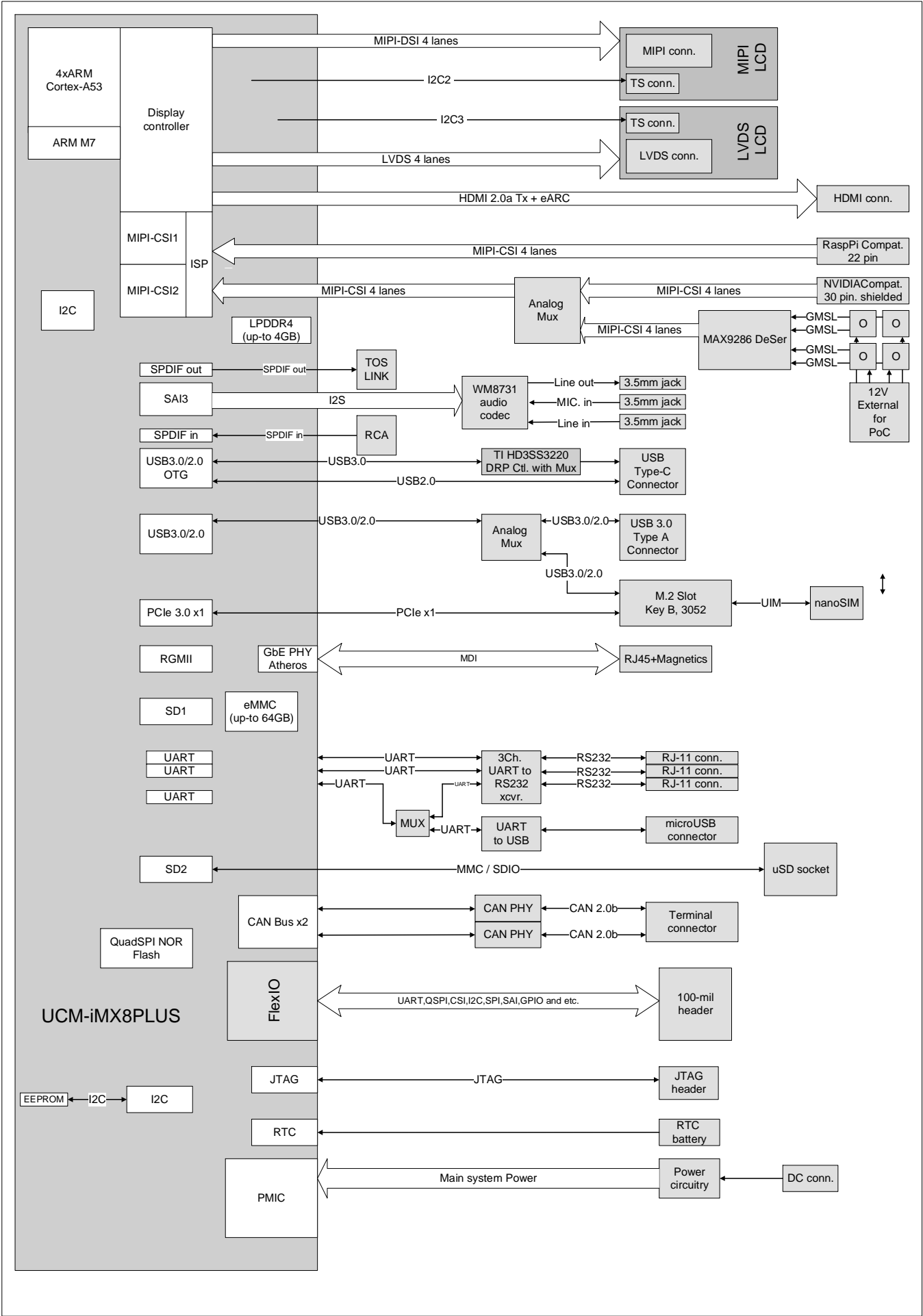


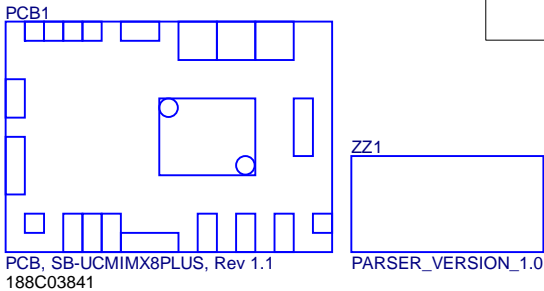
SB-UCM-iMX8PLUS

BOARD REVISION: 1.1
Attention:
BOARD REVISION 1.1 requires
Compulsory rework described on page 13

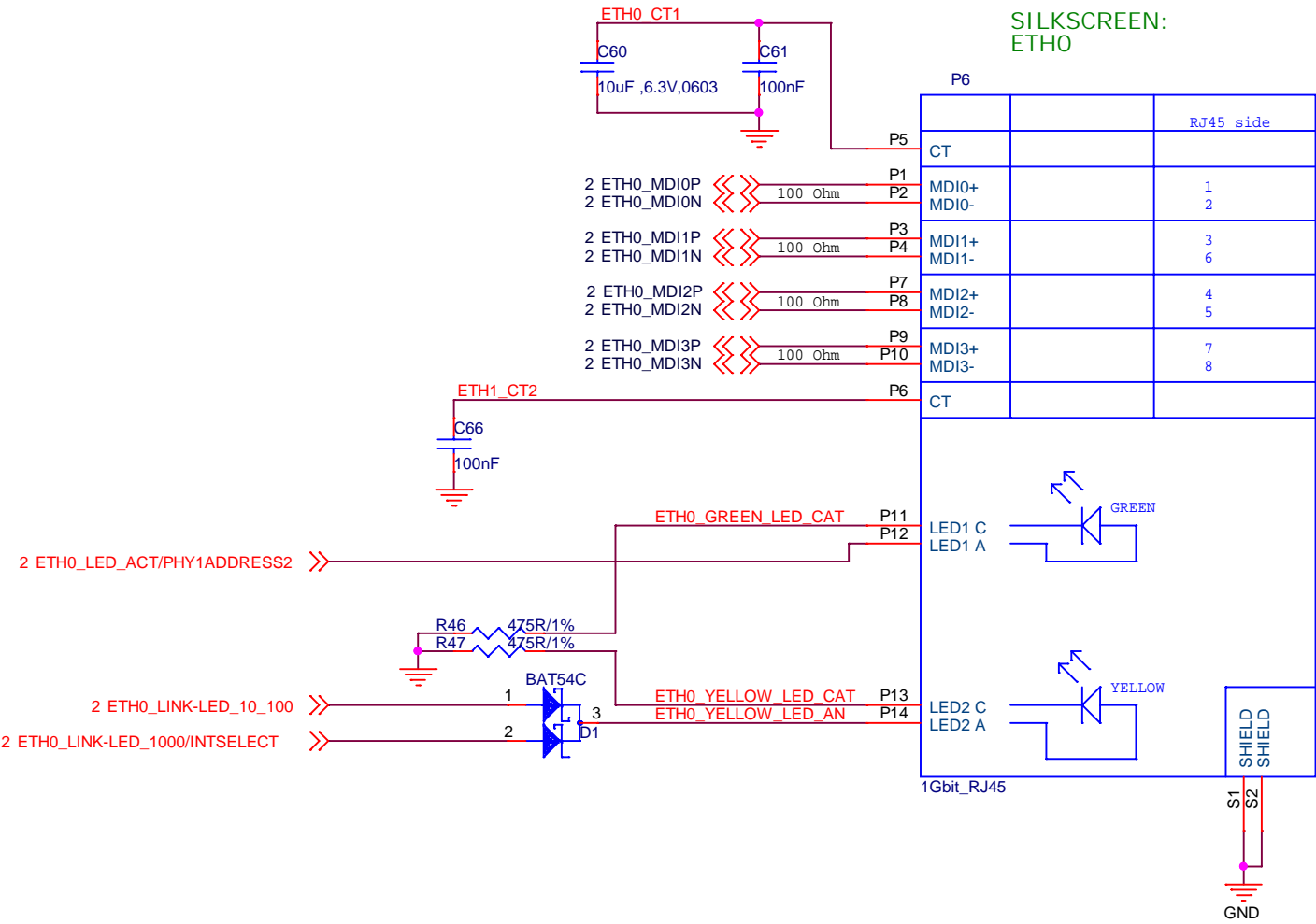
Page	Description
01	Block Diagram
02	Carrier-board interface
03	RJ-45 Ethernet connector
04	USB3.0, Type-C, Host
05	Audio Codec
06	JTAG, CAN, GPIO Exp., Misc.
07	MIPI-DSI LCD
08	LVDS LCD
09	HDMI, eARC
10	MIPI-CSI1 Connectors
11	MIPI-CSI2 Connector, GMSL DeSer
12	M.2 Key B, PCIe, USB3
13	Power
14	UART, RS232, SD, EEPROM
15	Mechanical



