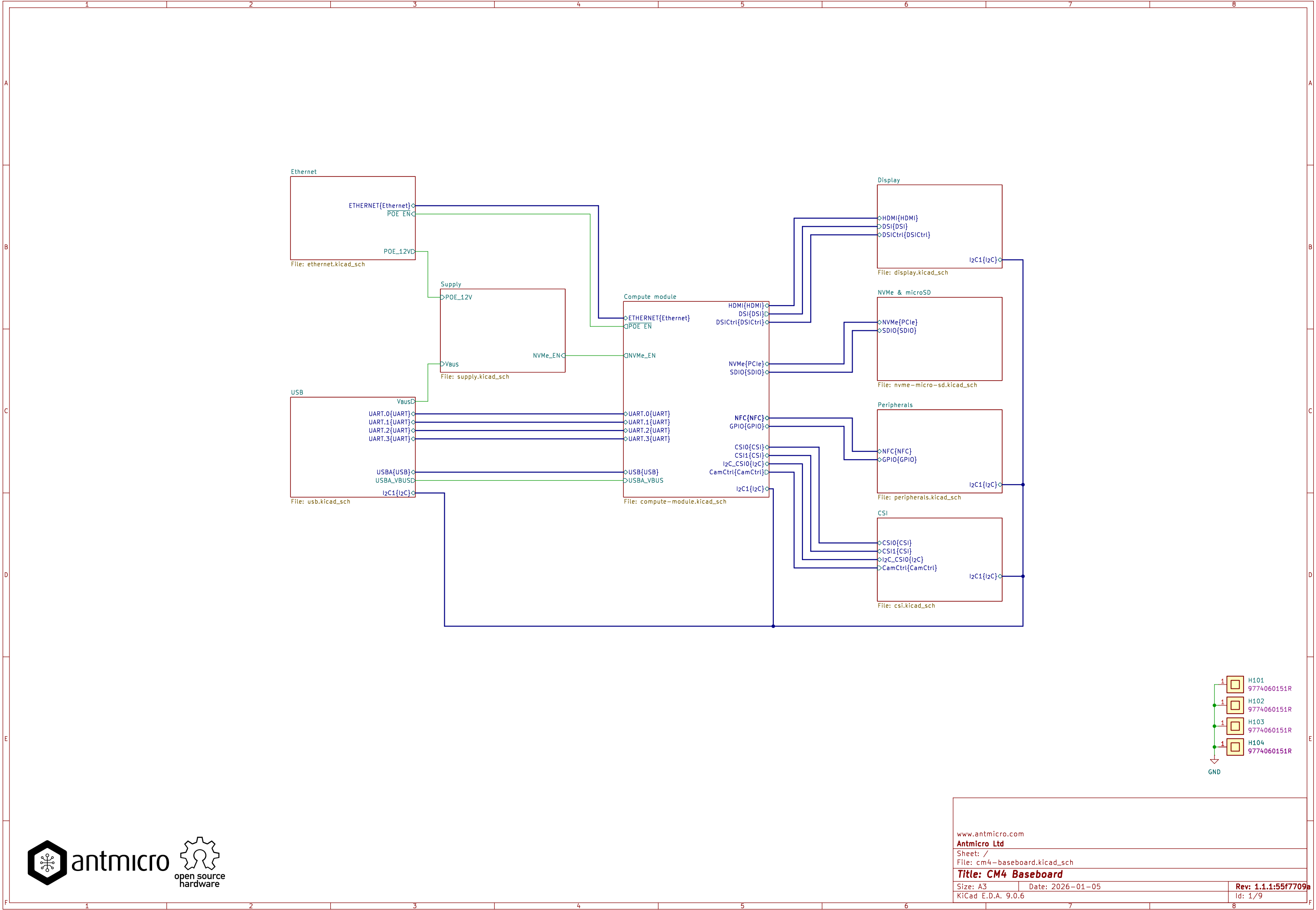
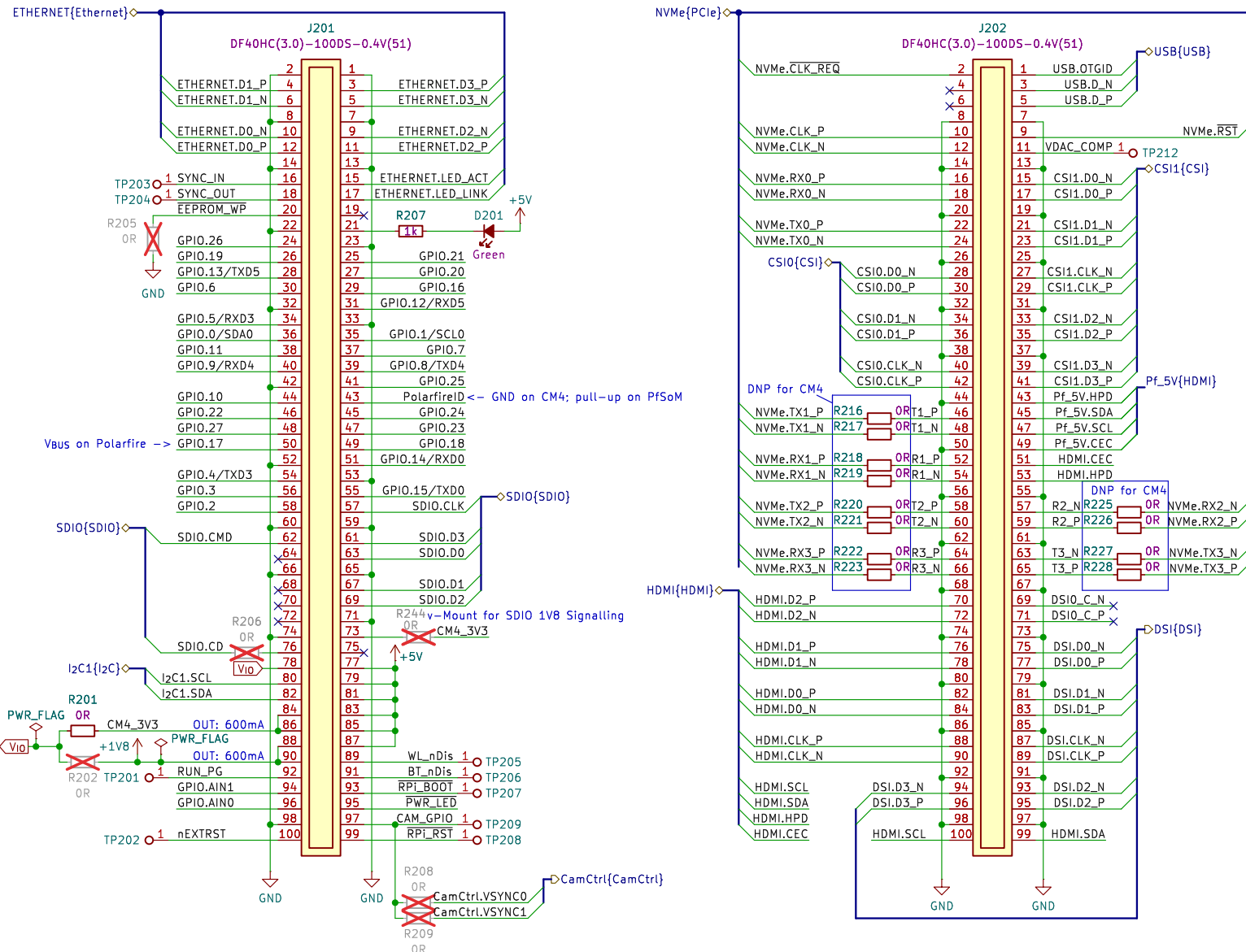


