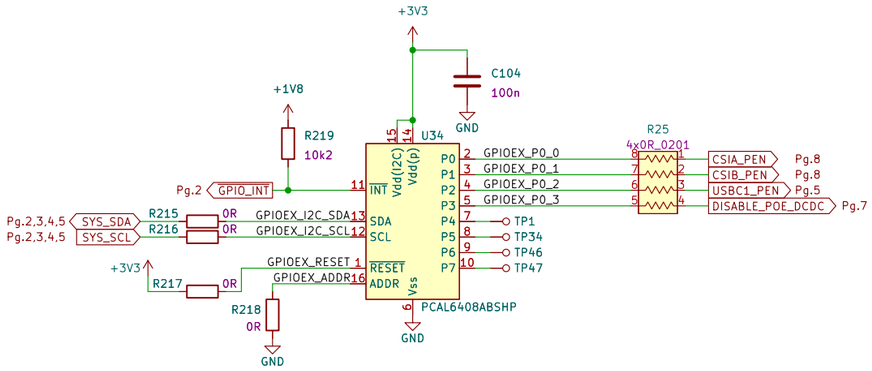
Sheet: /CSI/
File: csi.kicad_sch

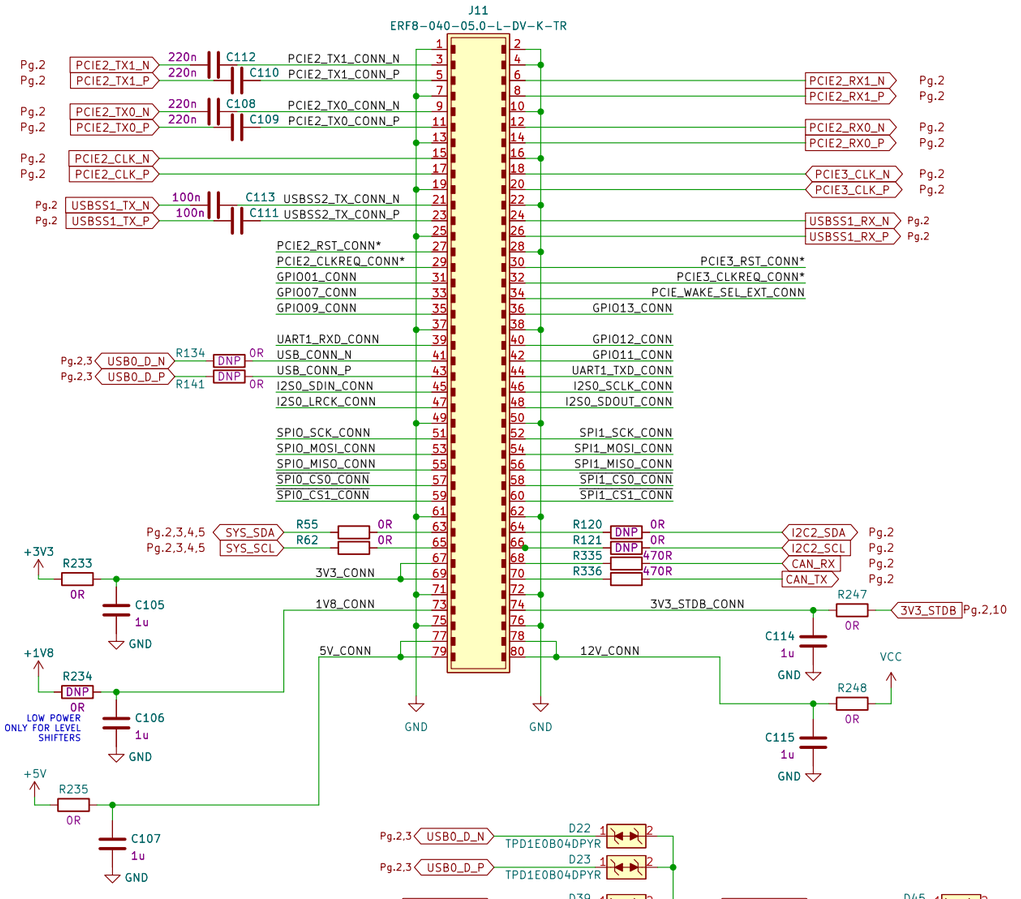
Title: Jetson Orin Baseboard

Size: A3	Date: 2022-10-07	**Rev: 1.0.0**
KiCad E.D.A.	eeschema 6.0.9-8da3e8f707-117-ubuntu22.04.1	Id: 8/10