SILKSCREEN:
CompuLab
SB-UCMIMX8PLUS Rev 1.1
188C03841



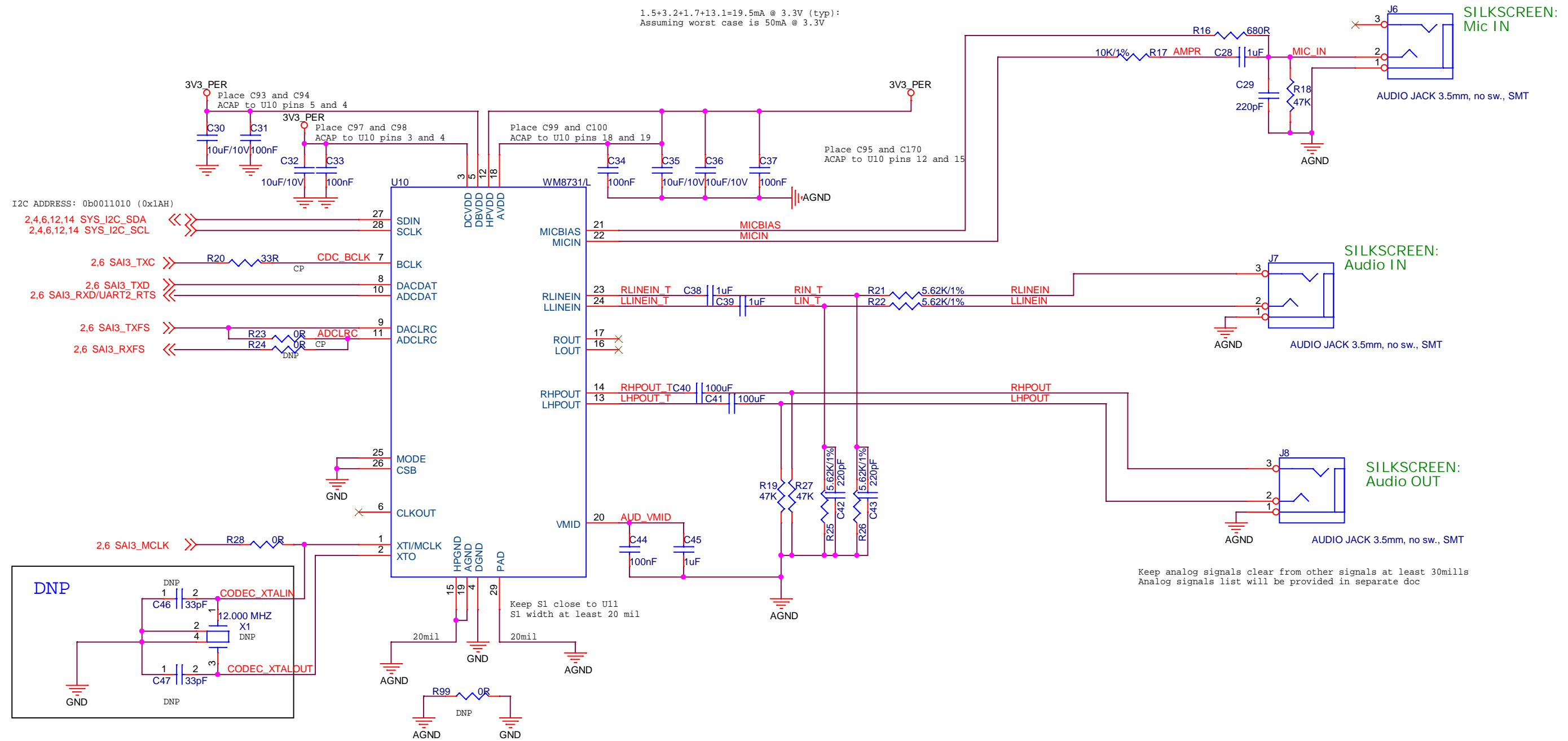
Ethernet connector



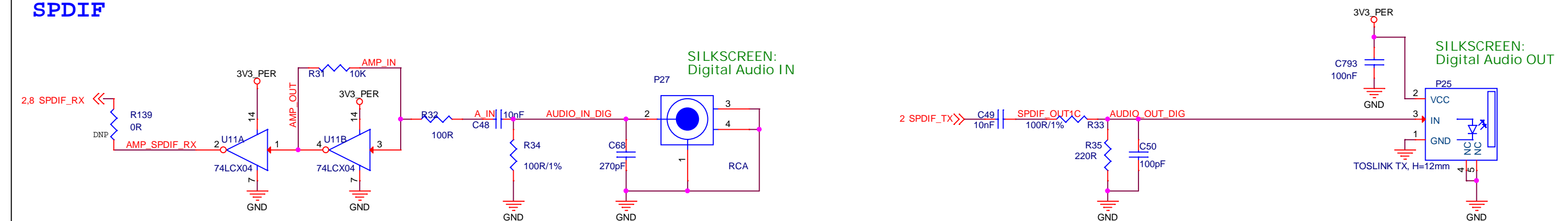
Audio Codec

POWER CONSUMPTION:
 DBVDD = 1.5mA @ 3.3V (typ)
 DCVDD = 3.2mA @ 1.5V (typ) ==> assuming same current @ 3.3V
 HPVDD = 1.7mA @ 3.3V (typ)
 AVDD = 13.1mA @ 3.3V (typ)

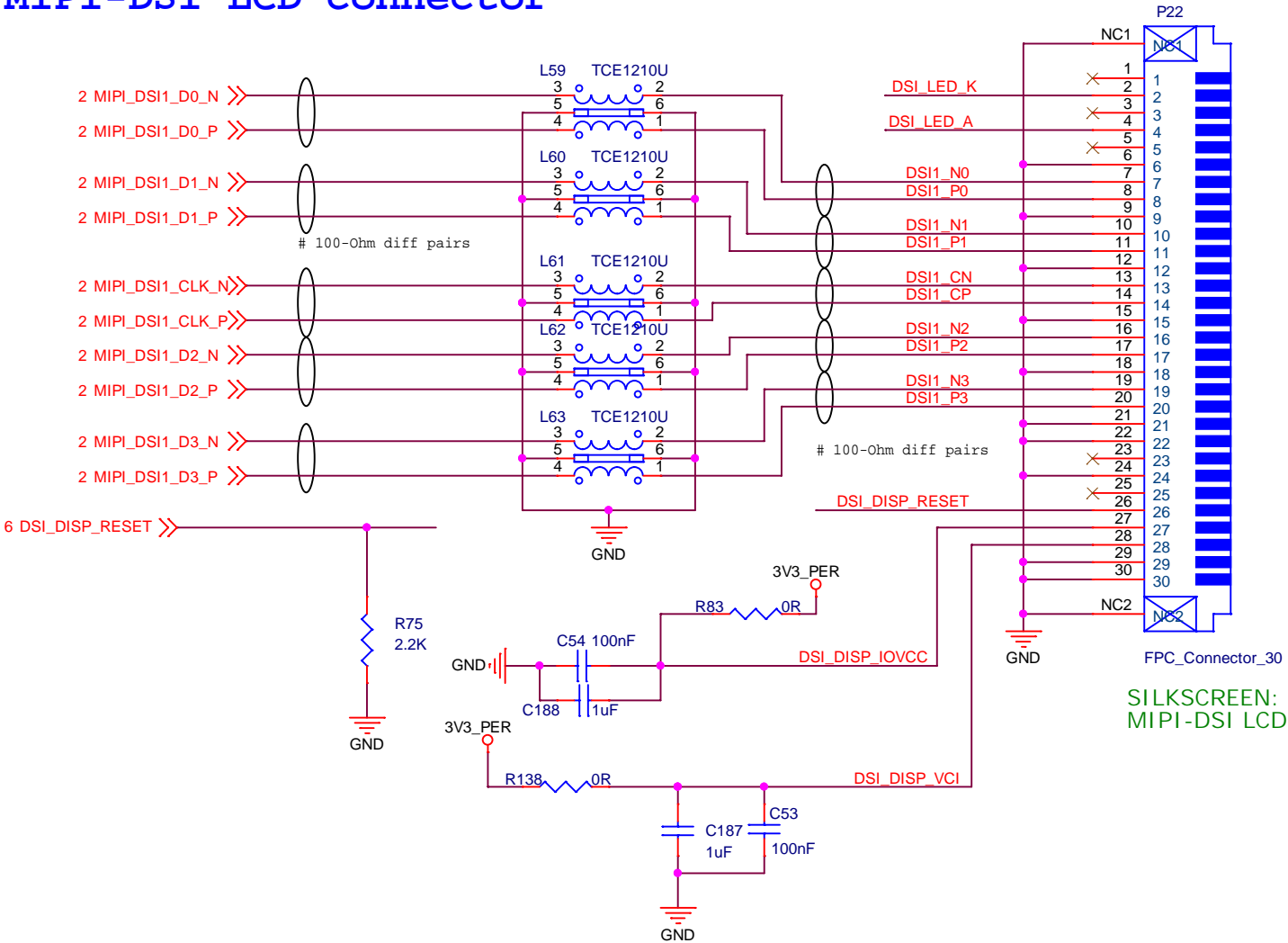
1.5+3.2+1.7+13.1=19.5mA @ 3.3V (typ):
Assuming worst case is 50mA @ 3.3V



