

1 2 3 4 5 6 7 8

Power requirements & supplies:

VCC(9–15V, nom. 12V):
DCDC 5V: 2.8A
DCDC 3V3: 1.1A x2

5V @6A:
CM: 2A(RPi)/3A(PF)
GPIO conn.: 3A(max)
USB source: 1.5A
CSI: 1.5A(max)
LED Strip (DNP): 1A
DSI adapter: 0.8A(LVDS); 2A(max)
HDMI: 50mA+

3V3 @3A:
GPIO conn: 3A (max)
CSI: 1.5A (max)
LED Strip: 1A (may be switched to 5V)
DSI adapter: 0.5A (max)
NFC: 350mA+
SD card: 100mA+?
proximity: 50mA/ 1A (max)
GPIO expander/levelshifters: 50mA

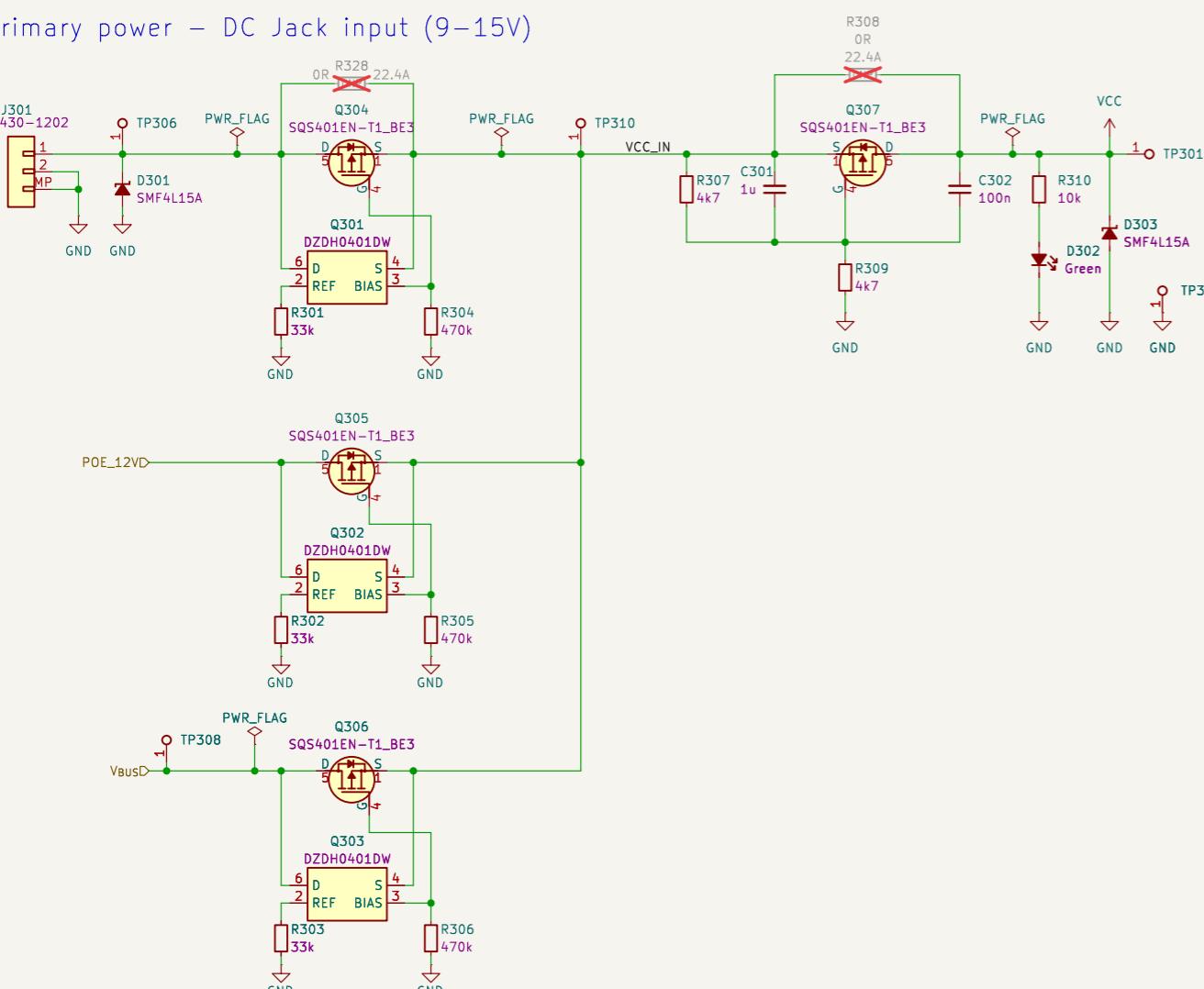
3V3–NVMe @3A:
M.2: 3A

3V3 @600mA (from CM4)
unused

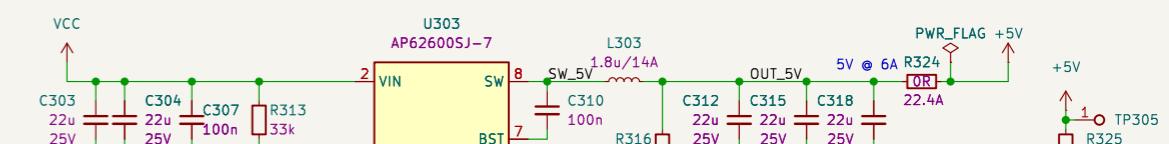
1V8 @600mA (from CM4)
unused

Input selector & soft start

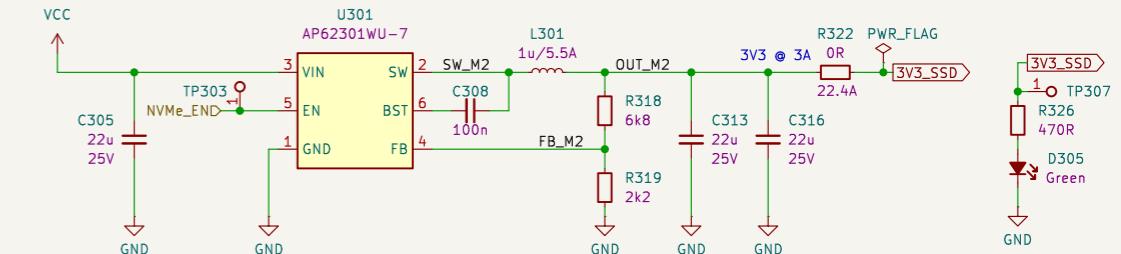
Primary power – DC Jack input (9–15V)



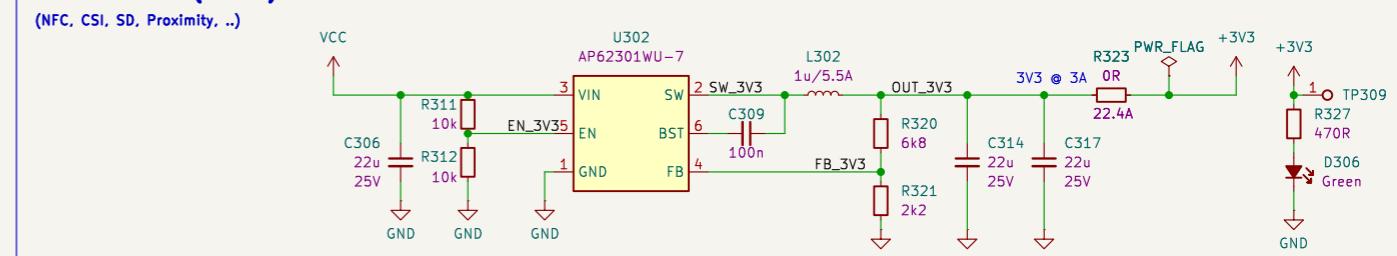
5V DCDC



3V3 DCDC (M.2 NVMe)



3V3 DCDC (Main)



