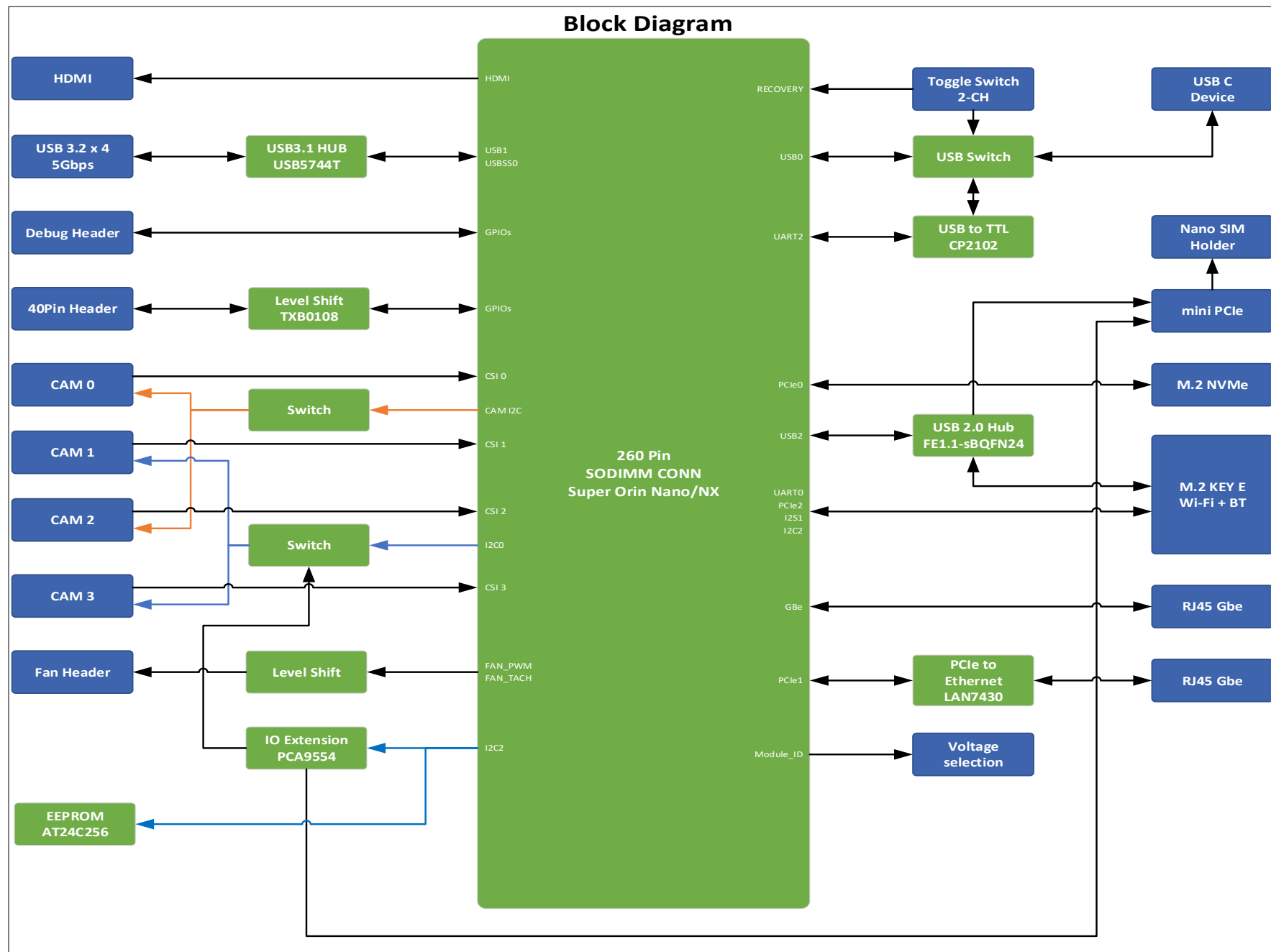
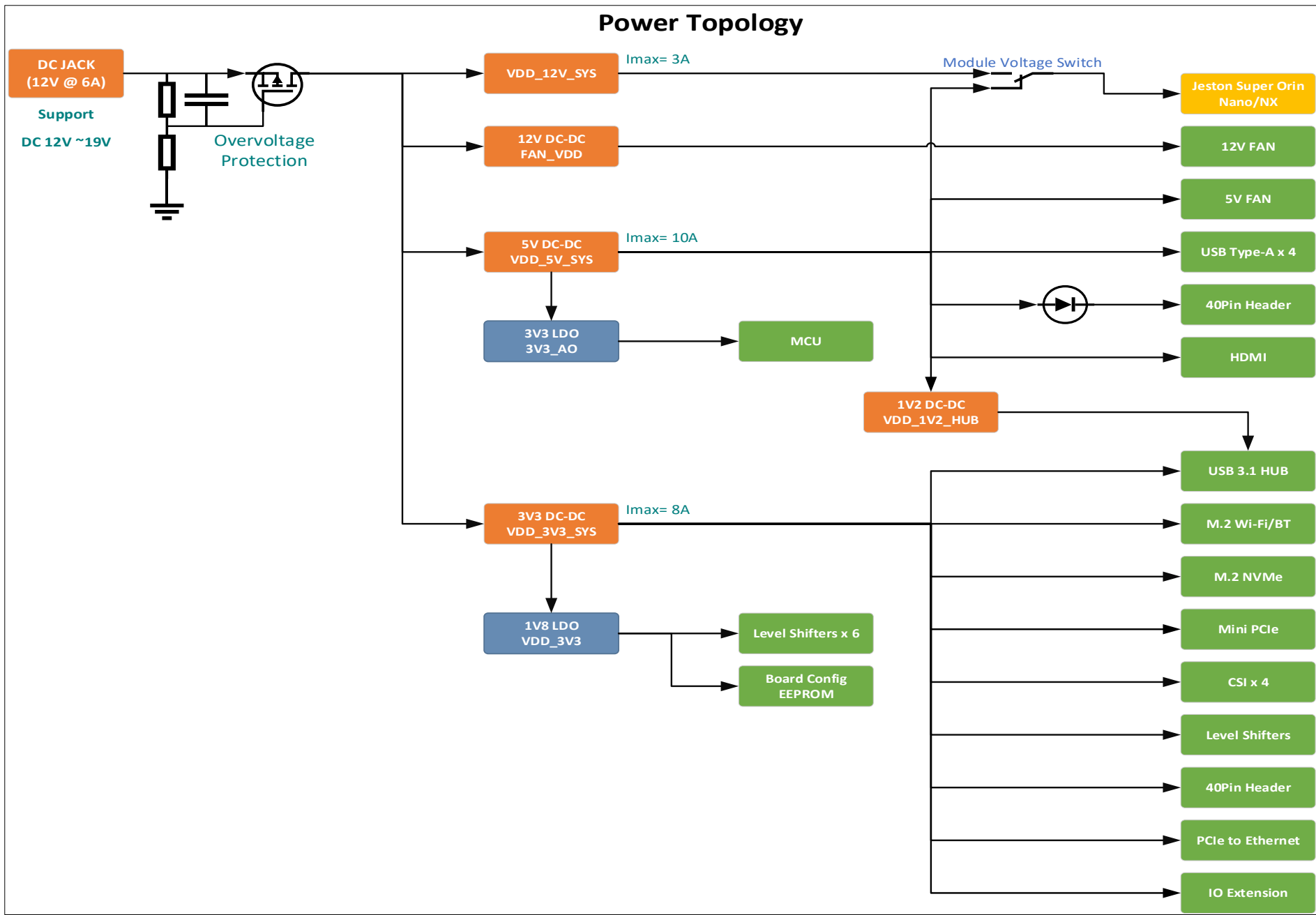