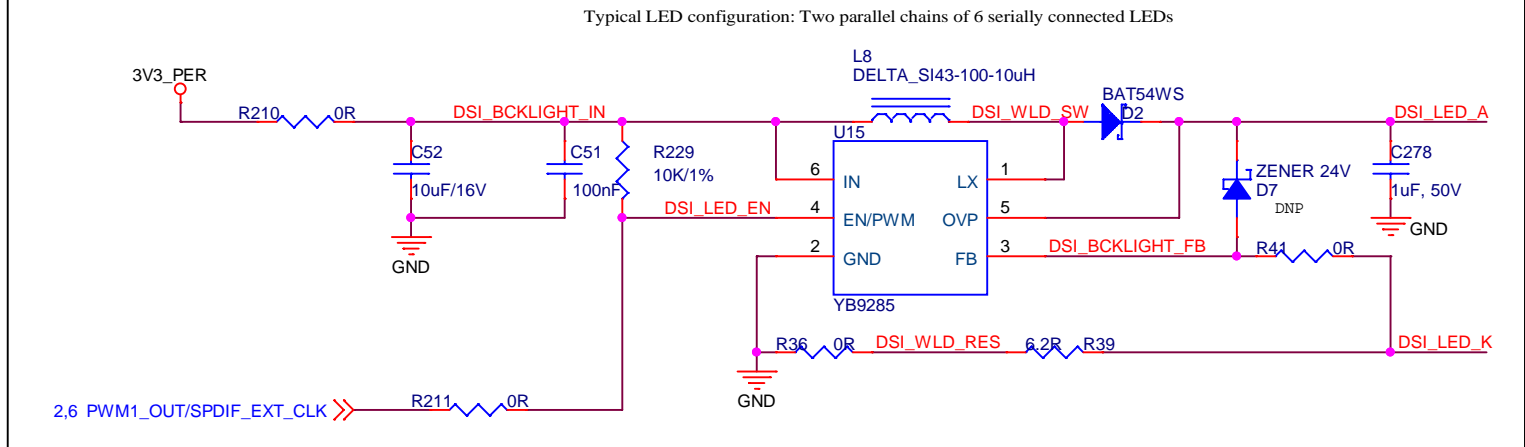
SPDIF



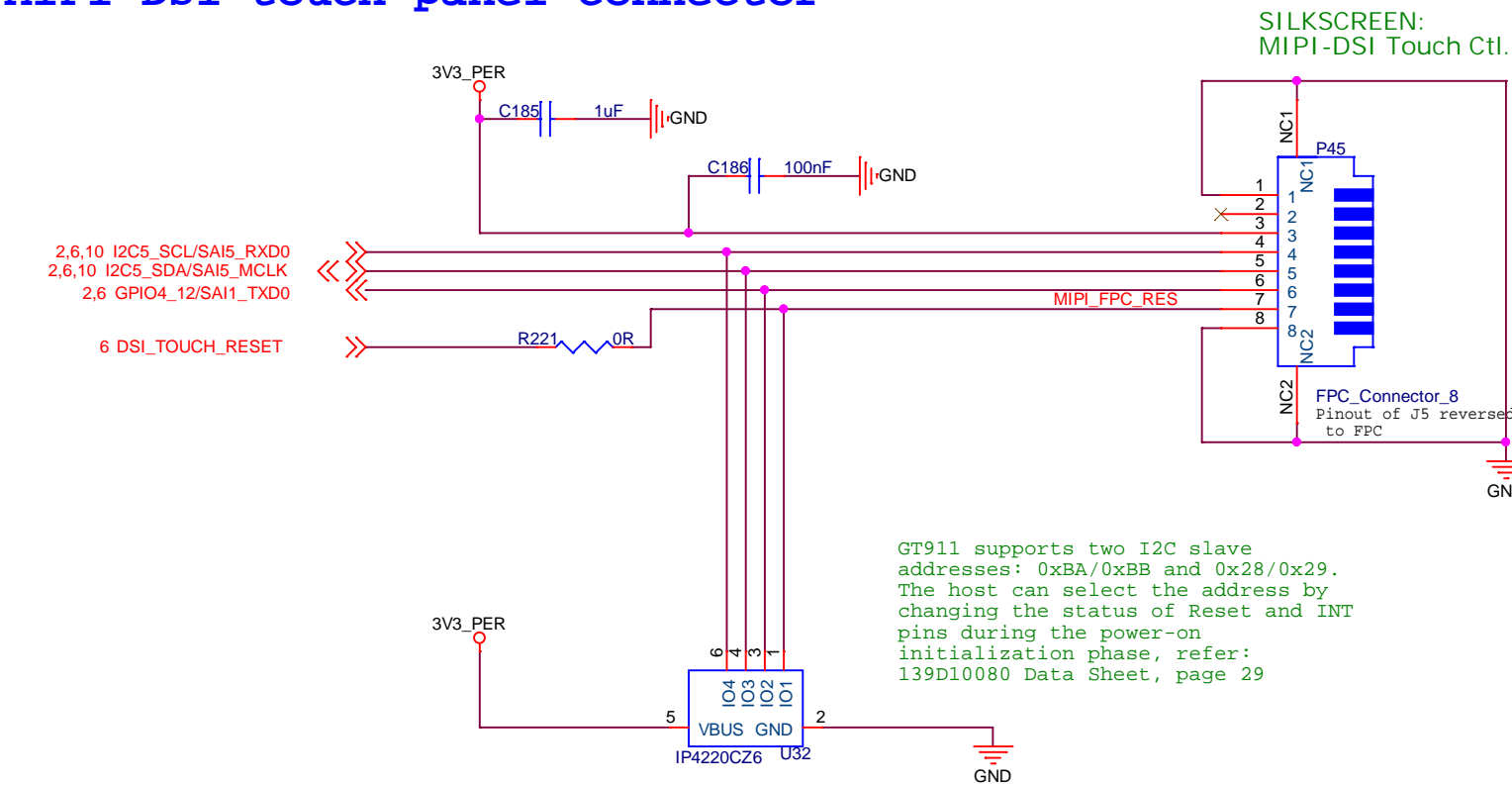
MIPI-DSI LCD connector



MIPI-DSI LCD back-light power

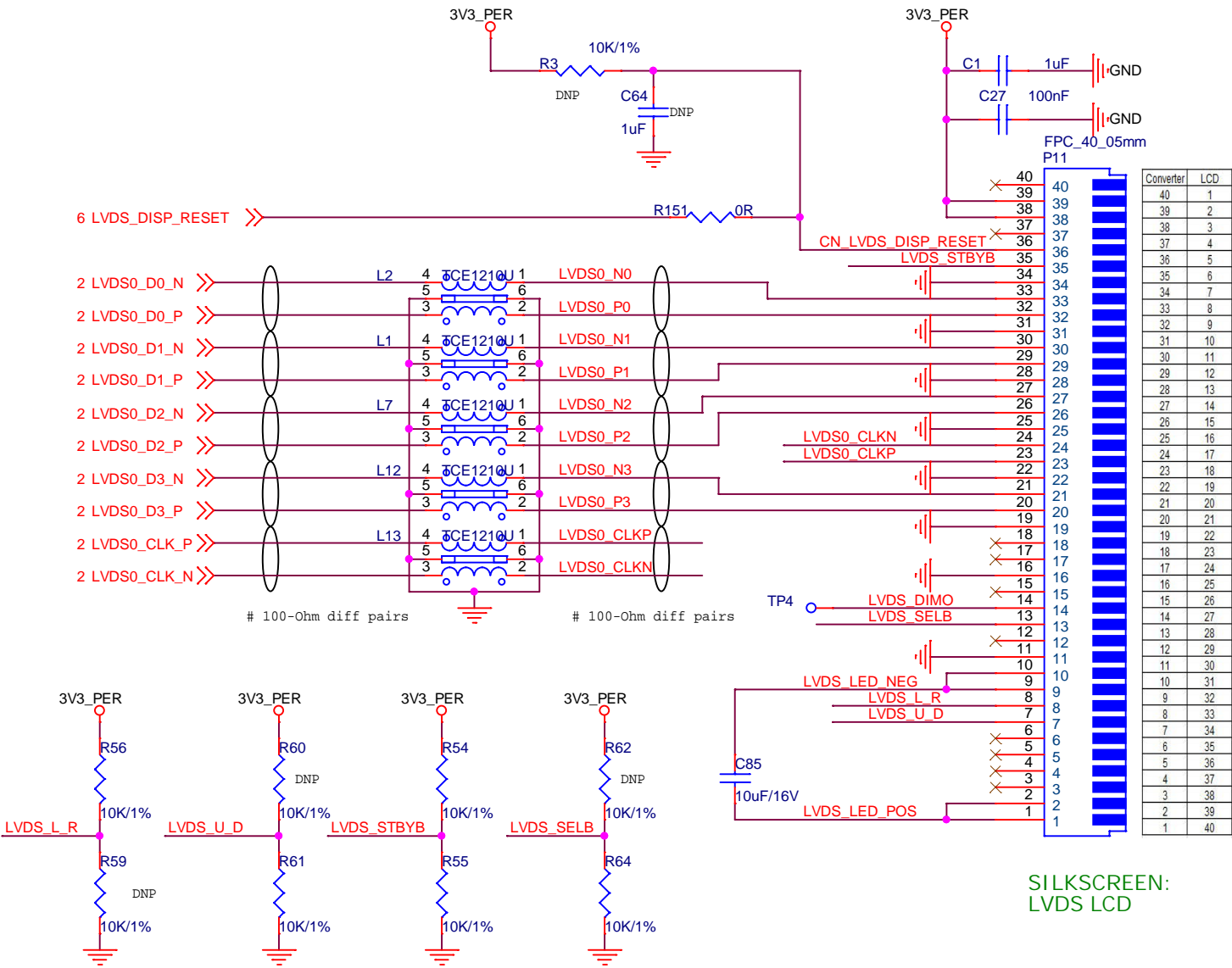


MIPI-DSI touch-panel connector

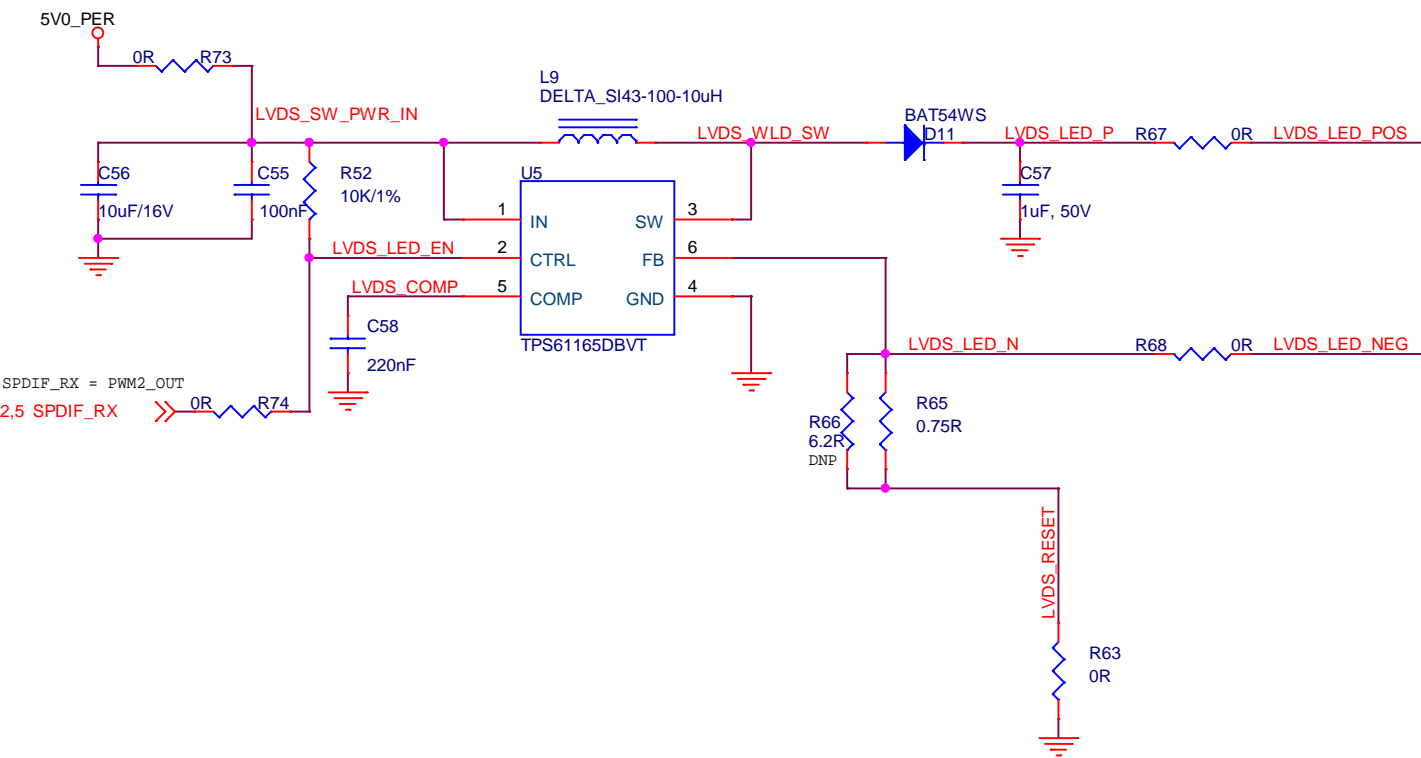


GT911 supports two I2C slave addresses: 0xBA/0xBB and 0x28/0x29. The host can select the address by changing the status of Reset and INT pins during the power-on initialization phase, refer: 139D10080 Data Sheet, page 29