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Sheet: /Supply/

File: supply.kicad_sch

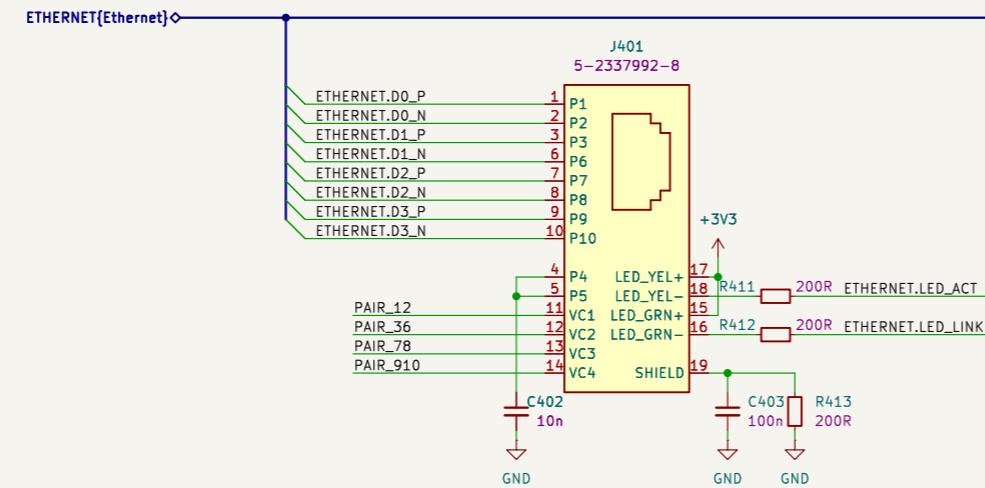
Title: CM4 Baseboard

Size: A3 Date: 2024-09-13
KiCad E.D.A. kicad-cl 7.0.11

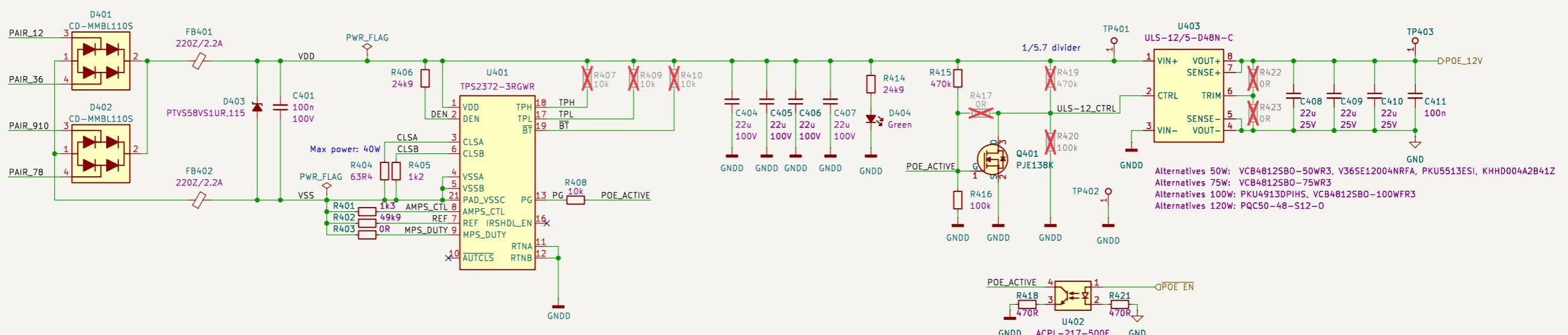
Rev: 1.0.5:29bcd
Id: 3/9