reComputer Super J401

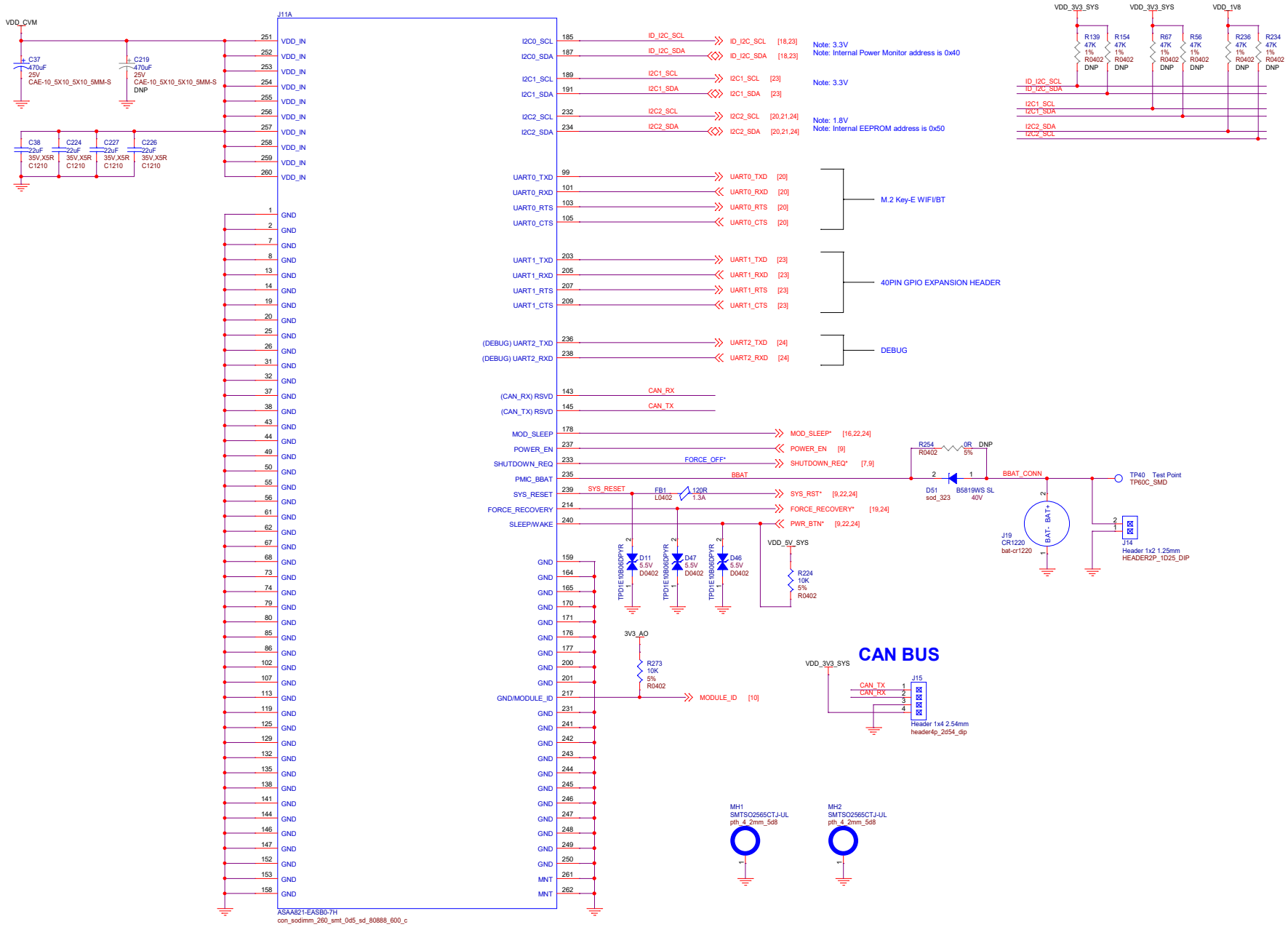
PAGE LIST	
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01	Revision History
02	Block Diagram
03	Power Tree
04	SODIMM Connector 1/3
05	SODIMM Connector 2/3
06	SODIMM Connector 3/3
07	Power IN & 5V & 3.3V_AO
08	3.3V & 1.8V & 1.2V
09	Button MCU For Power Up
10	SOM Power
11	USB3.2 Gen1 HUB
12	PCIe to Ethernet
13	USB3.2 Type-A x2
14	USB3.2 TYPE-A, Gbe RJ45 A
15	USB3.2 TYPE-A, Gbe RJ45 B
16	HDMI
17	CAM Connector A
18	CAM Connector B
19	USB2.0 HUB, Type C
20	M.2 KEY-E (WIFI/BT)
21	M.2 KEY-M (NVME)
22	Mini PCIe & SIM Board Header
23	40Pin GPIO Expansion Header
24	Debug & EEPROM & IO Expansion
25	FAN

REVISION HISTORY			
VER #	DATE	DESCRIPTION OF CHANGES	AUTHOR
V1.0	2025.04.01	First release	Linus.Liao
			Linus.Liao
			Linus.Liao

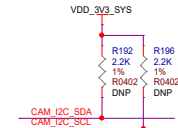
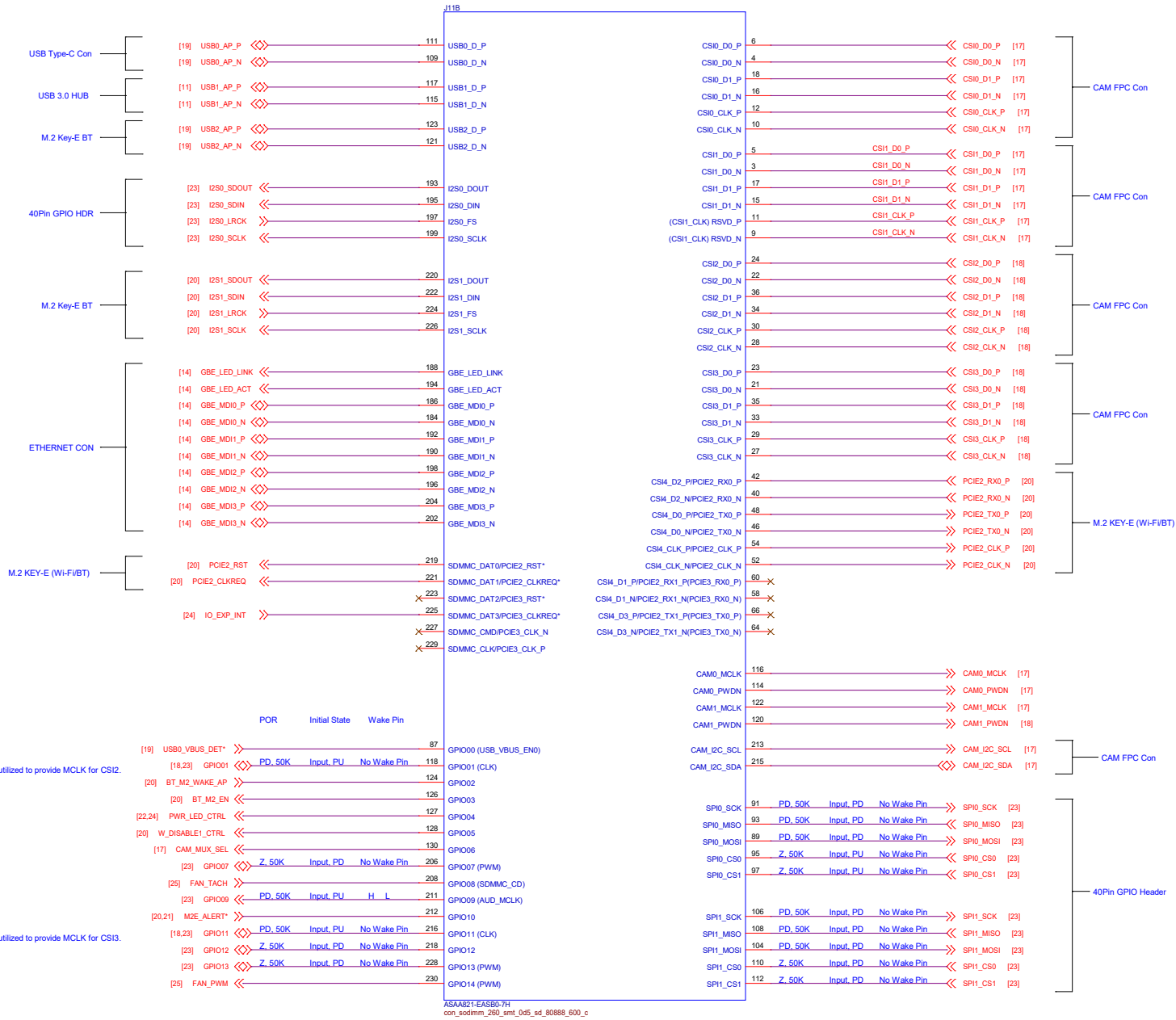