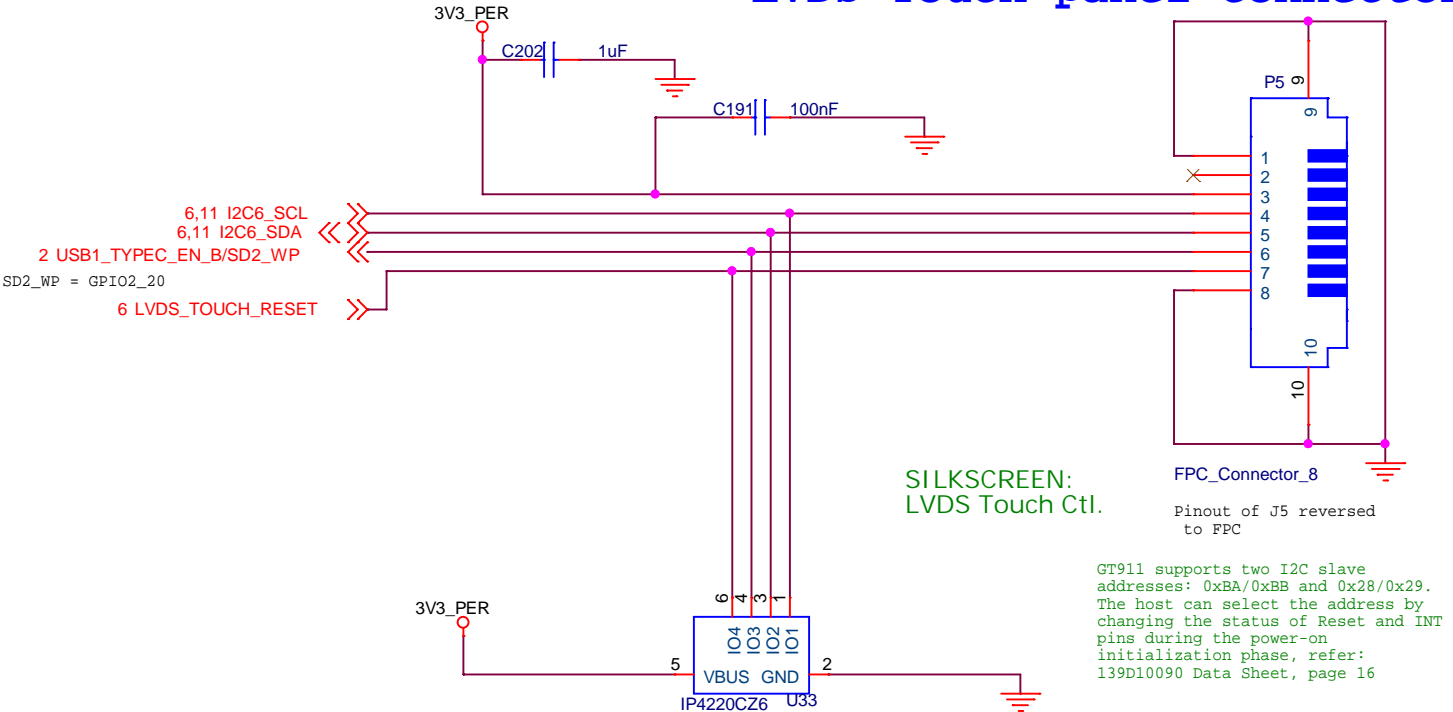
LVDS connector



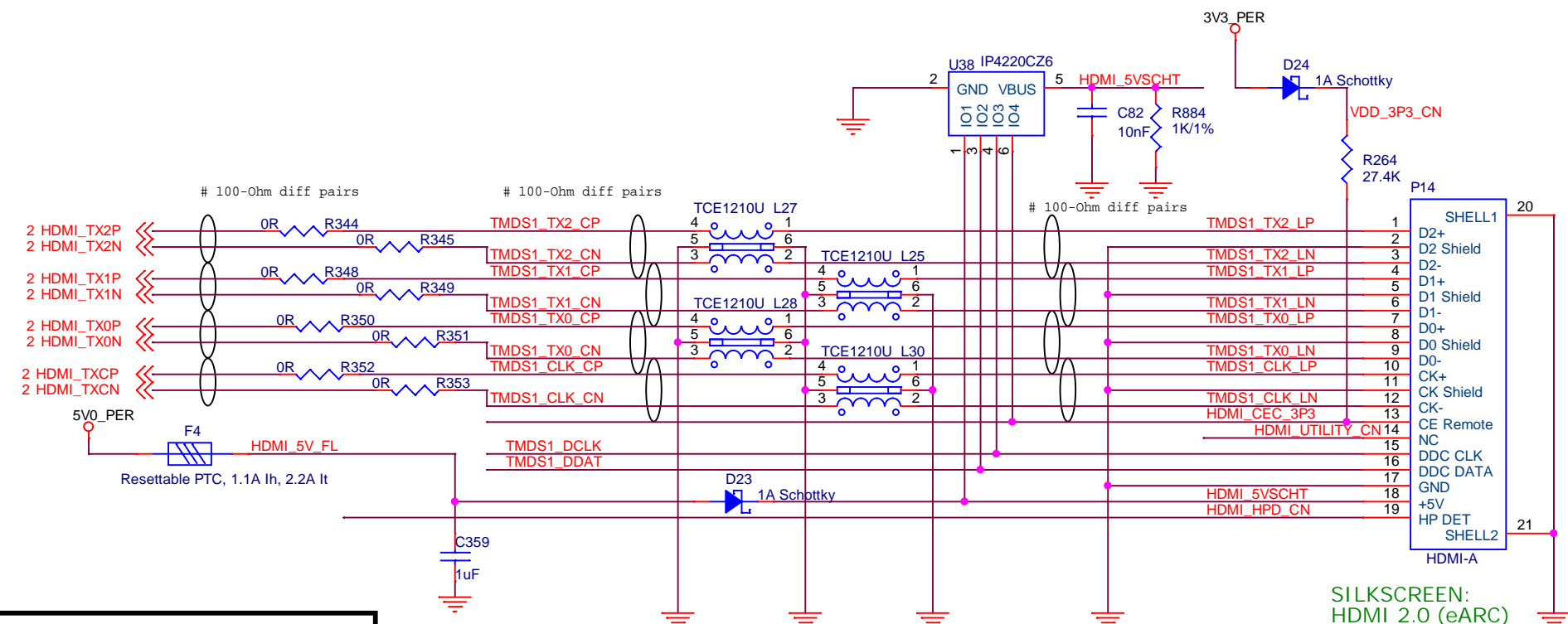
LCD back-light power



LVDS Touch-panel connector

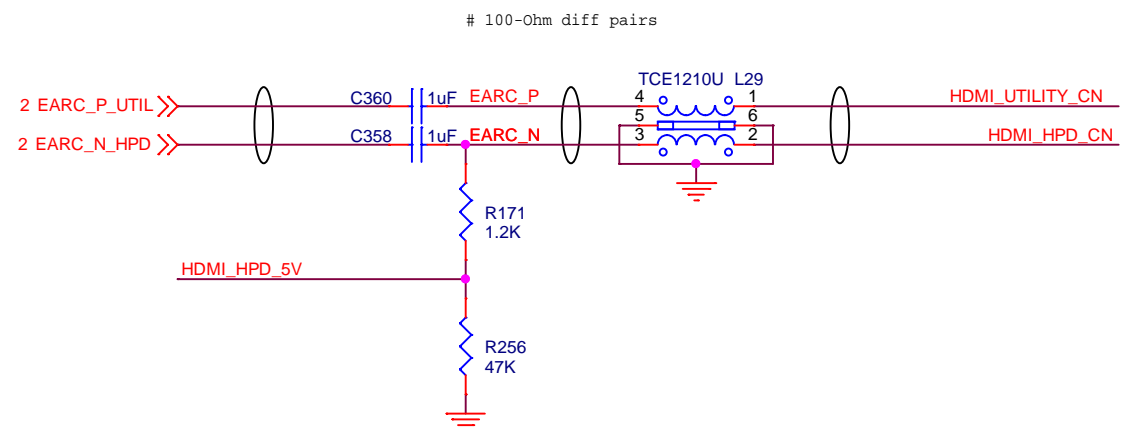


HDMI connector with eARC

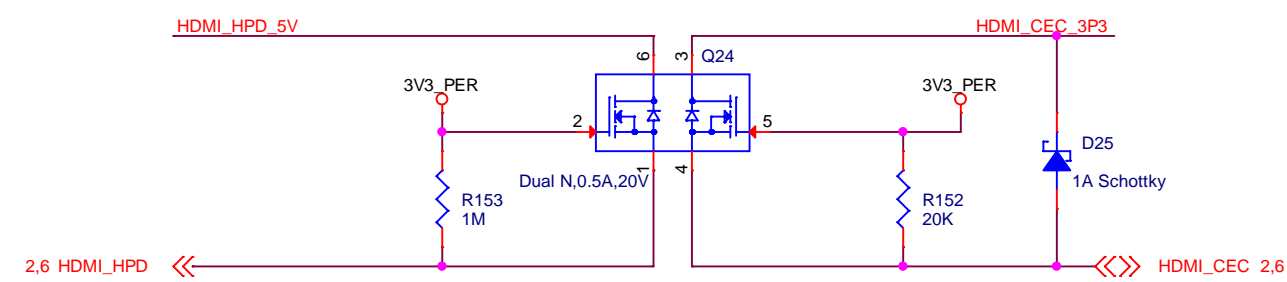


SILKSCREEN:
HDMI 2.0 (eARC)