Raspberry CM4 connector



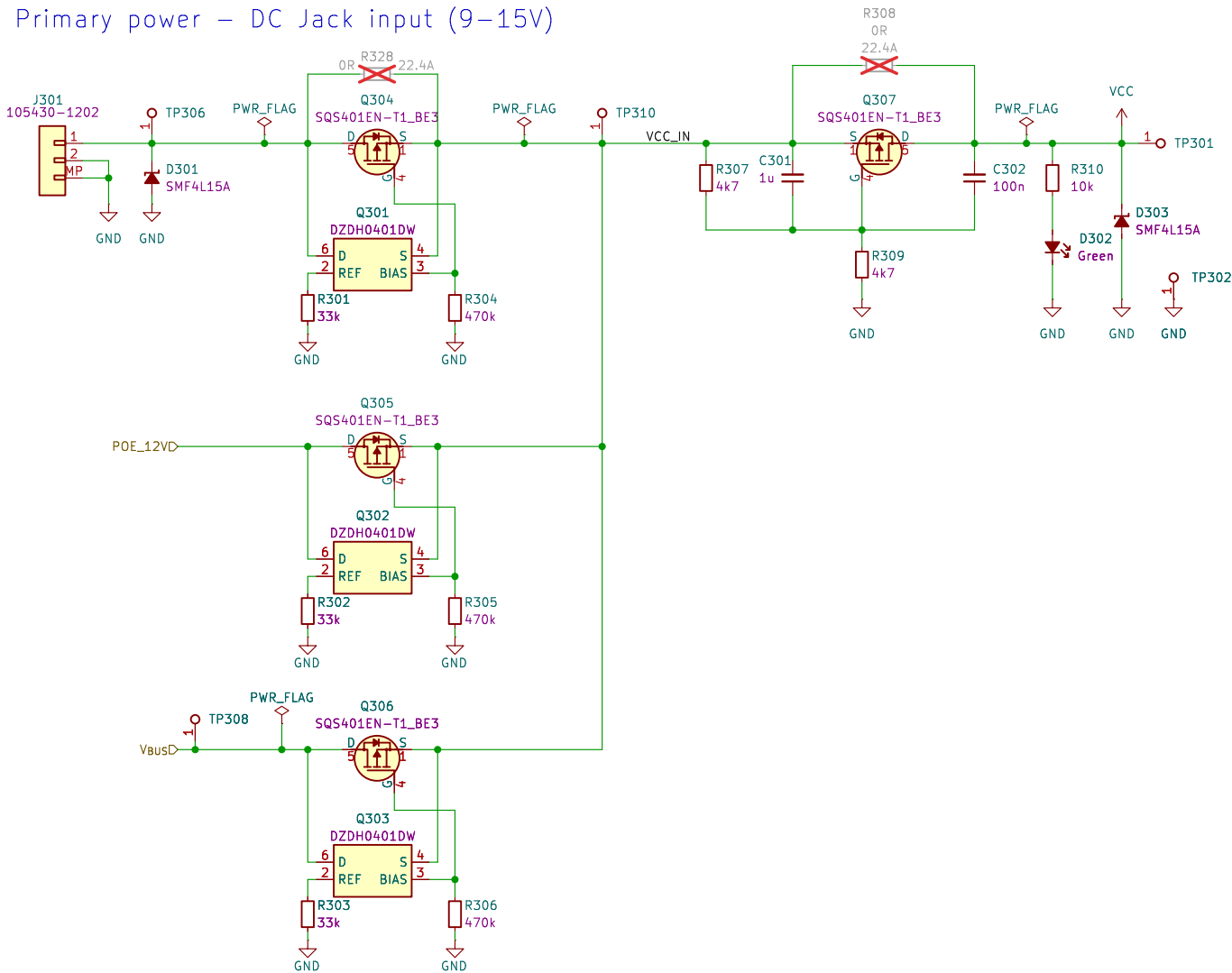
Power requirements & supplies:

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+

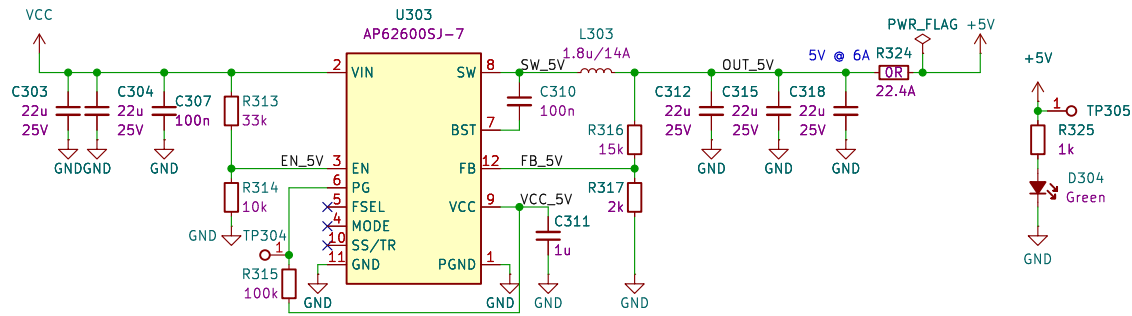
3V3 @3A:
GPIO conn: 3A (max)
CSI: 1.5A (max)
LED Strip: 1A (may be switched to 5V)
DSI adapter: 0.5A (max)
NFC: 350mA+
SD card: 100m+?
proximity: 50mA/ 1A (max)
GPIO expander/levelshifters: 50mA
3V3–NVMe @3A:
M.2: 3A
3V3 @600mA (from CM4)
unused
1V8 @600mA (from CM4)
unused

Input selector & soft start

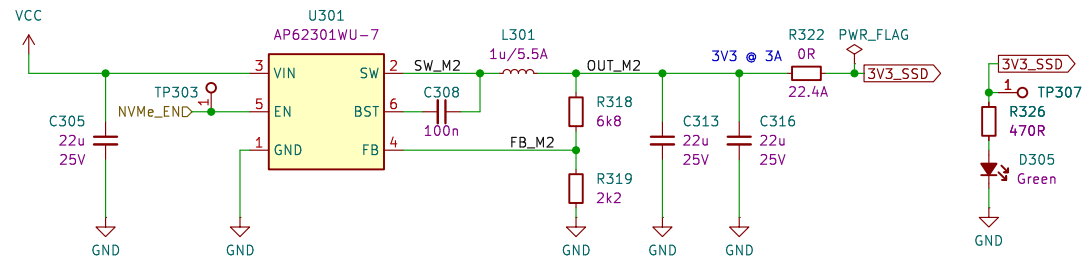
Primary power – DC Jack input (9–15V)