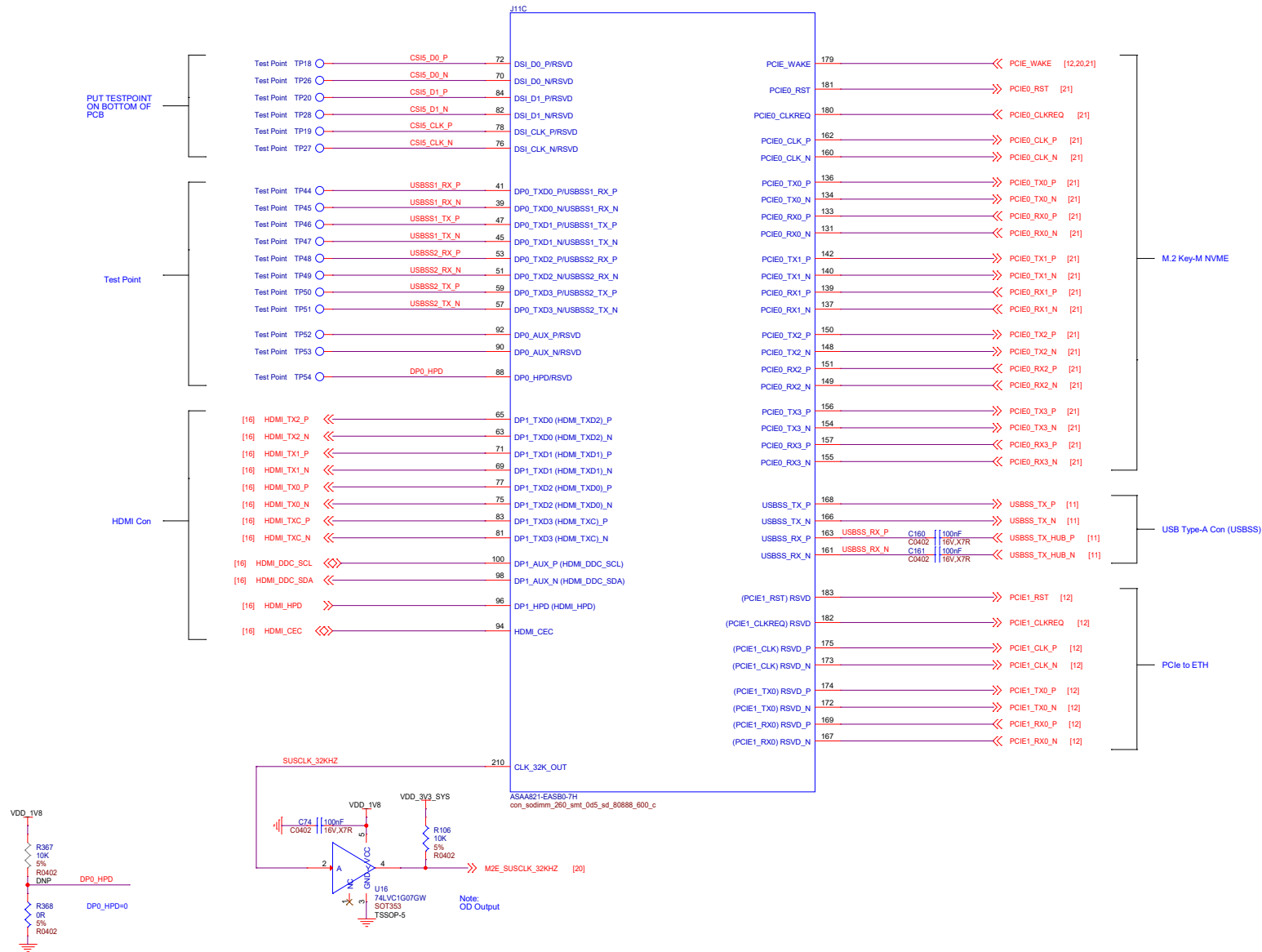
UART, I2C, CAN and GPIOs

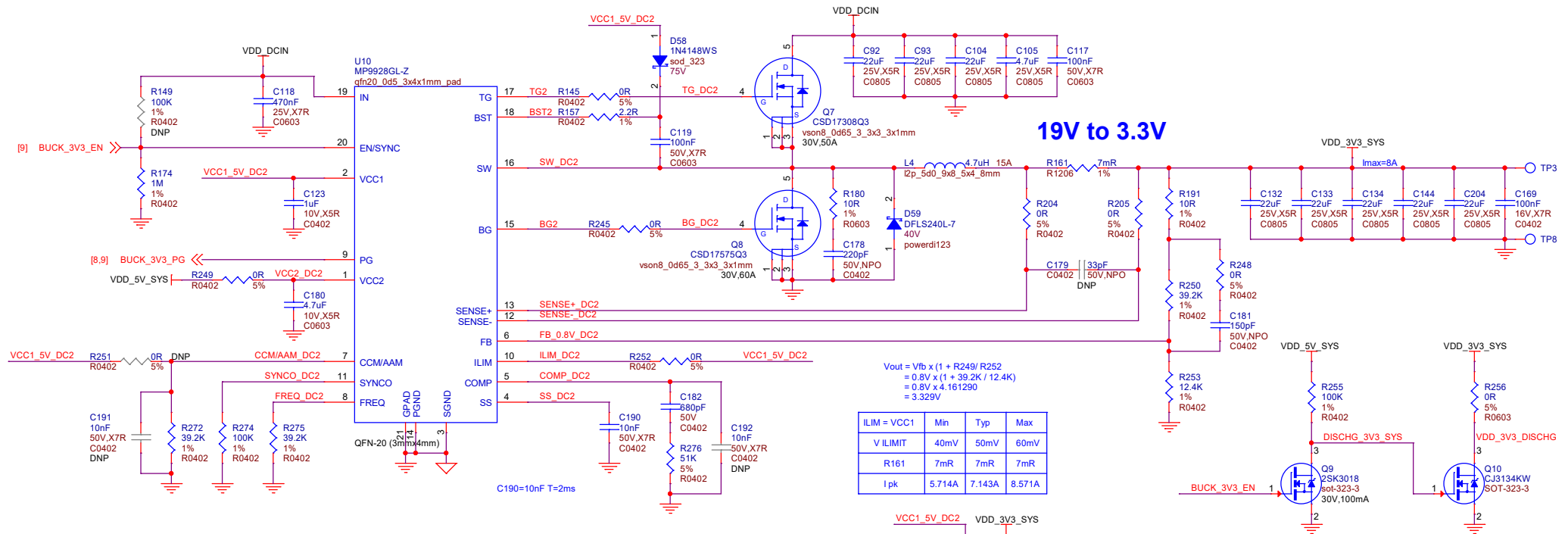


GPIOs, USB2.0, I2S, SPI, GBE and CSI

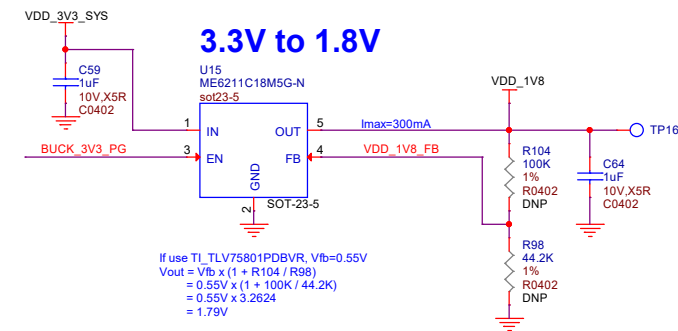
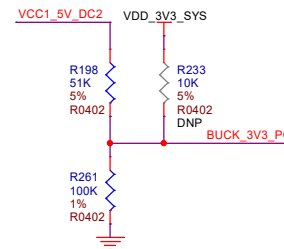


HDMI, DP, DSI, USBSS and PCIe

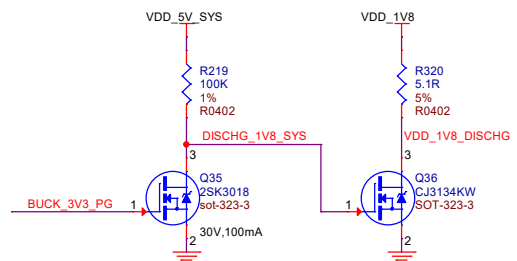
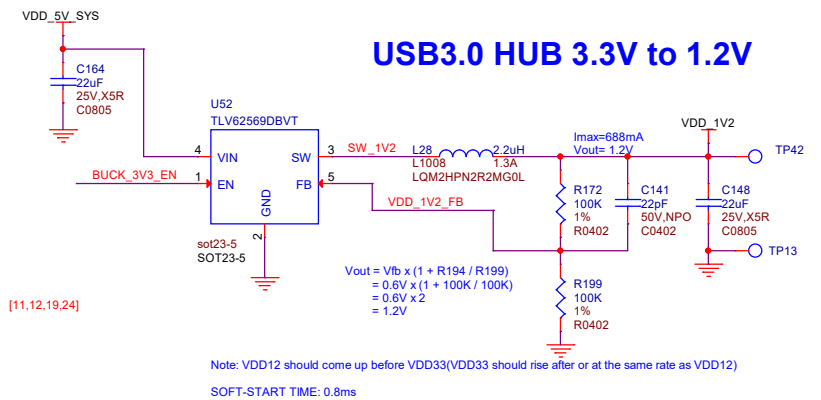