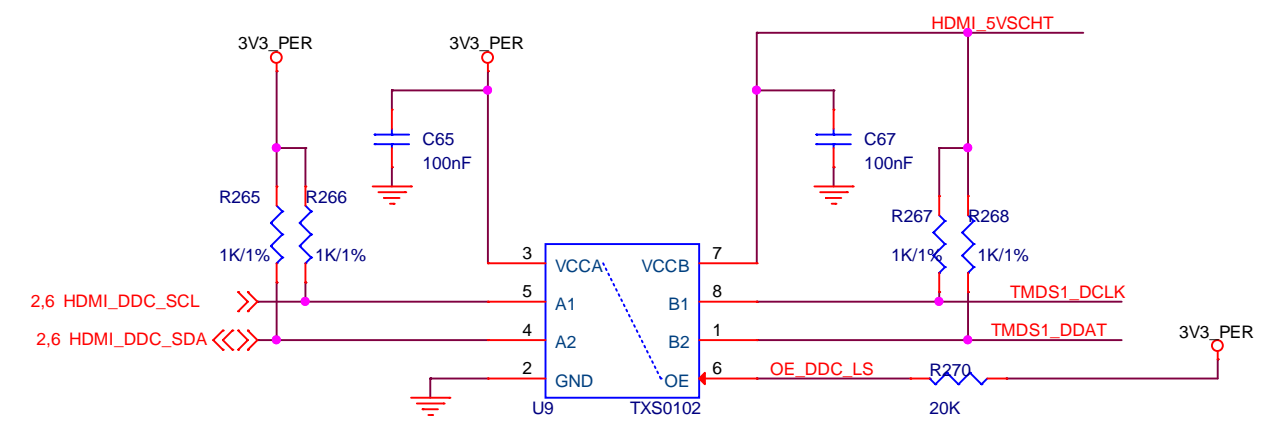
eARC ESD and HPD DC Filter



HPD and CEC Level Shifter



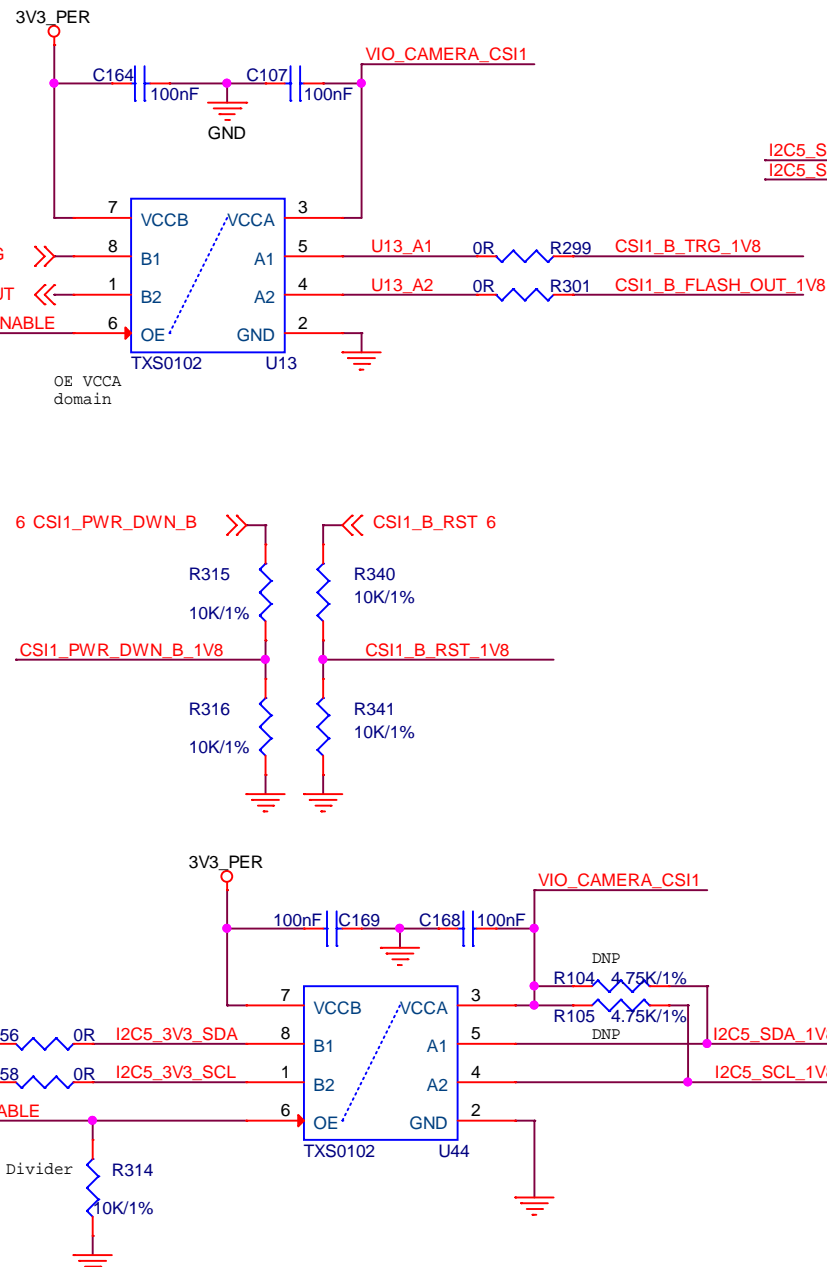
DDC Level Shifter



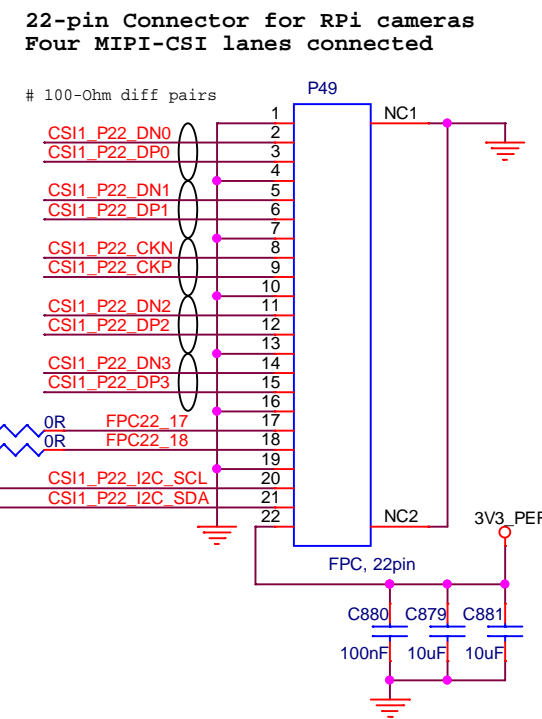
The schematic diagram illustrates the electrical connections for the MAX14998ETO+T camera module. Key components and connections include:

- Power and Grounding:**
 - 3V3_PER:** Provides power to the module. It is connected to pins 1, 6, 13, and 26.
 - Grounding:** Pins 14 and 15 are connected to ground. Pins 19 and 18 are also connected to ground.
- Resistors and Capacitors:**
 - R328:** A 10K/1% resistor connected to the **CSI1_SELECTOR** pin.
 - E18:** A component connected to the **CSI1_SELECTOR** pin.
 - Capacitors:** C159 (100nF), C105 (100nF), C170 (100nF), and C160 (100nF) are connected to the power and ground lines.
- MIPI-CSI1 Interface:**
 - COM0+/-, COM1+/-, COM2+/-, COM3+/-, COM4+/-, COM5+/-:** These pins are connected to the corresponding COM pins of the camera module.
 - NC0+/-, NC1+/-, NC2+/-, NC3+/-, NC4+/-, NC5+/-:** These pins are connected to the corresponding NC pins of the camera module.
 - NO0+/-, NO1+/-, NO2+/-, NO3+/-, NO4+/-, NO5+/-:** These pins are connected to the corresponding NO pins of the camera module.
- SEL1 and SEL2:** These pins are connected to the camera module's SEL1 and SEL2 pins.
- TPAD:** The camera module's TPAD pin is connected to the ground plane.

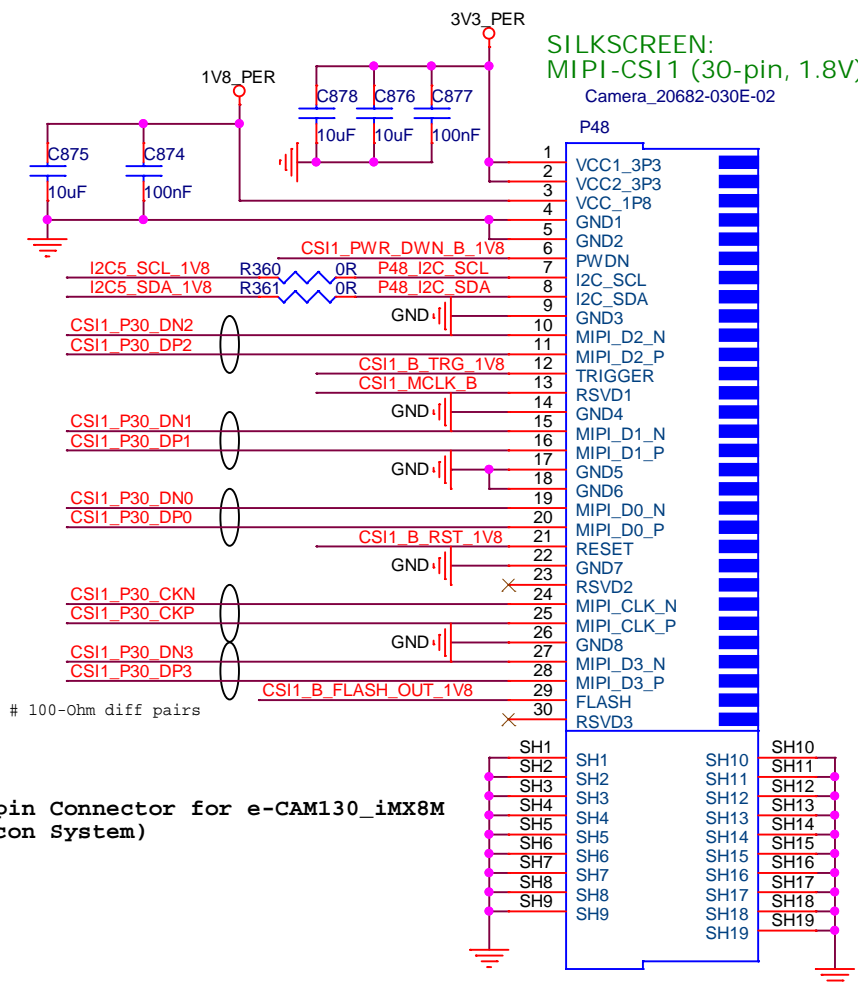
The diagram also includes a note: "SILKSCREEN: Enable 30-pin, 1.8V connector".