5V DCDC

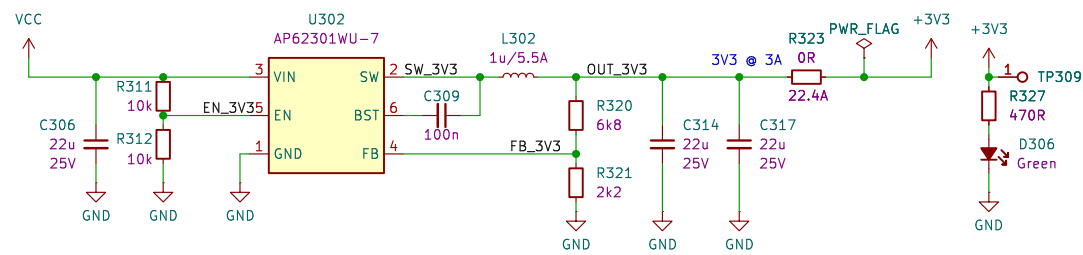


3V3 DCDC (M.2 NVMe)



3V3 DCDC (Main)

(NFC, CSI, SD, Proximity, ...)



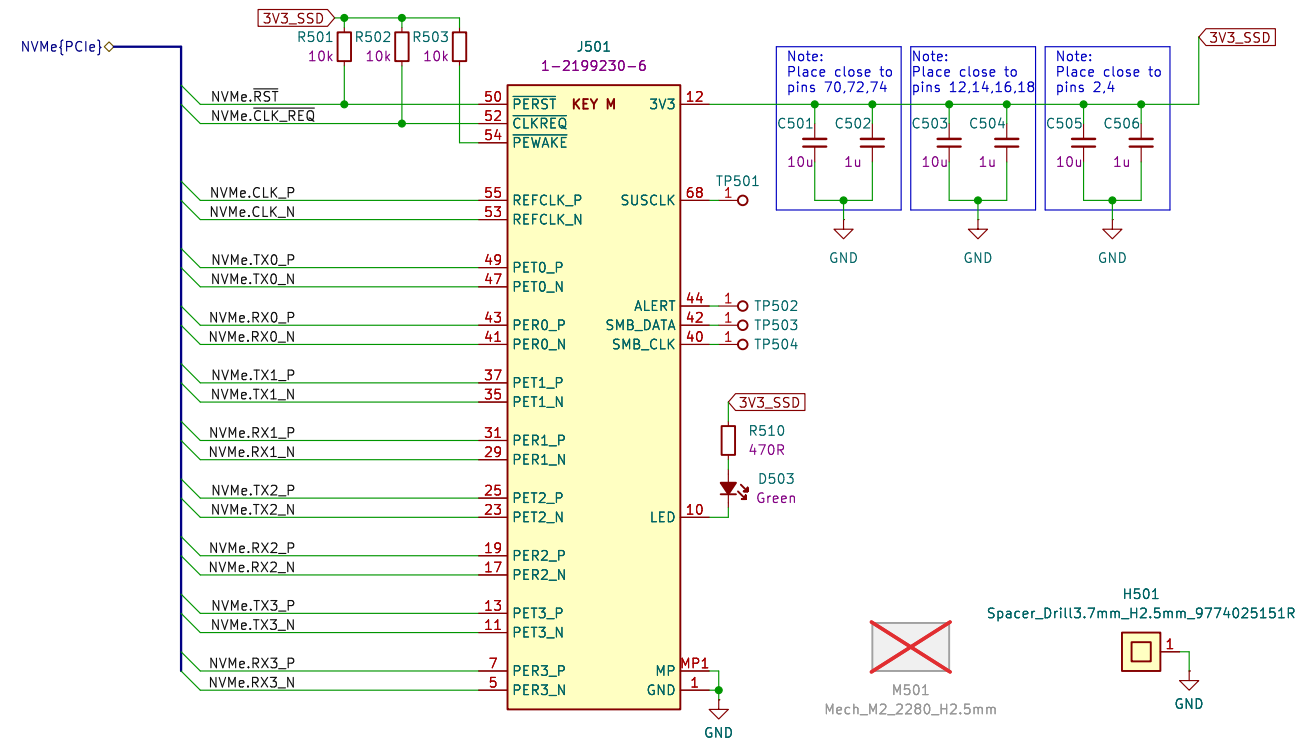
The diagram illustrates the connection of an Ethernet module to a J401 connector. The J401 connector (5-2337992-8) has pins P1 through P10. The Ethernet module is connected to these pins via a shield. The module has four LEDs: LED_YEL+, LED_YEL-, LED_GRN+, and LED_GRN-. The module is connected to a +3V3 supply and ground (GND) via resistors R411, R412, R413, and capacitors C402, C403. The module is also connected to a PAIR_12, PAIR_36, PAIR_78, and PAIR_910 via a shield. The module is connected to the Ethernet module via a shield.