GPIO expander

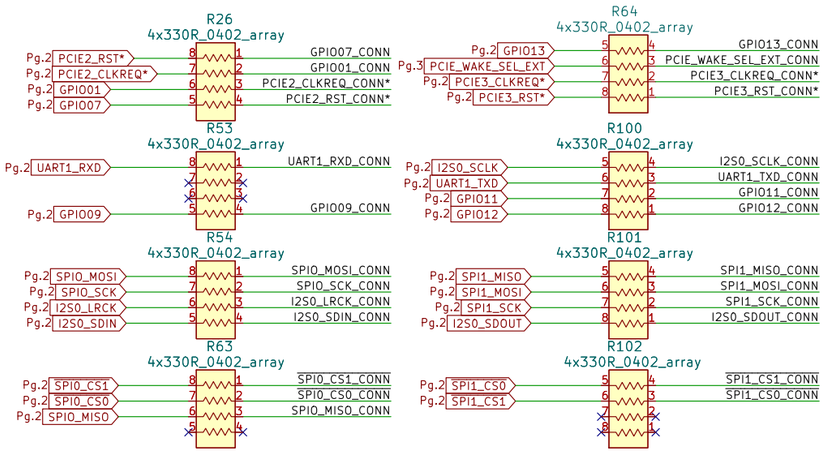


Expansion connector



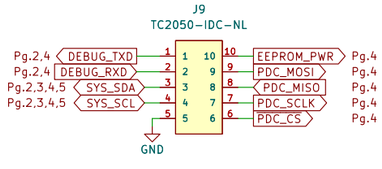
Fan connector

Expansion connector resistors

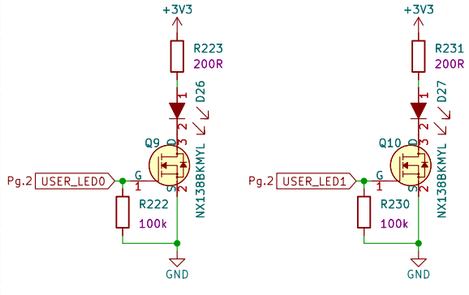


Debug connector

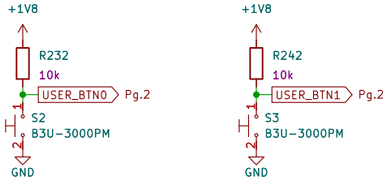
TAG-CONNECT

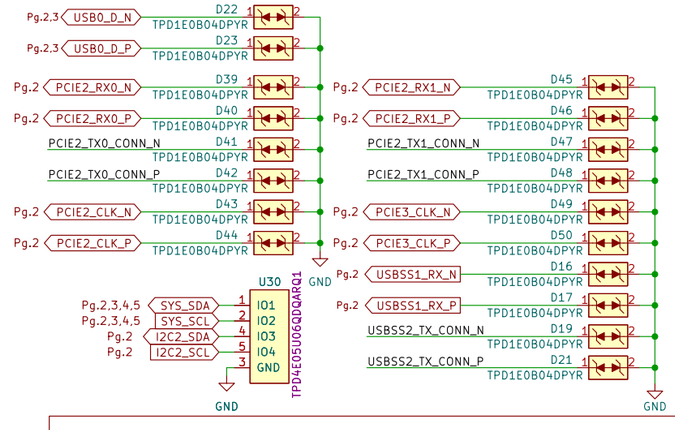


LED indicators



Buttons





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Sheet: /Peripherals/
File: peripherals.kicad_sch