I2C5_S

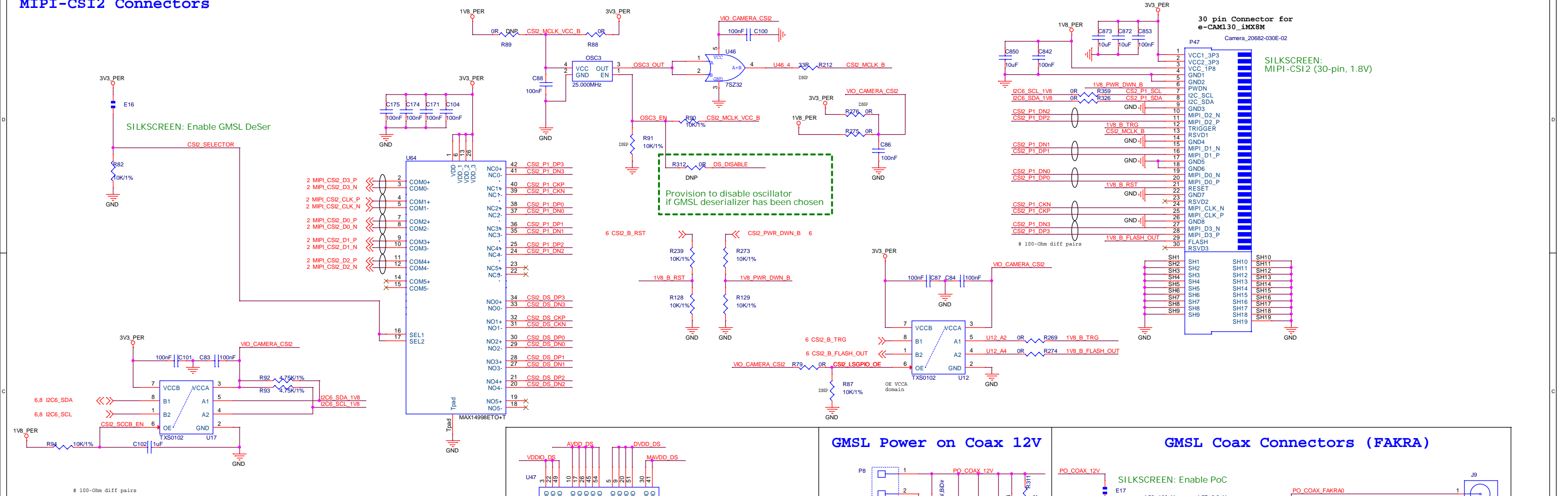


SILKSCREEN:
MIPI-CSI1 (30-pin, 1.8V)
Camera_20682-030E-02

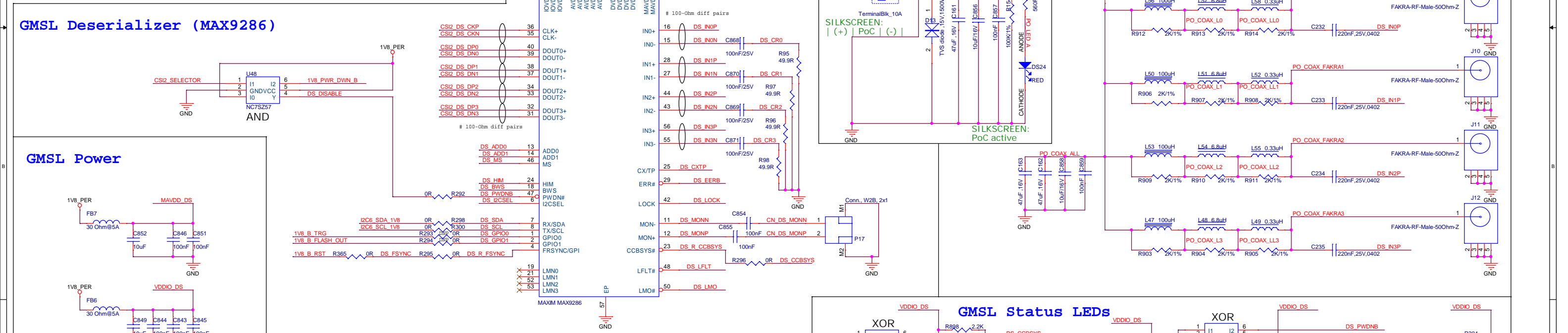


 CompuLab		CompuLab Ltd. (972) 4 8290100 P.O.Box 687 Yokneam 20692, Israel All Right reserved. <u>Unauthorized duplication prohibited</u>	
Size A3	Title SB-UCM-IMX8PLUS 10. MIPI-CS11 Connectors	Rev 1.1	
Document Number: 8000168001			
Date:	Sunday, November 27, 2022	Sheet	10 of 15

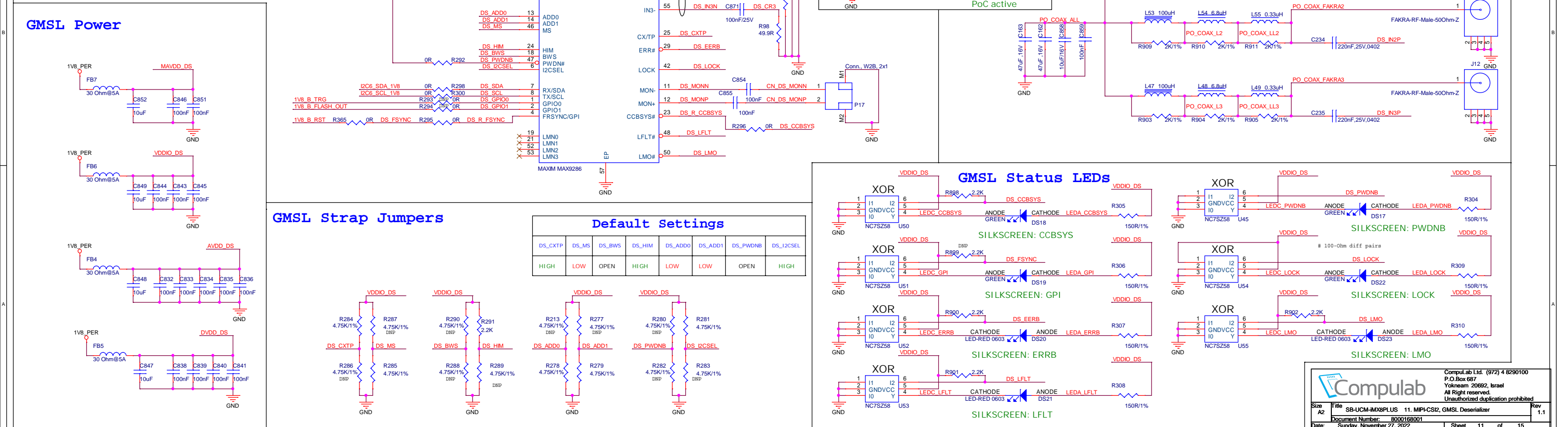
MIPI-CSI2 Connectors



GMSL Deserializer (MAX9286)

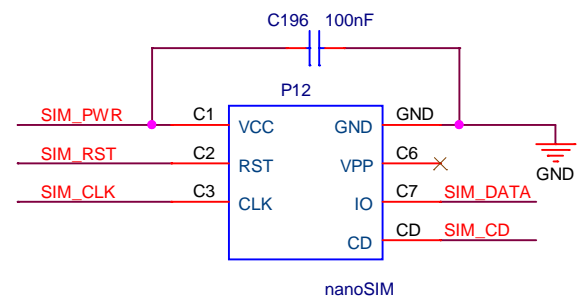


GMSL Power

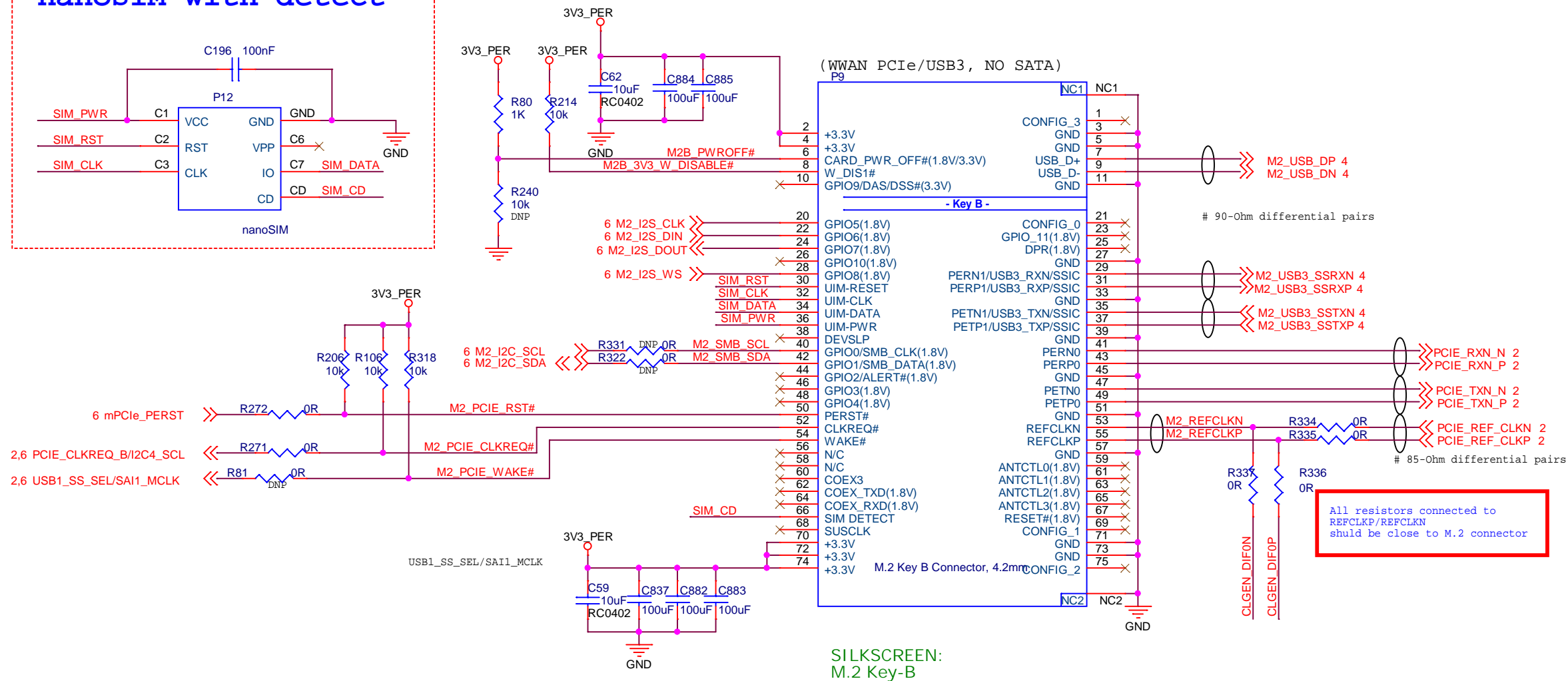


Default Settings							
DS_CXTP	DS_MS	DS_BWS	DS_HIM	DS_ADD0	DS_ADD1	DS_PWDNB	DS_J2CSEL
HIGH	LOW	OPEN	HIGH	LOW	LOW	OPEN	HIGH