[illegible]

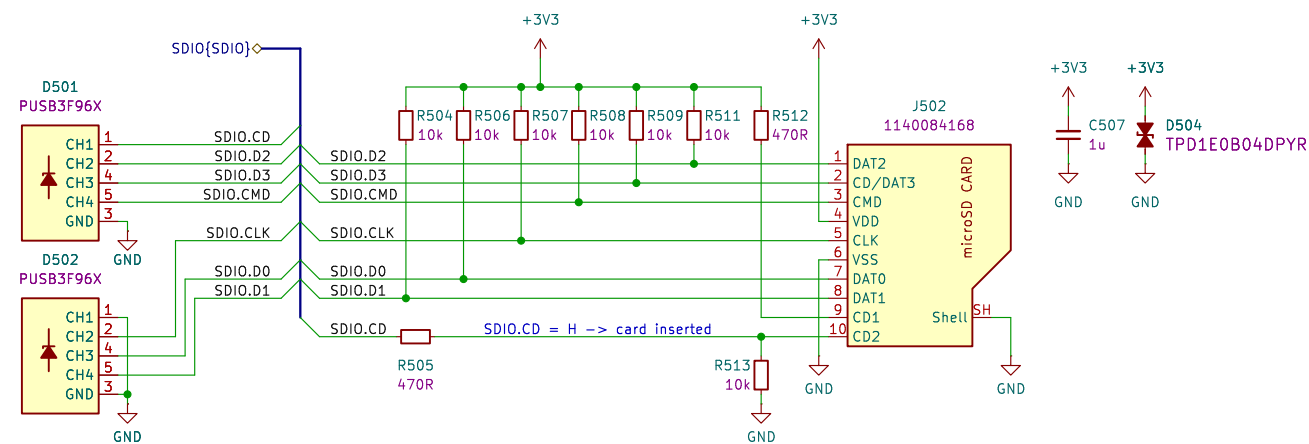
M.2 NVME

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

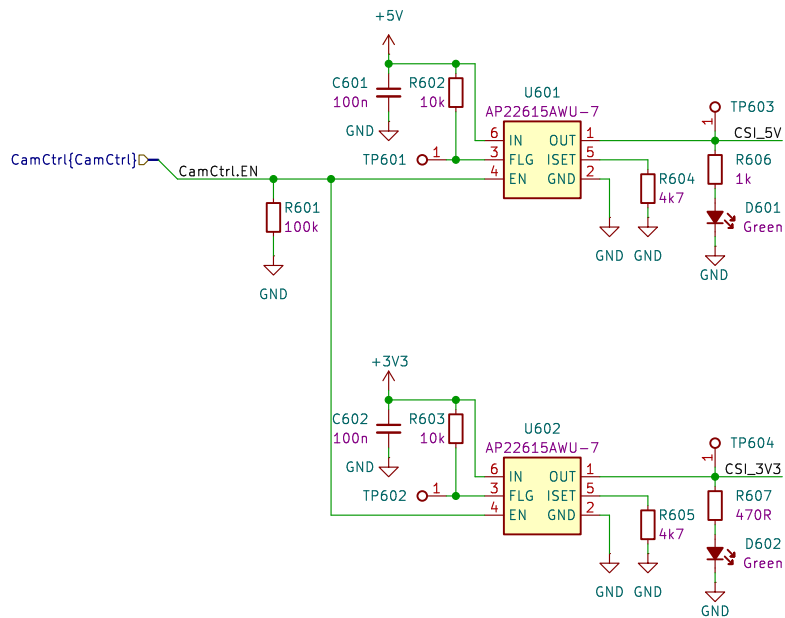


Micro SD card slot



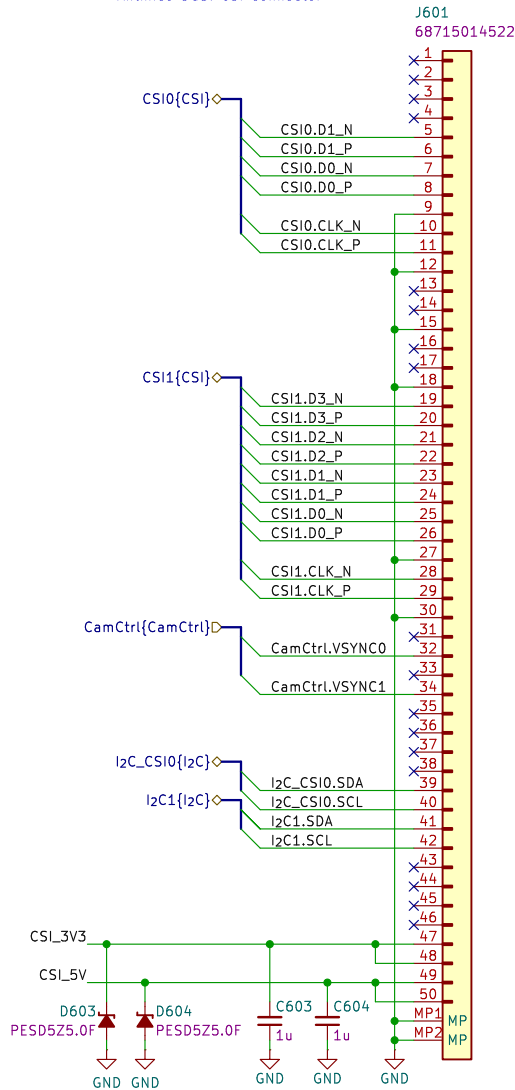
Power switches