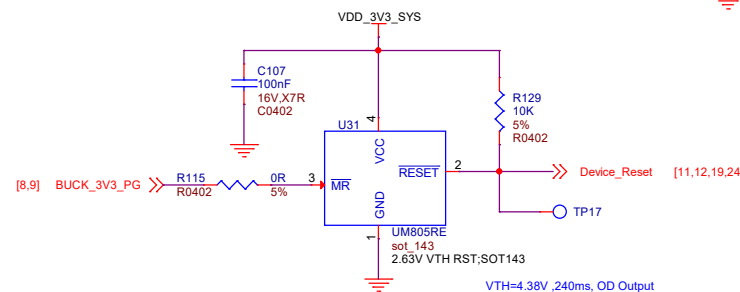
VDD_3V3_SYS RAIL DISCHARGE



USB3.0 HUB 3.3V to 1.2V

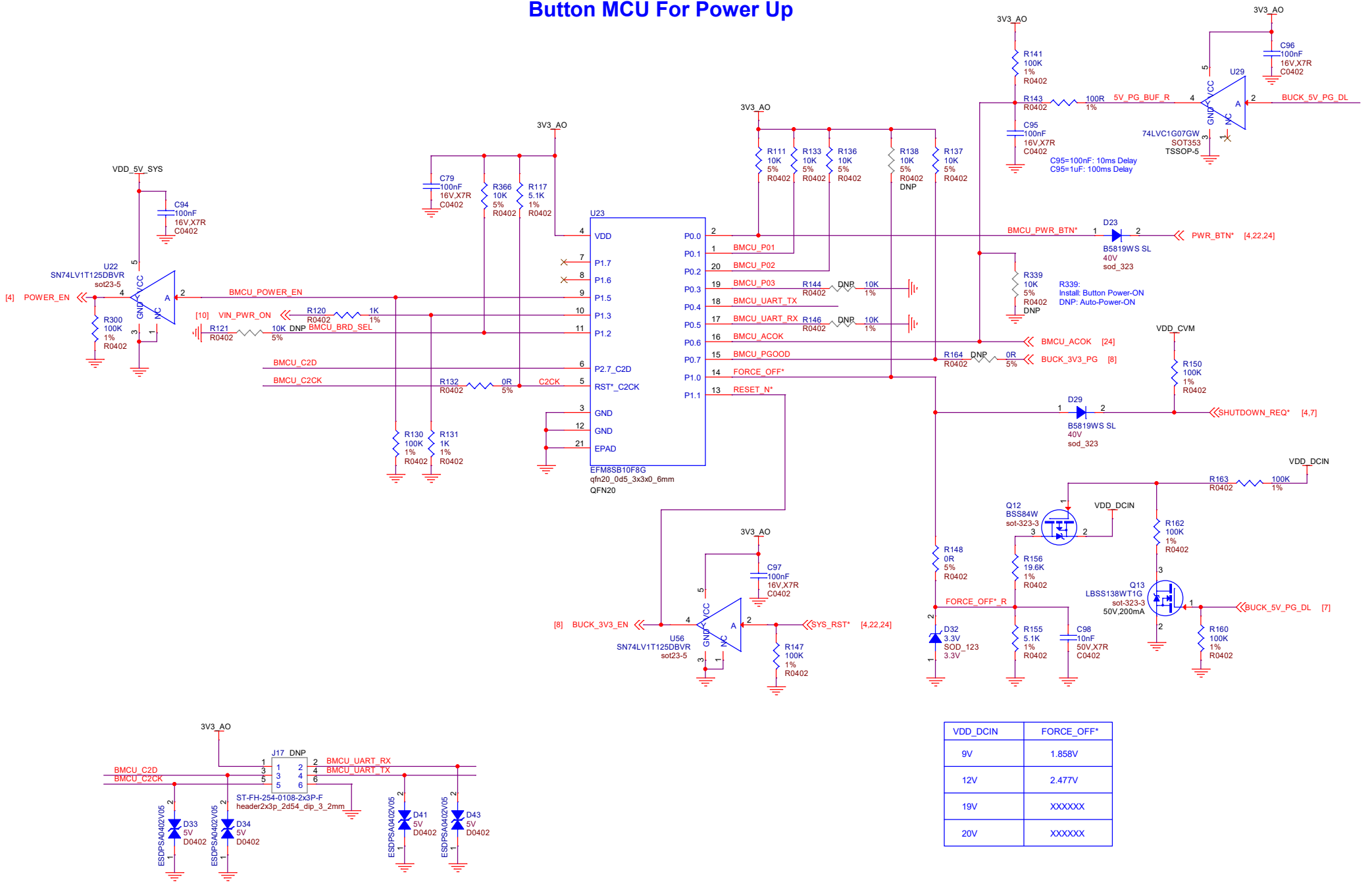


VDD_1V8_SYS RAIL DISCHARGE

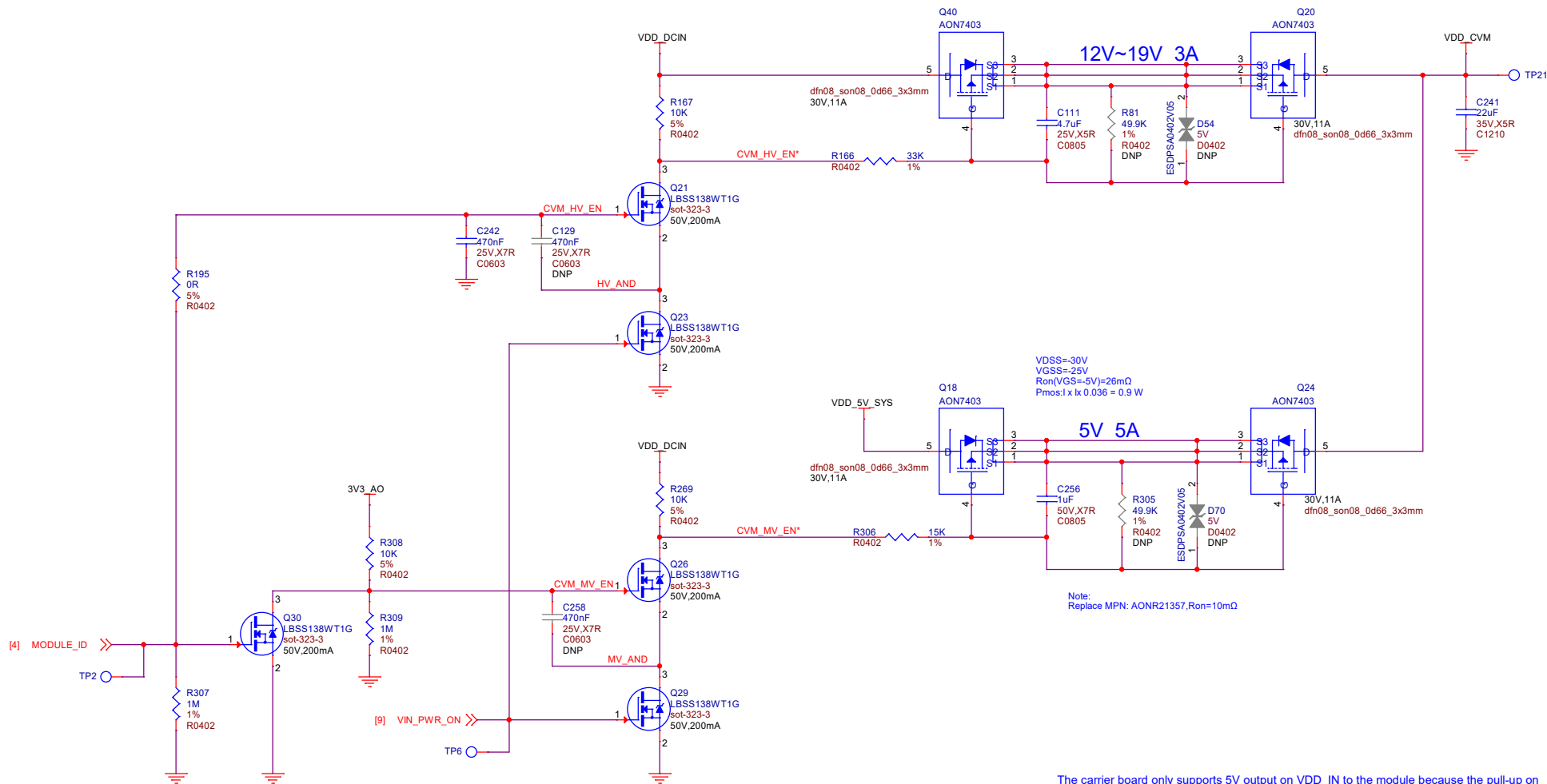


3V3 PG Delay

Button MCU For Power Up



VDD_DCIN	FORCE_OFF*
9V	1.858V
12V	2.477V
19V	XXXXXX
20V	XXXXXX



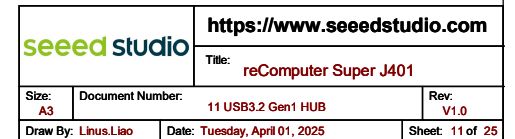
The carrier board only supports 5V output on VDD_IN to the module because the pull-up on MODULE_ID (R231) is not stuffed in the Orin Nano DevKit carrier board.