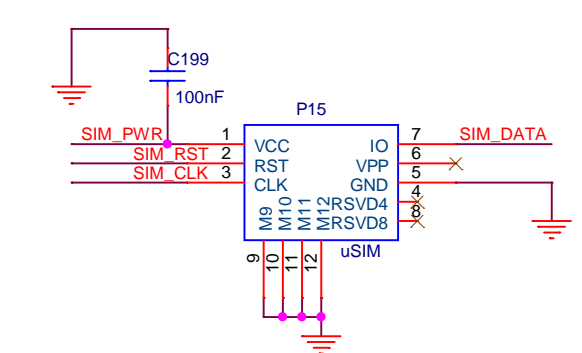
nanoSIM with detect



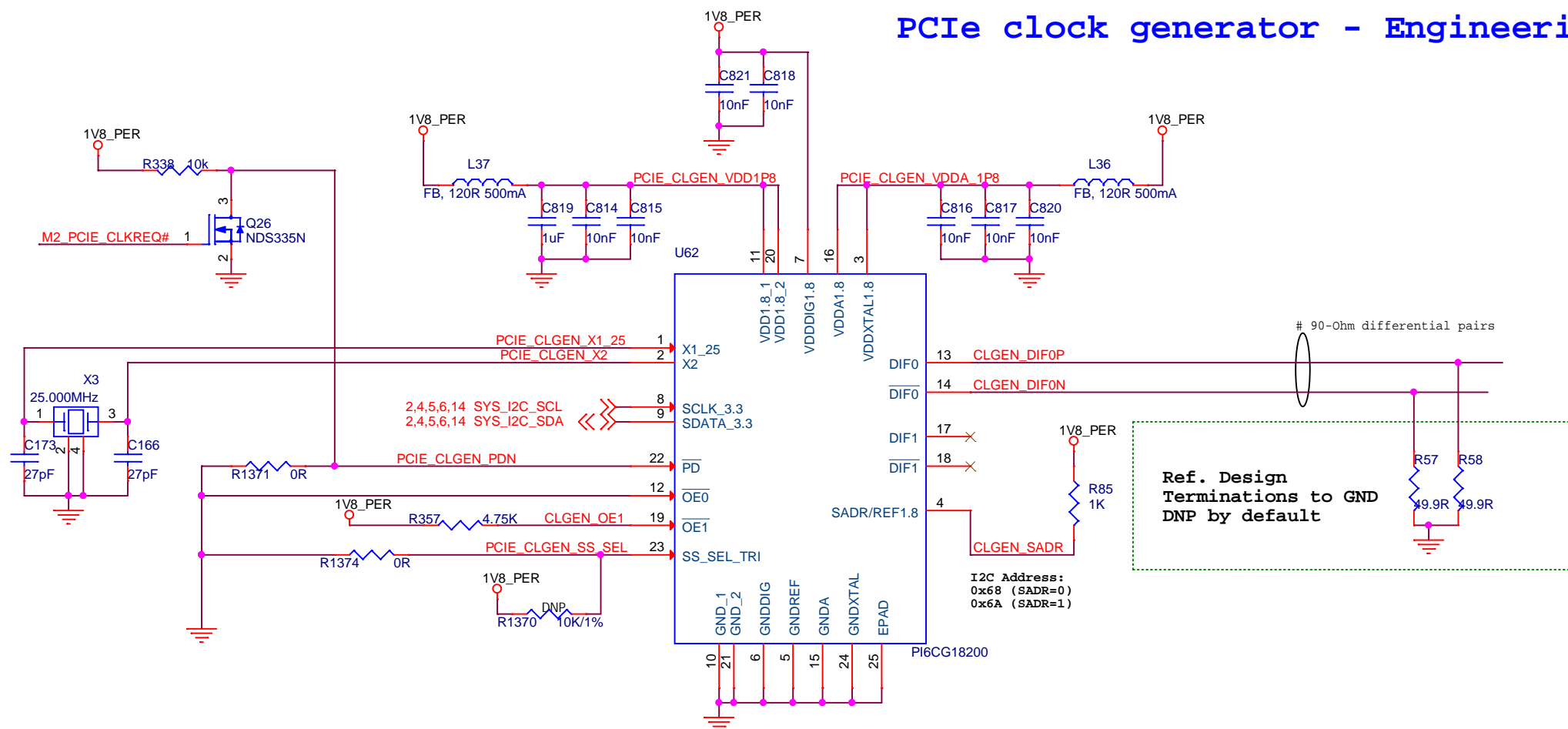
M.2 Socket - Key B



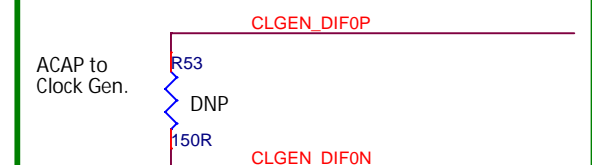
uSIM socket - DNP



PCIe clock generator - Engineering option [EXT_PCIE_CLGEN]



PCIE CLock Gen. Termination



PD#: Input notifies device to sample latched inputs and start up on first high assertion. Low enters Power Down Mode, subsequent high assertions exit Power Down Mode. This pin has internal pull-up resistor.

----- Configuration Straps

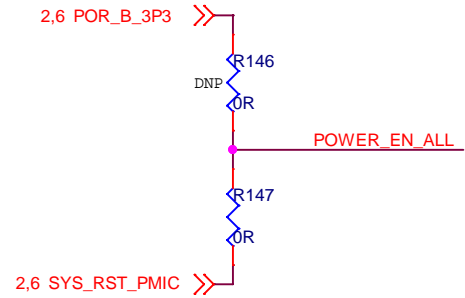
```

PD#:          Internal PU (see spec)
OE0#:         0 (Enable DIF0)
OE1#:         0 (Enable DIF1)
SS_SEL_TRI:   0 (SpreadSpect off)

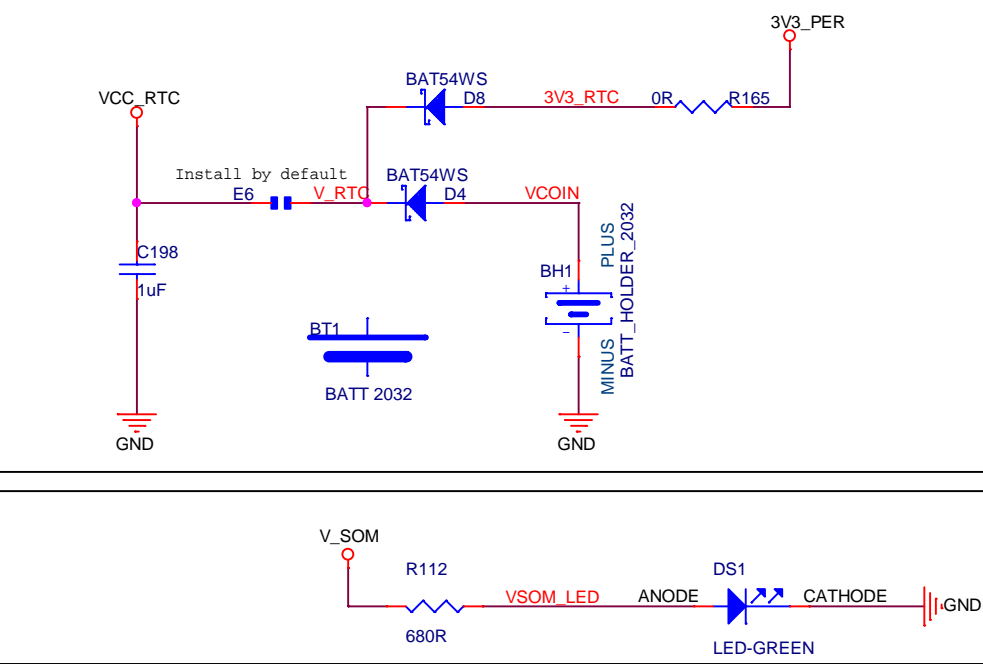
```