Both switches set to 1.5A current limit



CSI connector

MIPI CSI-2 input via Antmicro Dual CSI connector



www.antmicro.com

Antmicro Ltd

Sheet: /CSI/

File: csi.kicad_sch

Title: CM4 Baseboard

Size: A3

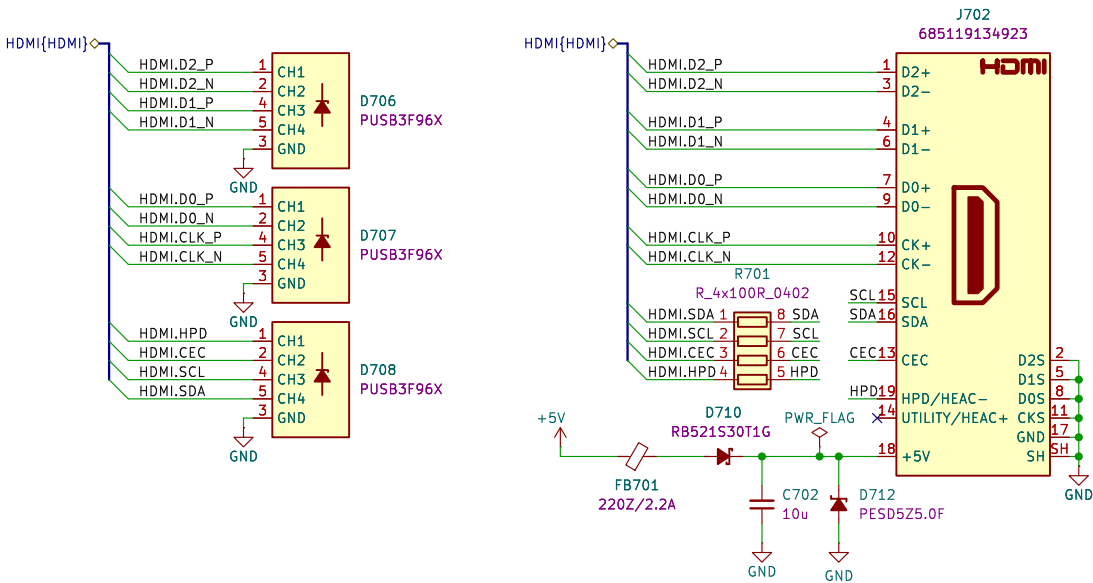
Date: 2026-01-05

Rev: 1.1.1:55f7709a