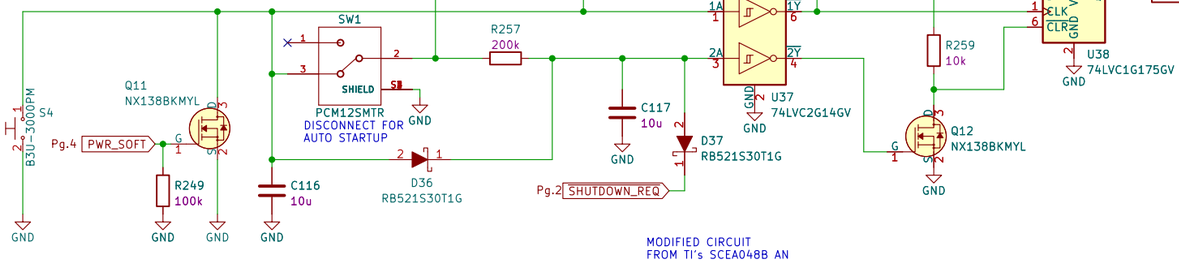
Title: Jetson Orin Baseboard

Size: A3	Date: 2022-10-07	**Rev: 1.0.0**
KiCad E.D.A.	eeschema 6.0.9-8da3e8f707-117~ubuntu22.04.1	Id: 9/10