Ethernet Connector



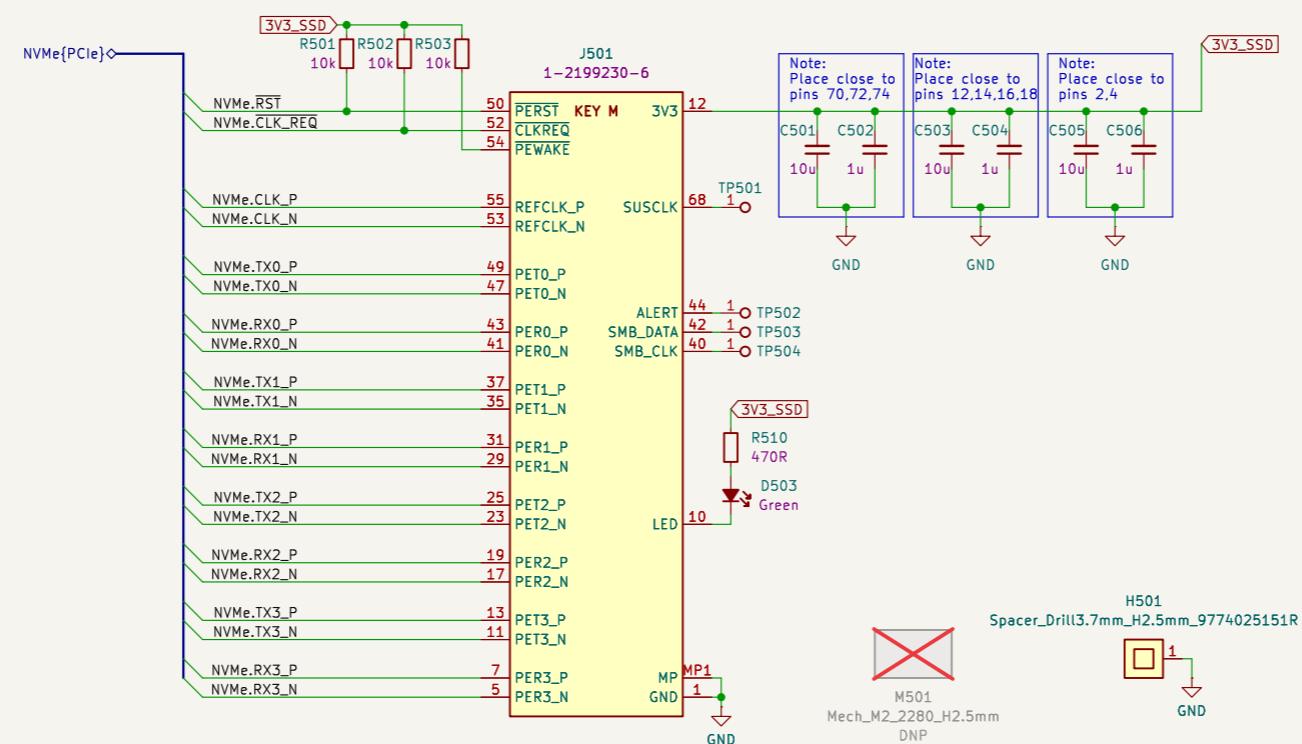
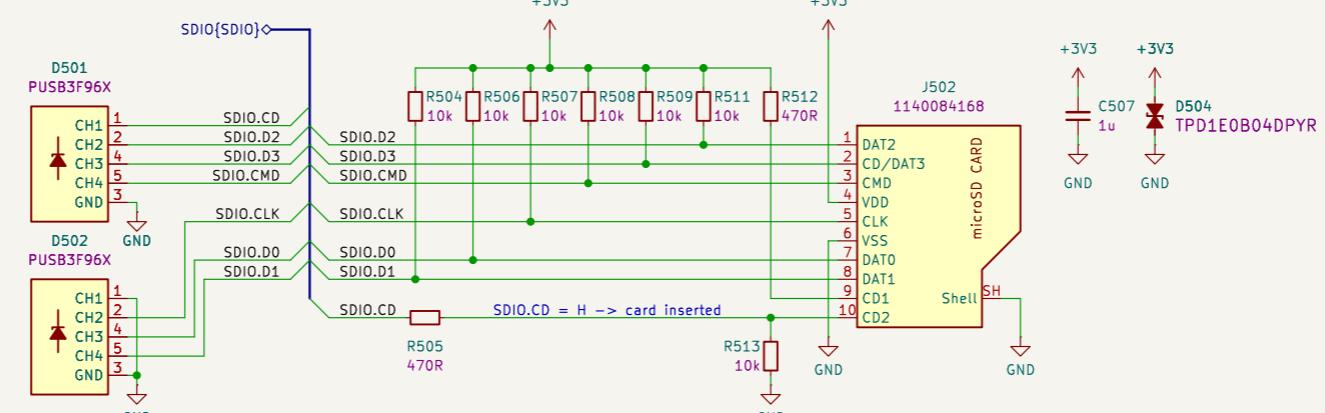
Power over Ethernet



M.2 NVME

Note:
CM4 supports only PCIe 2.0x1

Note:
RPi4 CM4 includes TX AC coupling capacitors
see: <https://datasheets.raspberrypi.com/cm4/cm4-datasheet.pdf> page 7