A 10kOhm, 0402 R231 Resistor can be added to support 5V, and up to 19V. As stated in the design guide, please be aware that Hot Plugging is not supported. Jetson Orin Nano modules have 5V Input Voltage, and hot plugging may cause an incorrect input voltage to be sent to the module if this resistor is added.

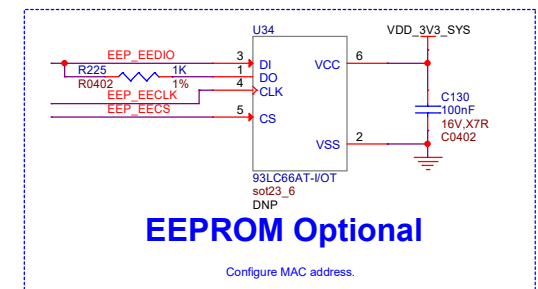
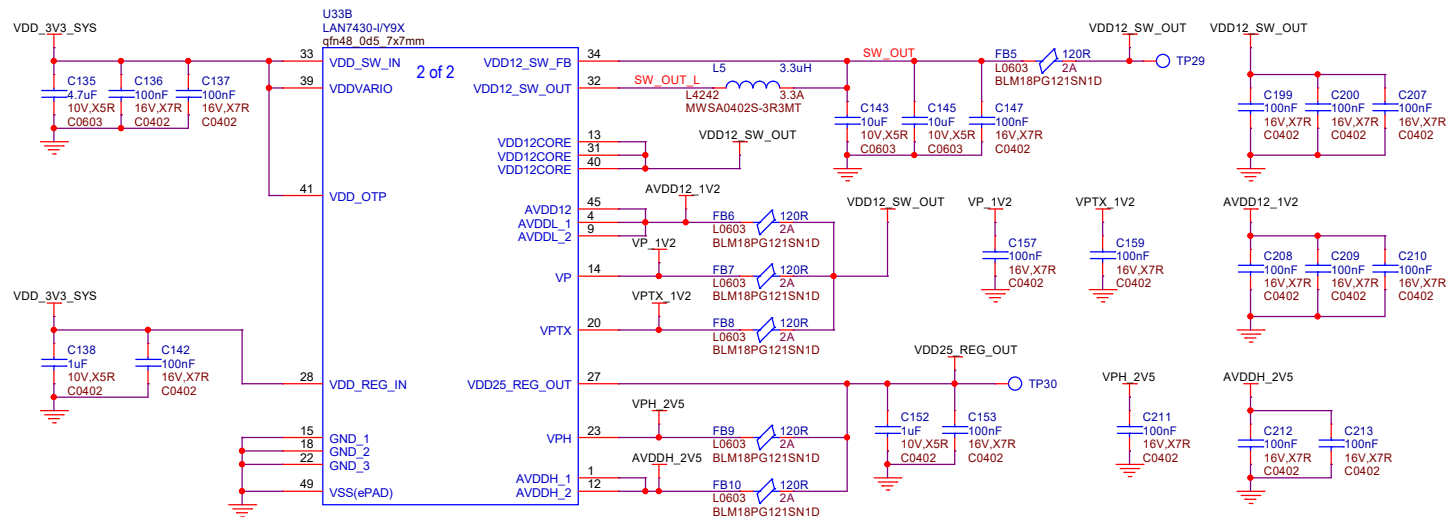
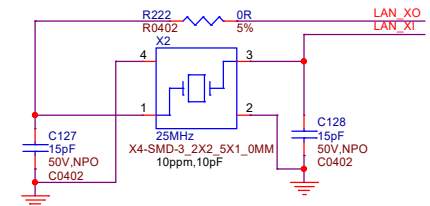
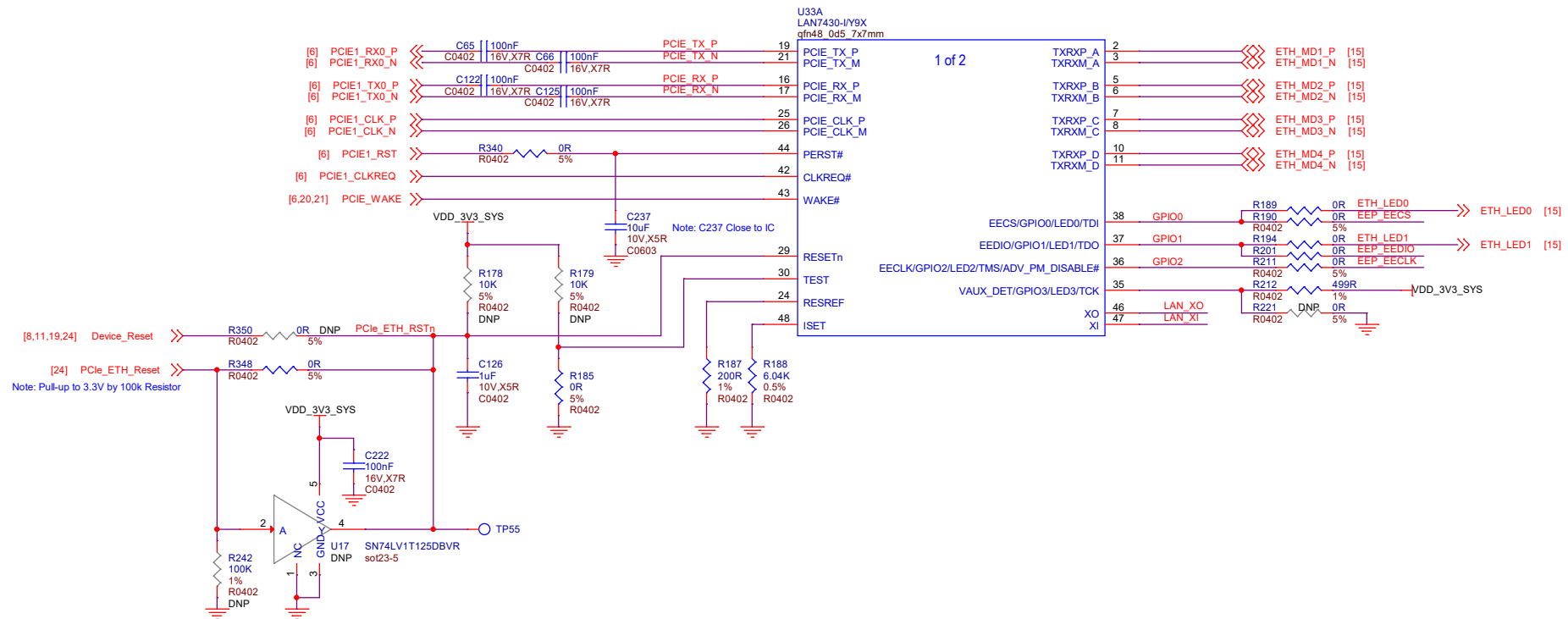
Please make sure the carrier board power is removed and adequate time has elapsed for the various power rails to fully discharge before when plugging in the Jetson Orin Nano module. R231 (to pull MODULE_ID high) is located on the SODIMM Connector 1/3 (page 4).