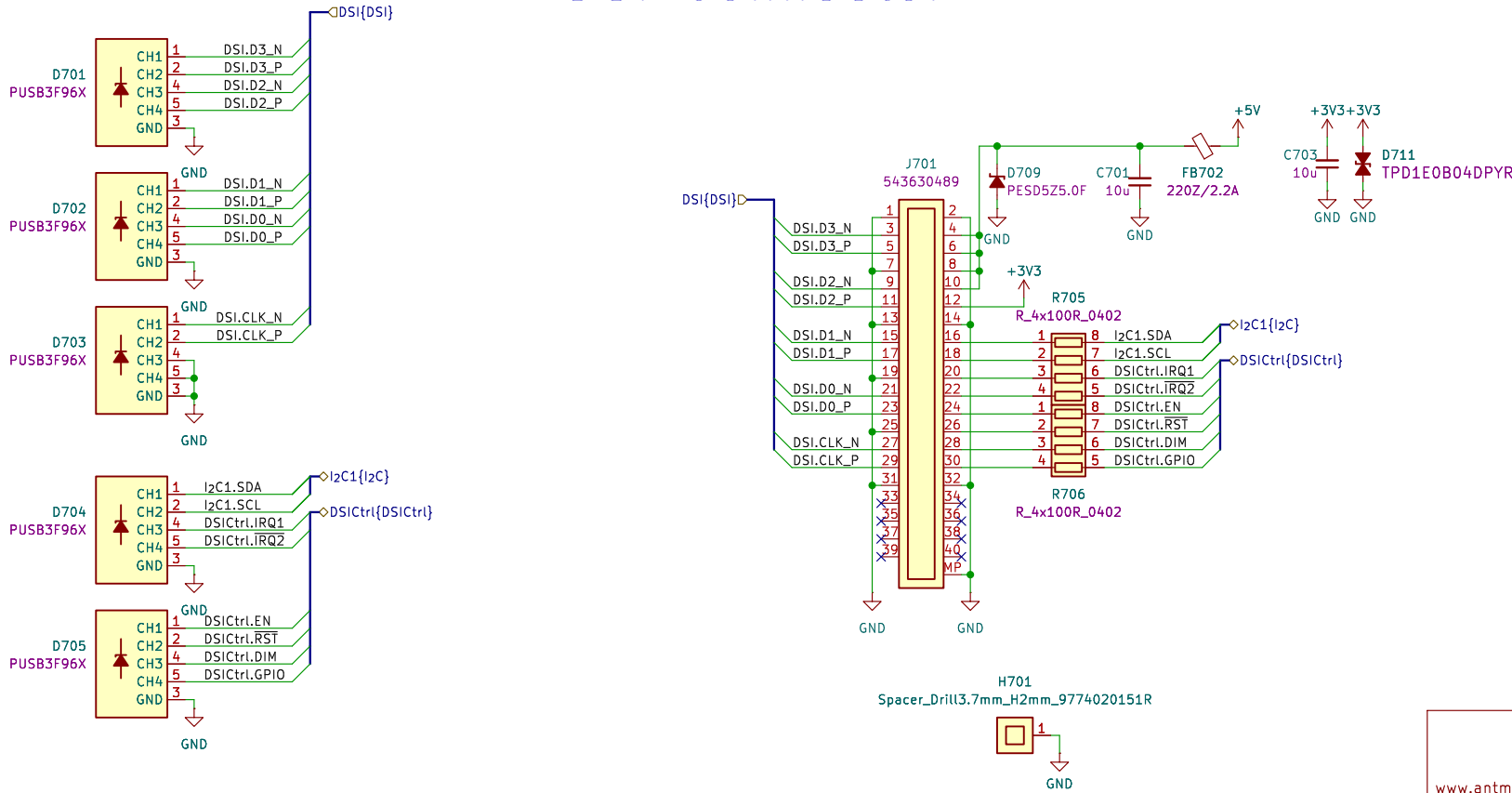
KiCad E.D.A. 9.0.6

Id: 6/9

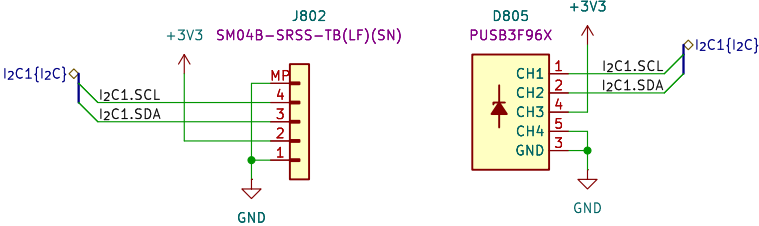
HDMI Connector



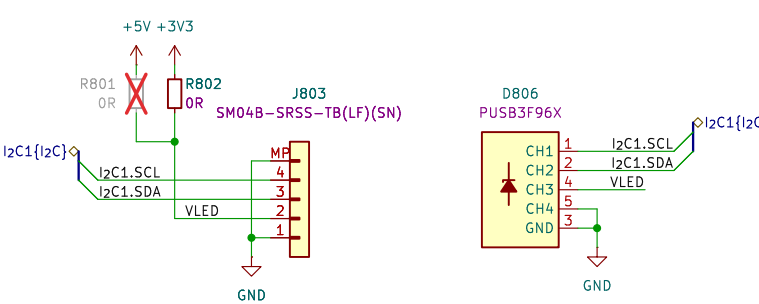
Antmicro CM4 Baseboard DSI Connector



QWIIC sensor connector