**Micro SD card slot**

1 2 3 4 5 6 7 8

A

A

B

B

C

C

D

D

E

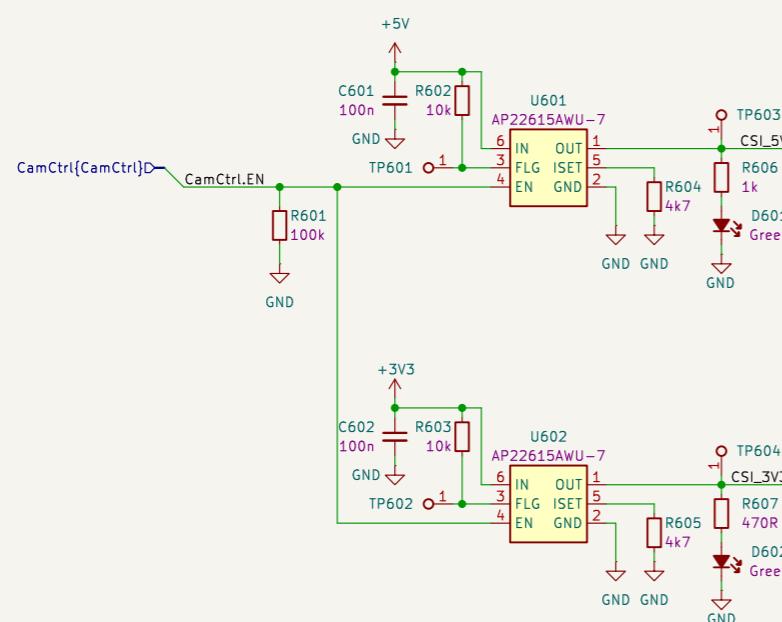
E

F

F

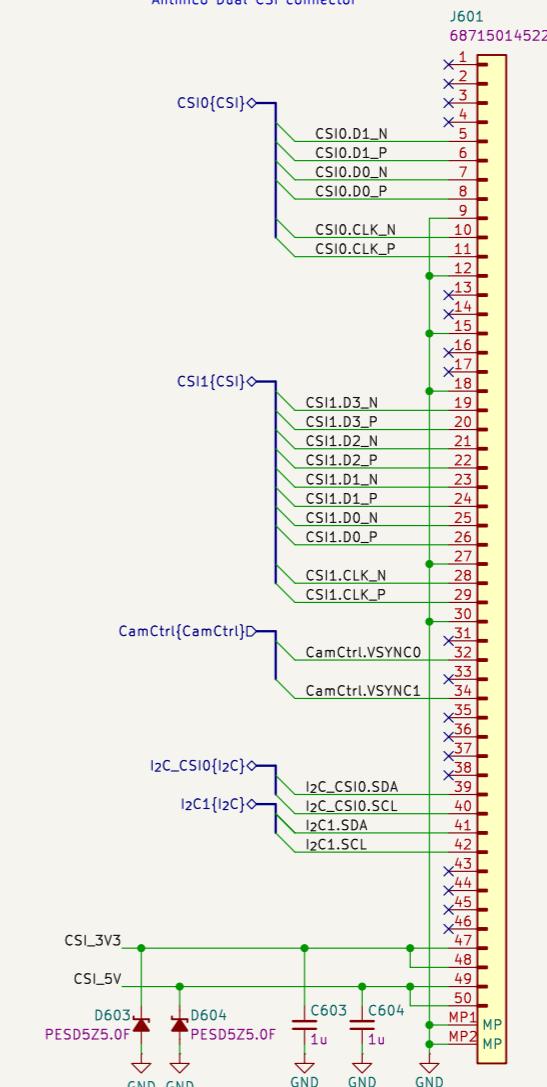
Power switches

Both switches set to 1.5A current limit

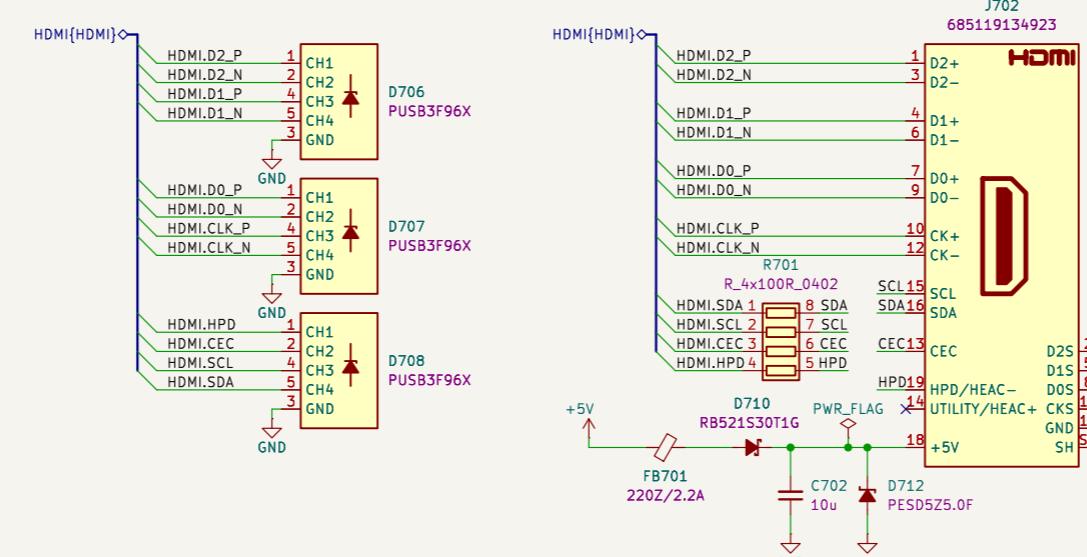


CSI connector

MIPI CSI-2 input via
Antmicro Dual CSI connector



HDMI Connector



Antmicro CM4 Baseboard DSI Connector