VIN_PWR_ON	MODULE_ID	VDD_SOM
0	0	OFF
0	0	OFF
1	0	5V
1	1	HV

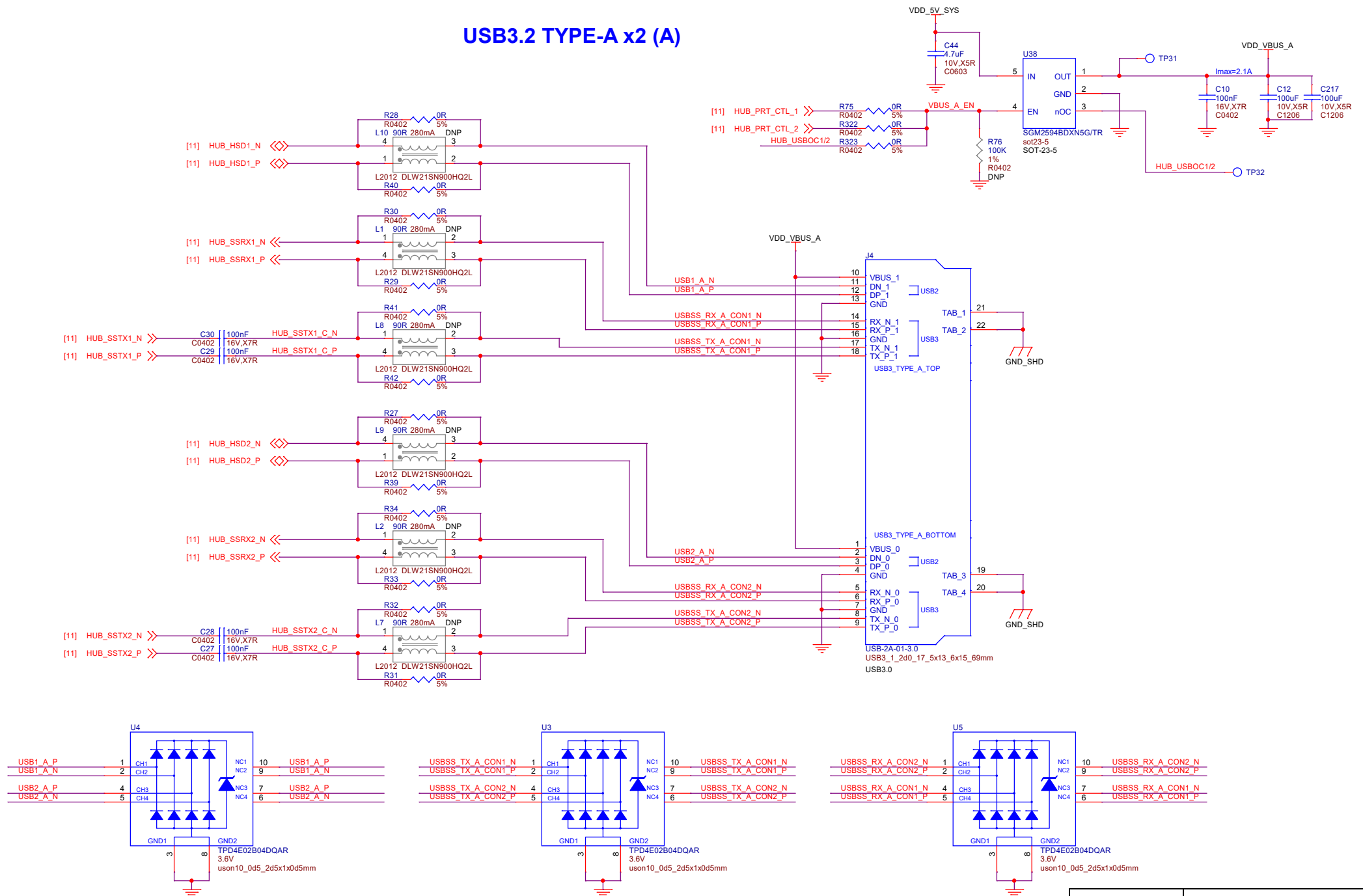
QSPI Flash



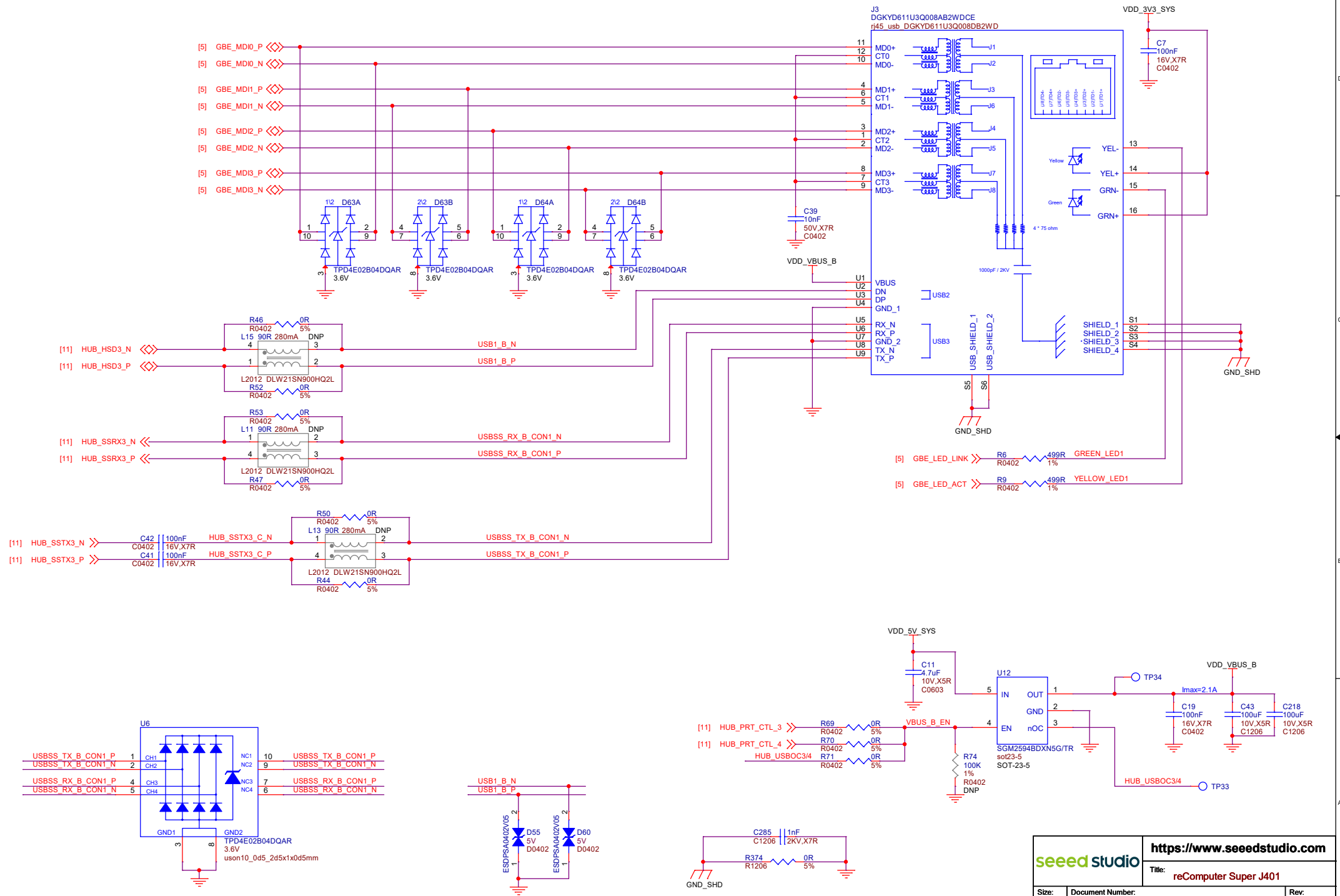
PCIe to 1000M Ethernet



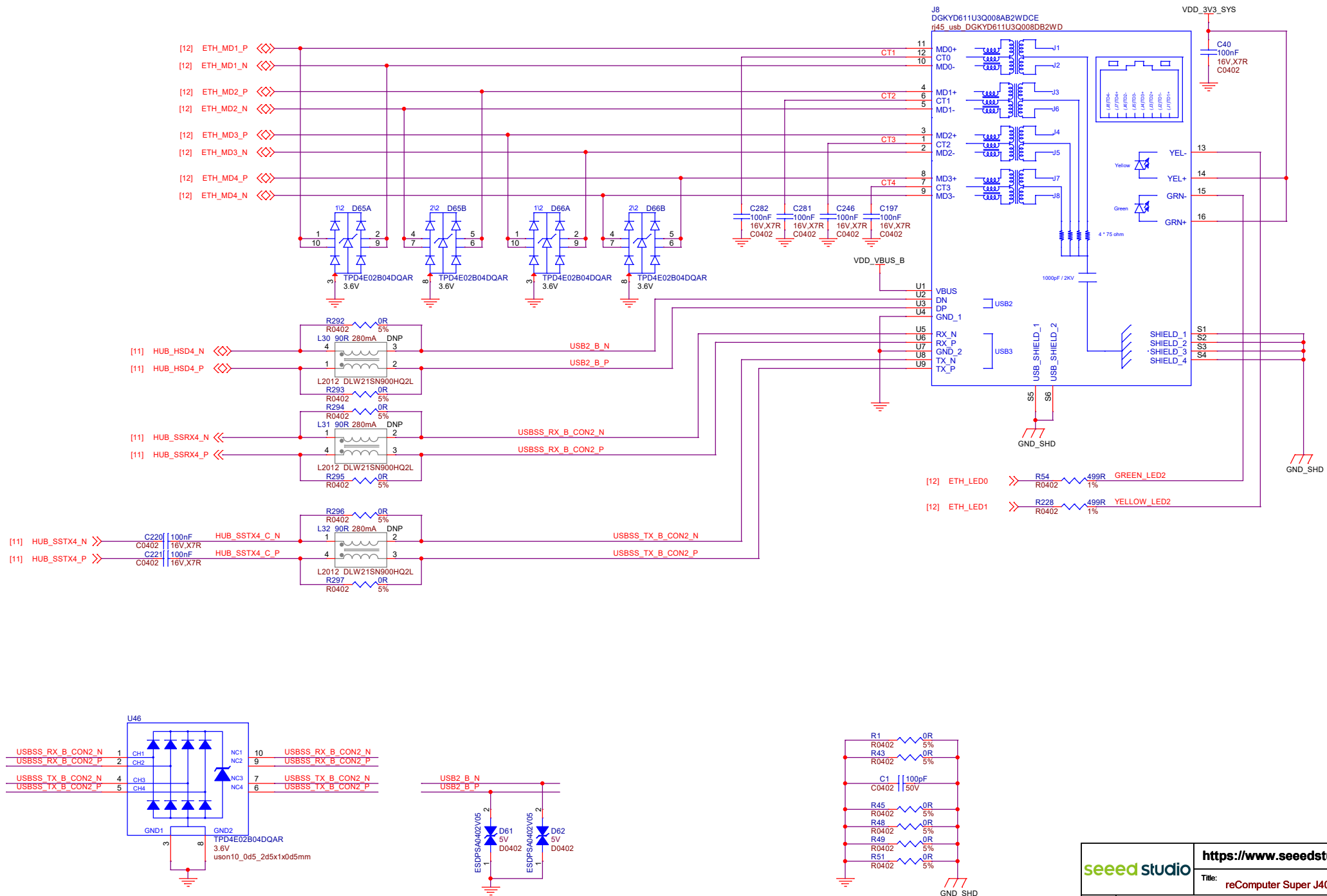
USB3.2 TYPE-A x2 (A)