POWER

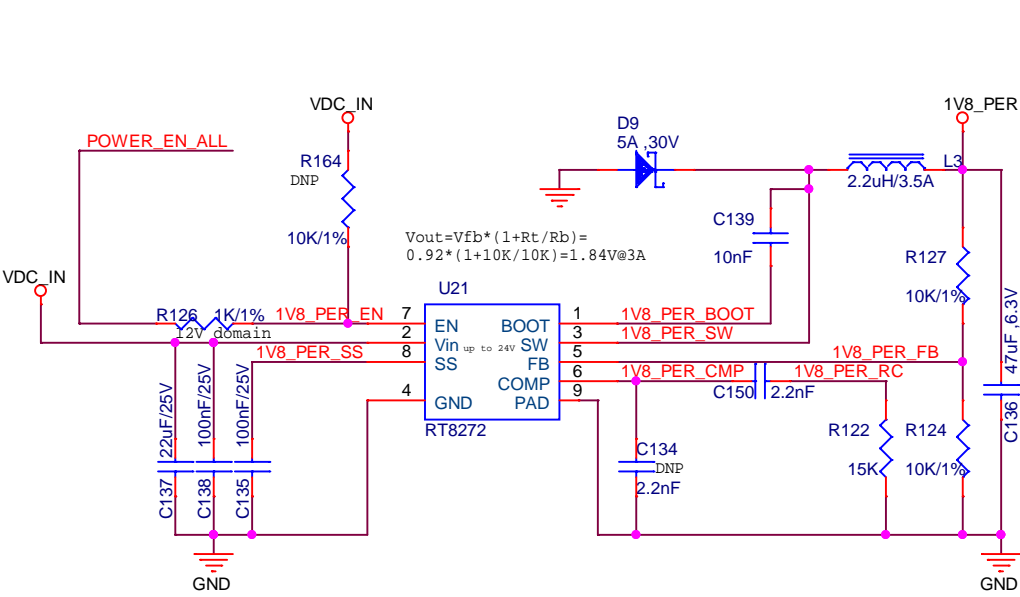
Power Reset Signal



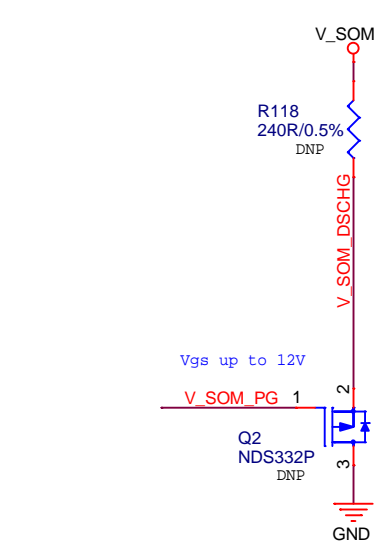
RTC battery



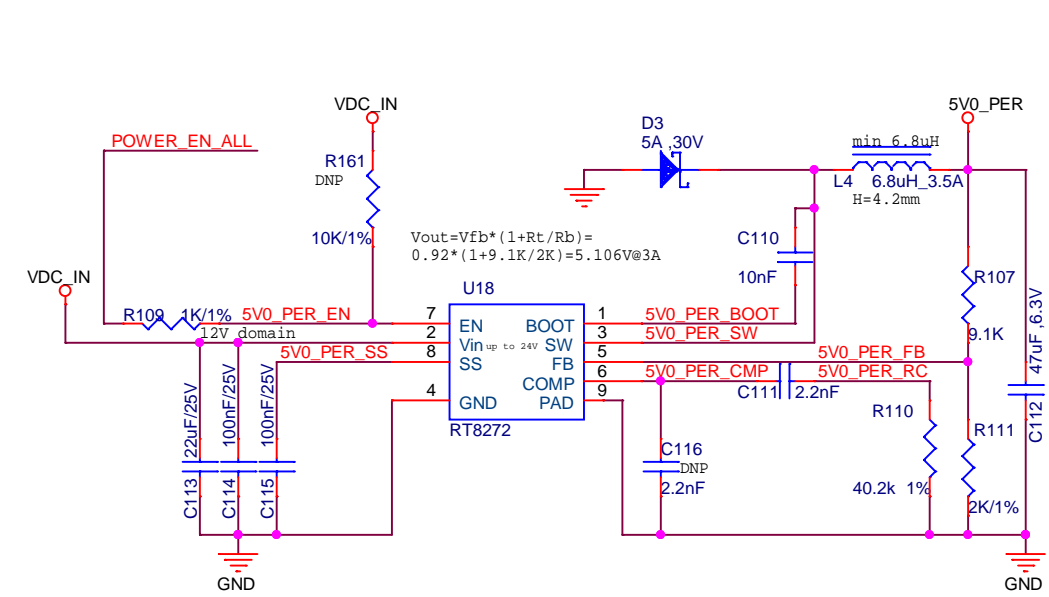
1V8_PER source



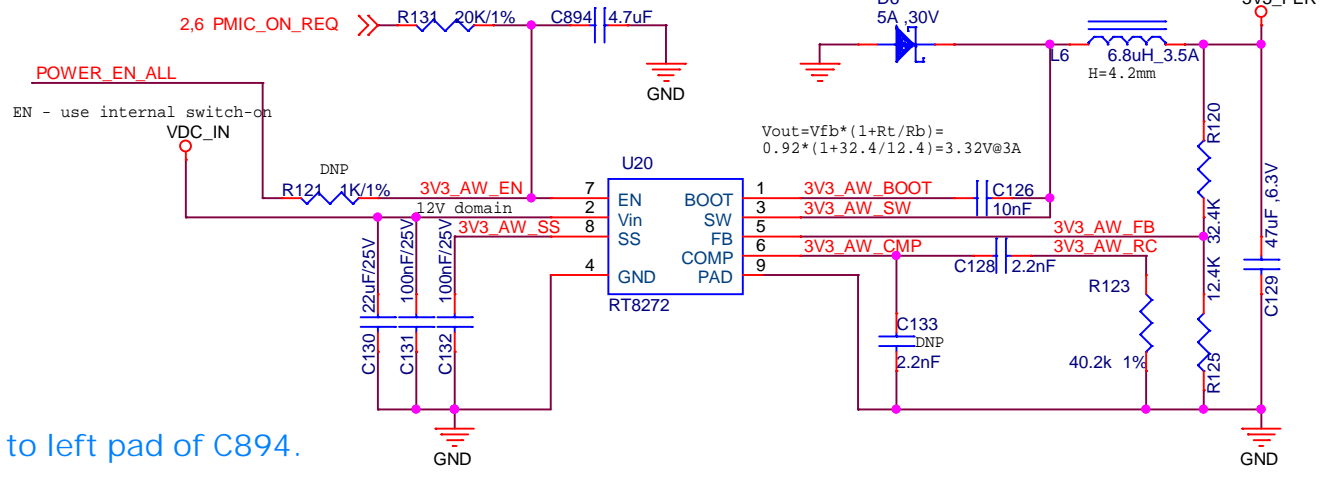
V_SOM discharge



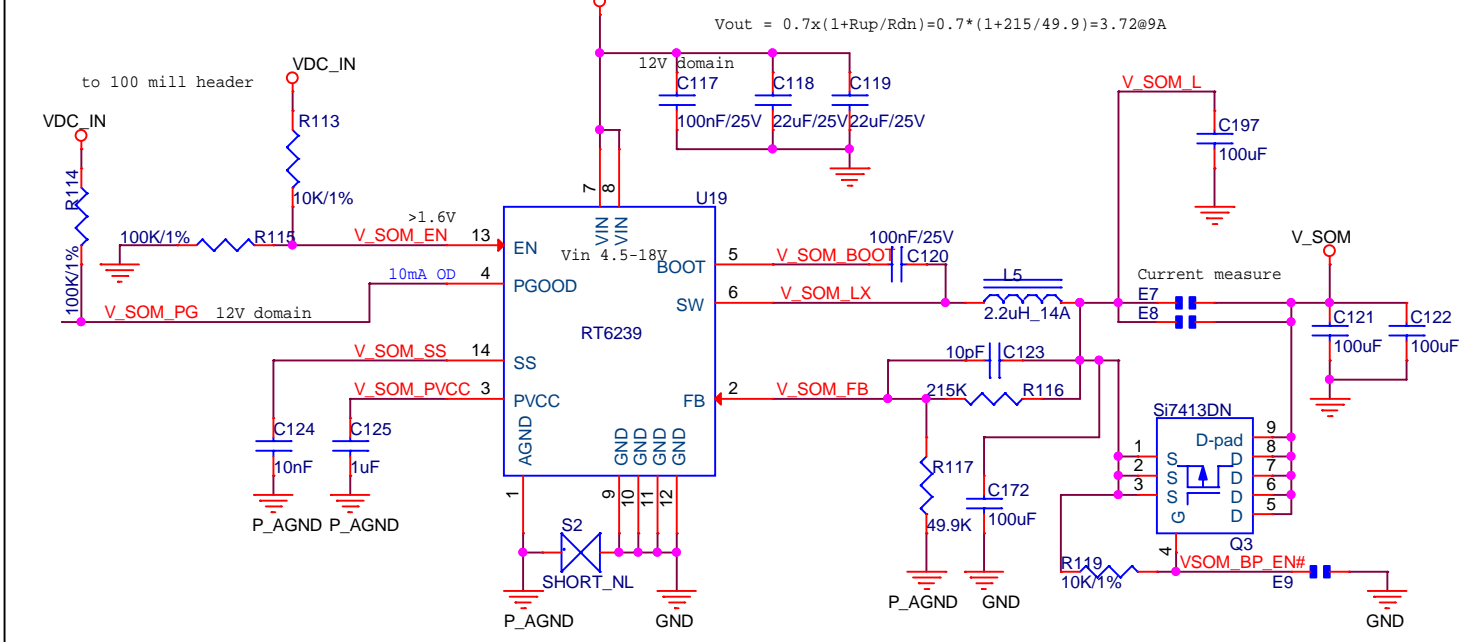
5V0_PER source



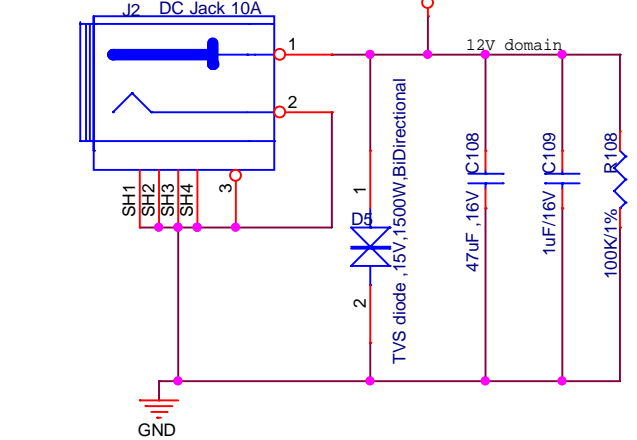
3V3_PER



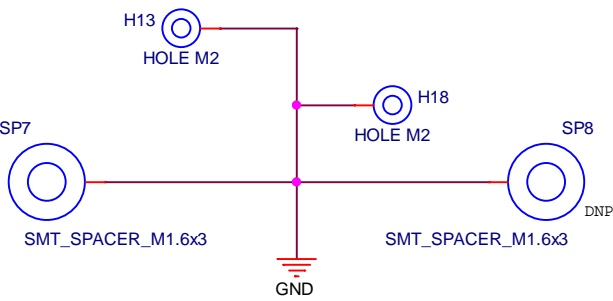
V_SOM



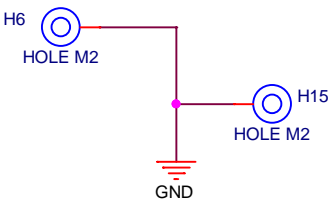
DC input



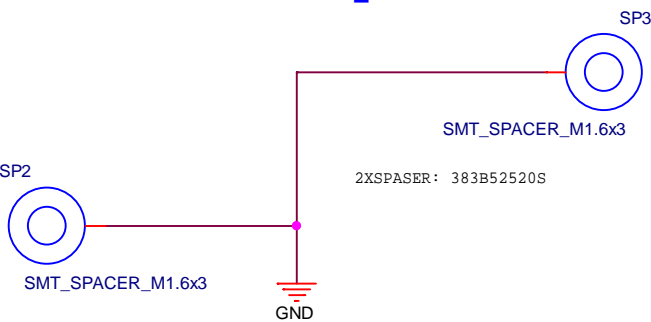
For M.2 module



For carrier-board stand-offs



UCM-iMX8M-Plus spacers



Stitching capacitors