POWER-UP AND RESET CIRCUITRY

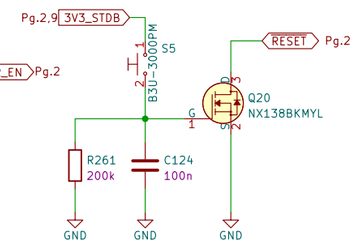
POWER BUTTON

SHORT PRESS - POWER UP
LONG PRESS - POWER DOWN

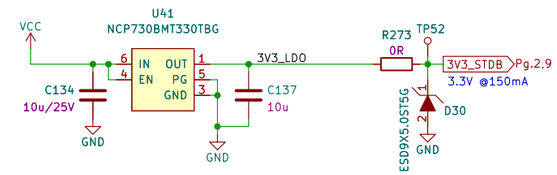


MODIFIED CIRCUIT
FROM TI's SCEA048B AN

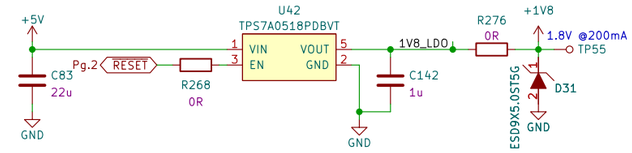
RESET BUTTON



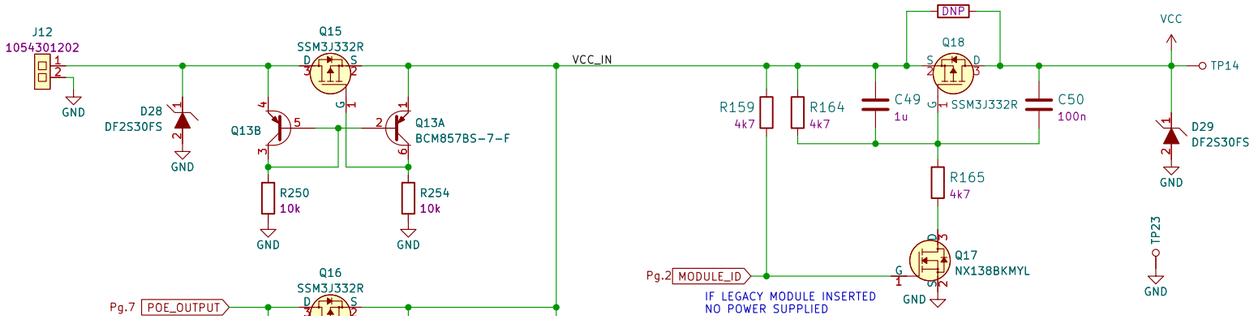
3V3 STANDBY LDO



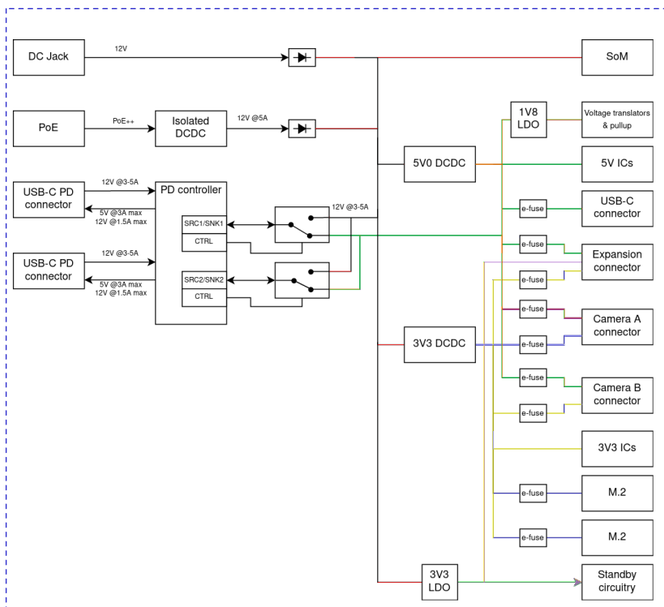
1V8 LDO



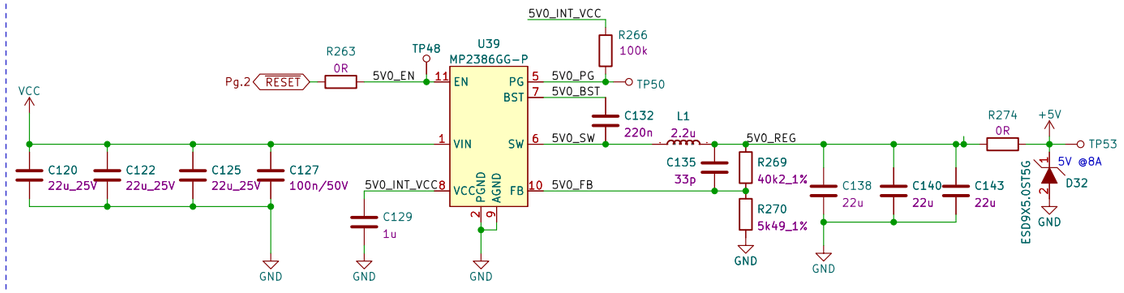
INPUT SELECTOR AND SOFT START



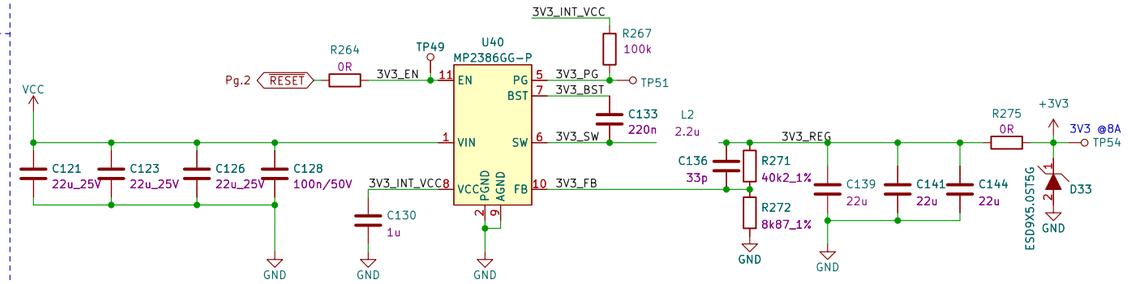
PD CONTROLLER HAS
IDEAL DIODE BUILT-IN



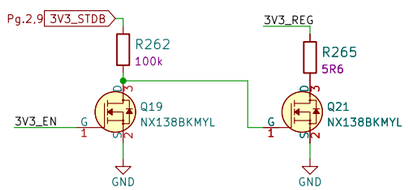
5V DCDC



3V3 DCDC



3V3 rail discharge



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Sheet: /Supply/
File: supply.kicad_sch

Title: Jetson Orin Baseboard

Size: A3	Date: 2022-10-07	**Rev: 1.0.0**
KiCad E.D.A.	eeschema 6.0.9-8da3e8f707~117~ubuntu22.04.1	Id: 10/10