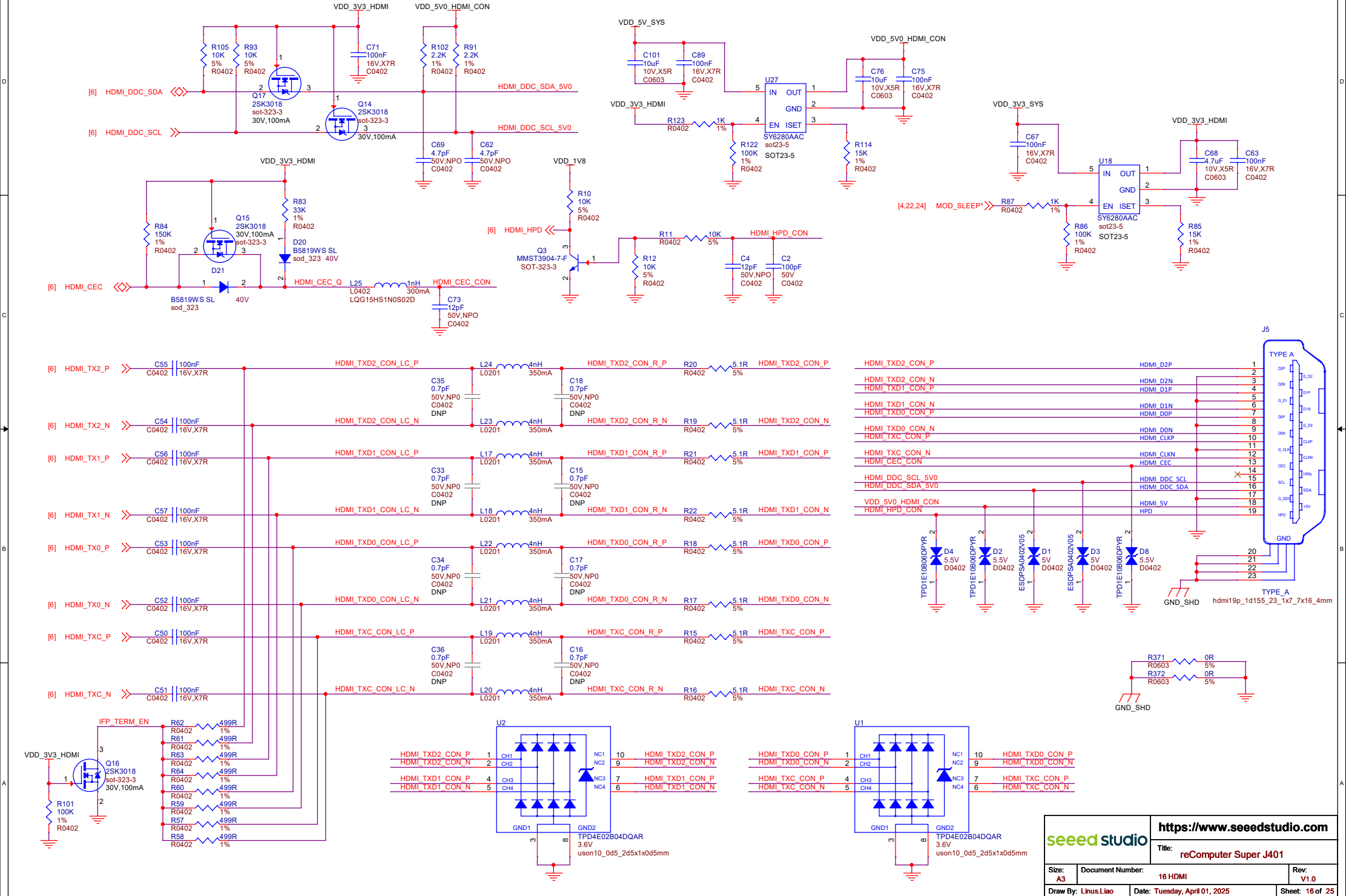
USB3.2 TYPE-A + Gbe RJ45



USB3.2 TYPE-A + Gbe RJ45



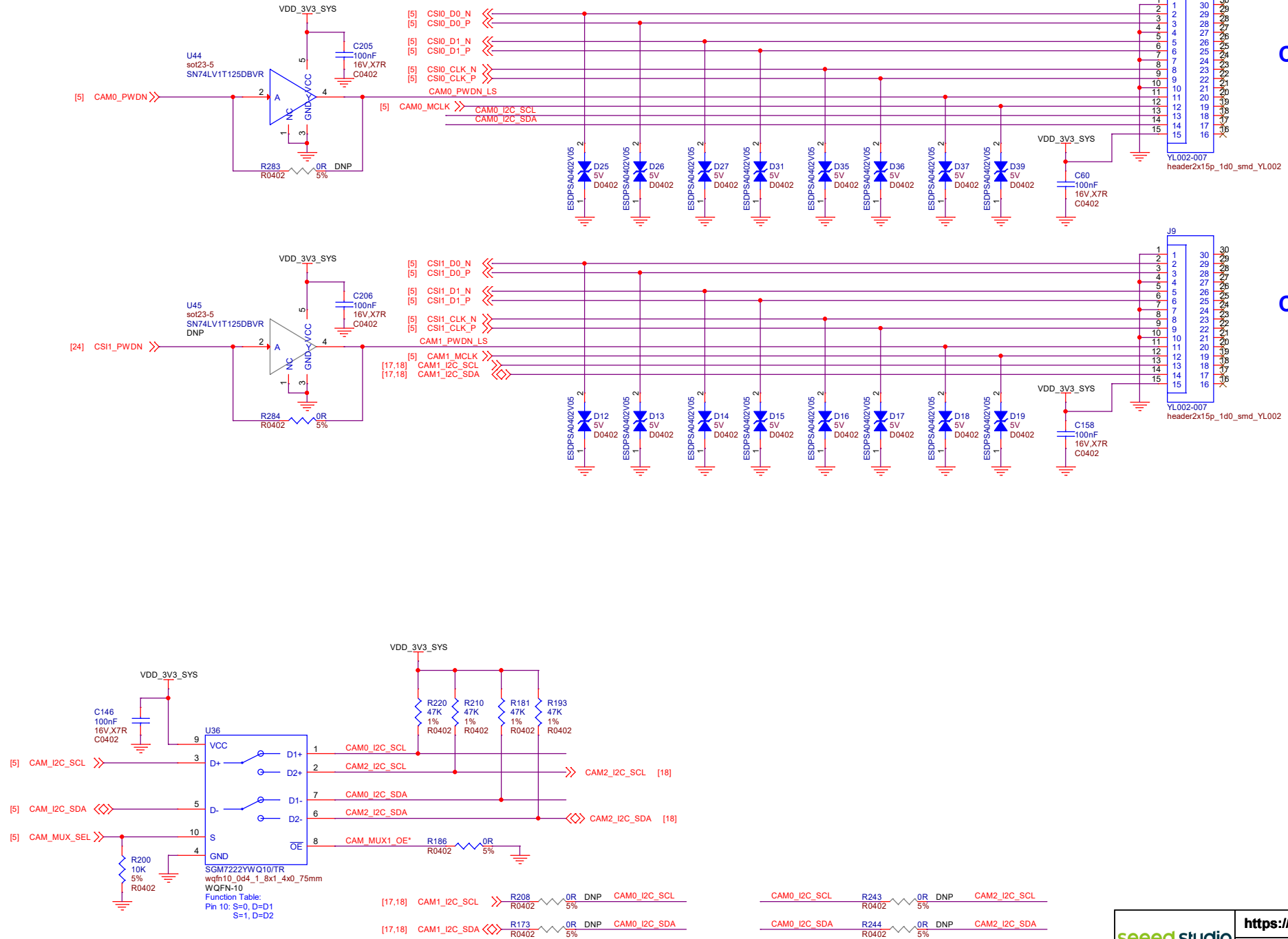
HDMI Connector



CSI CAM CONNECTOR

CSI 0

CSI 1