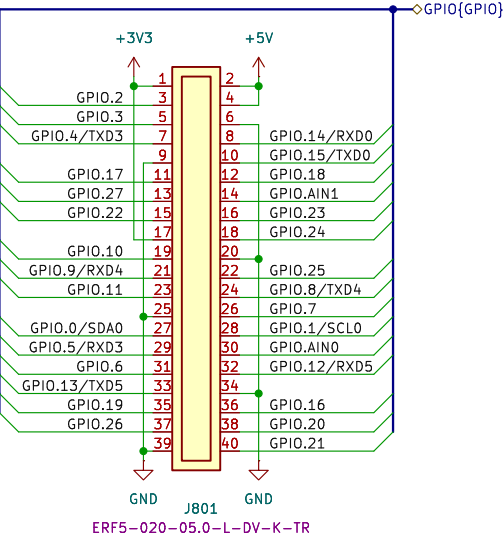


QWIIC LED strip connector

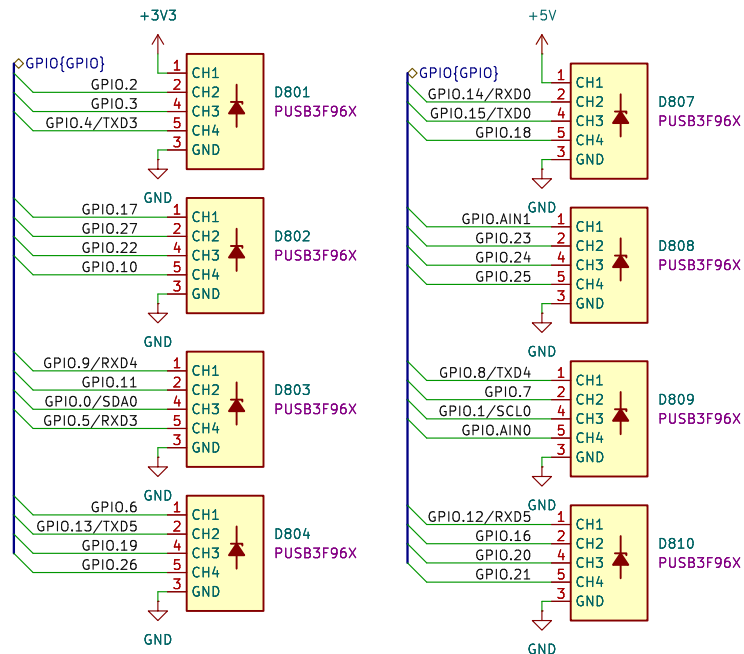


GPIO connector

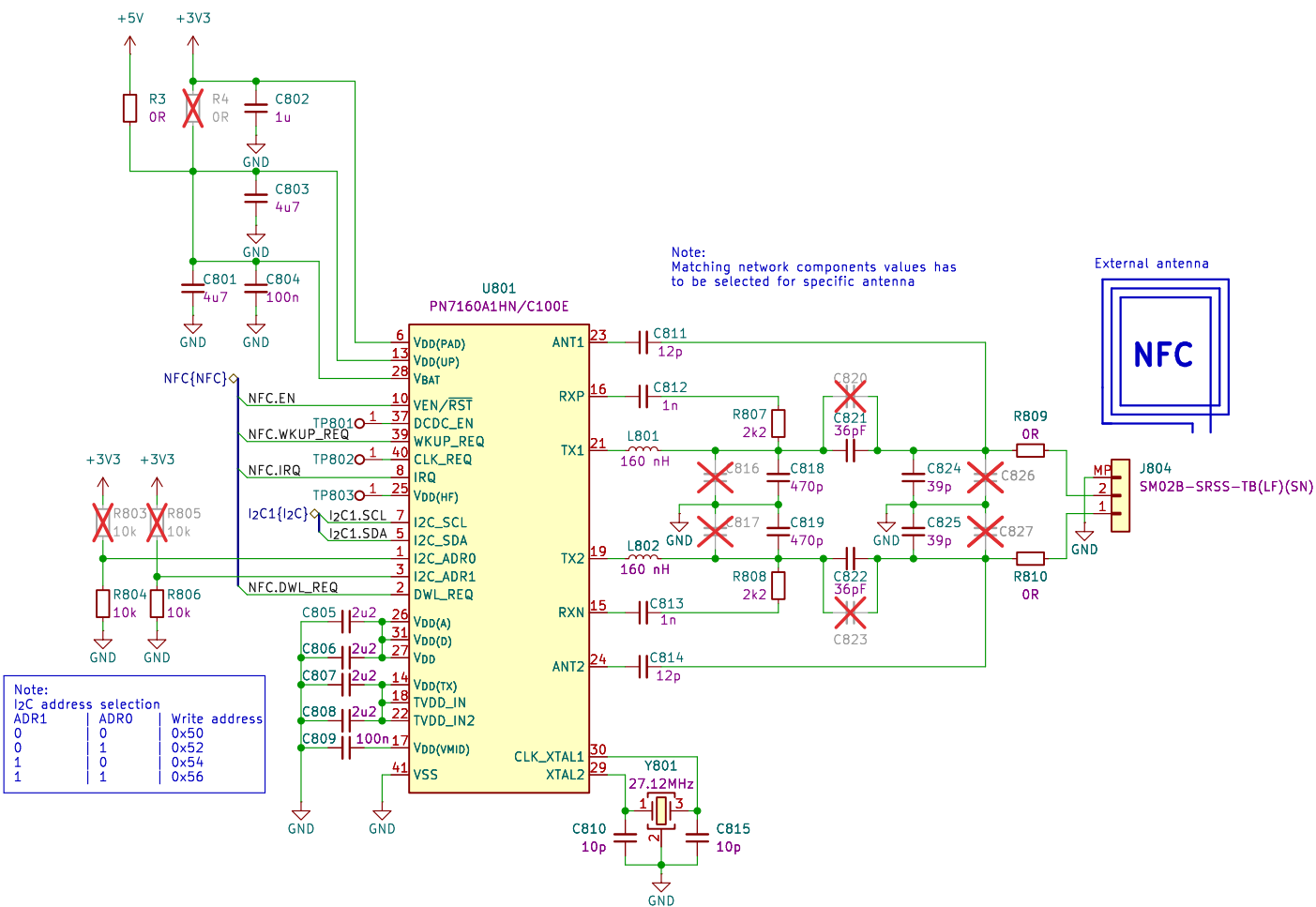
Note:
Follows RPi connector pinout,
except pins 14 & 30 (analog input)



GPIO protection



NFC Module



RTC