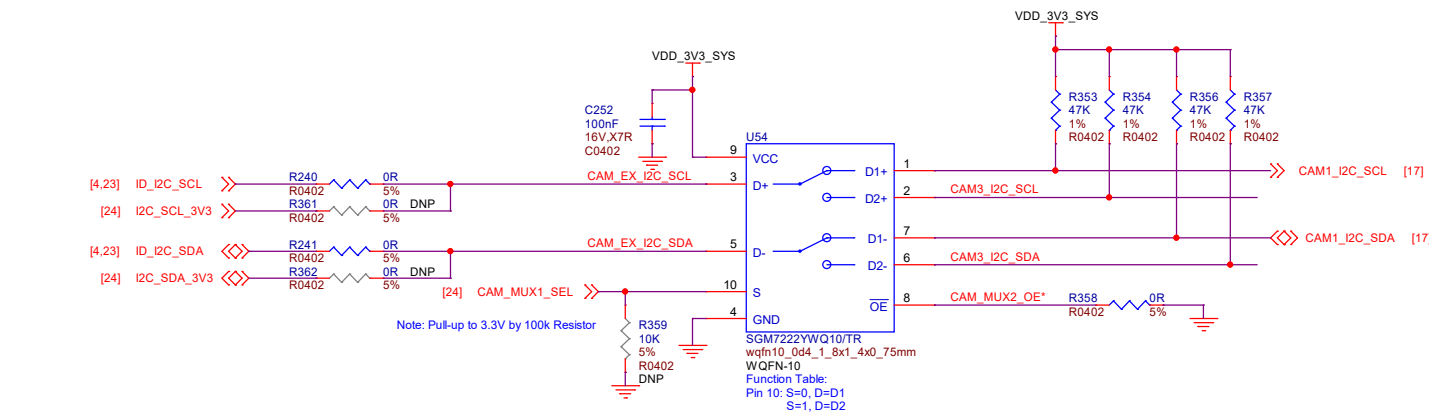
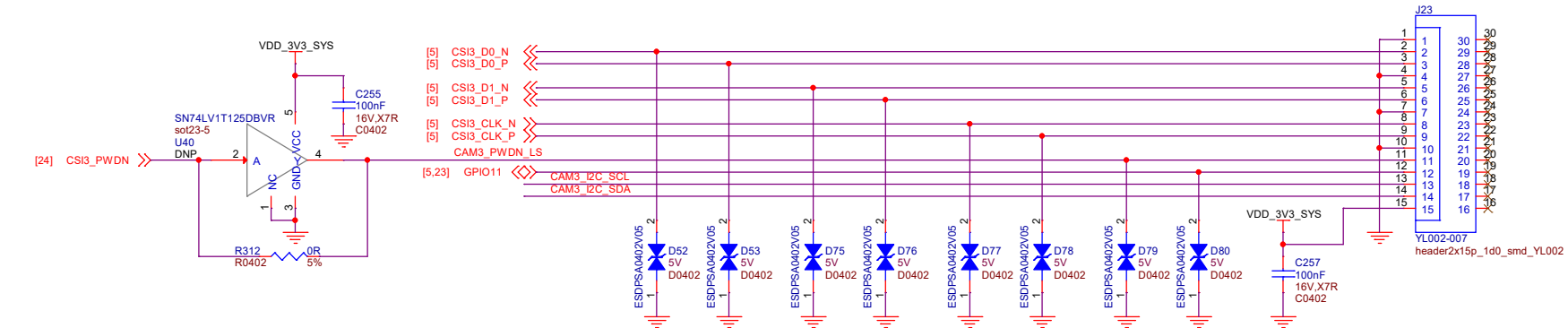
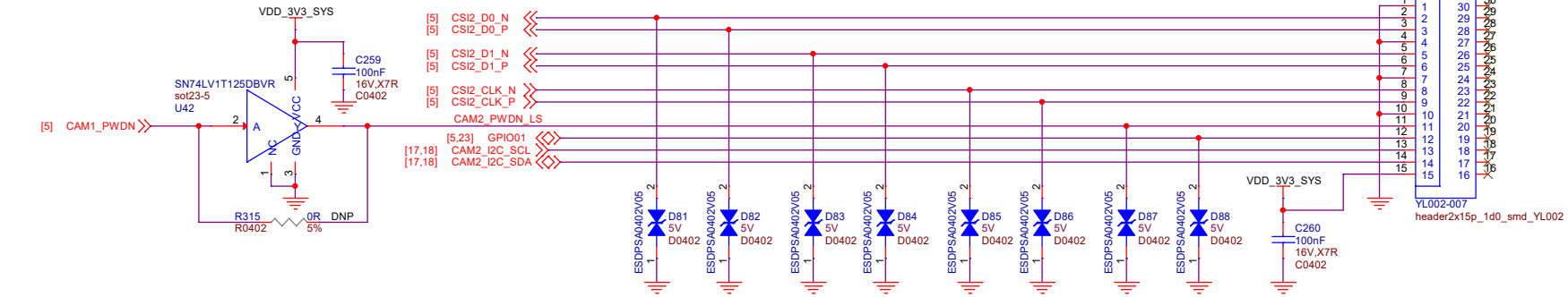


Note:
CSI 1, CSI3 I2C is connected to ID_I2C

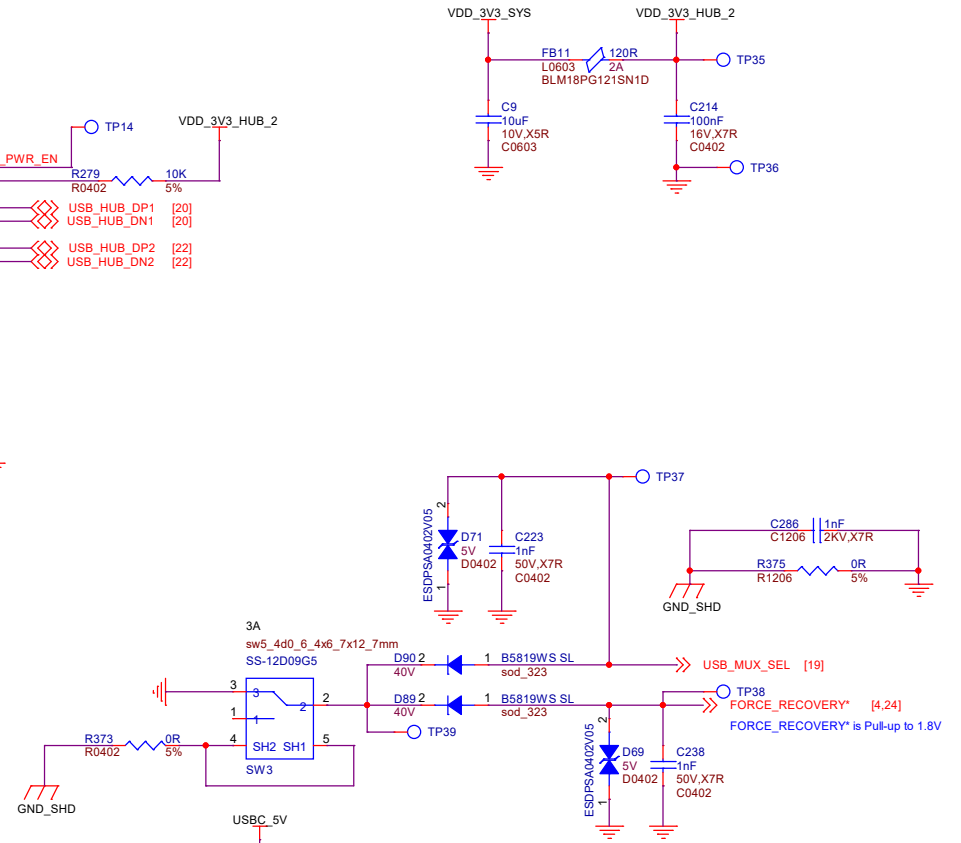
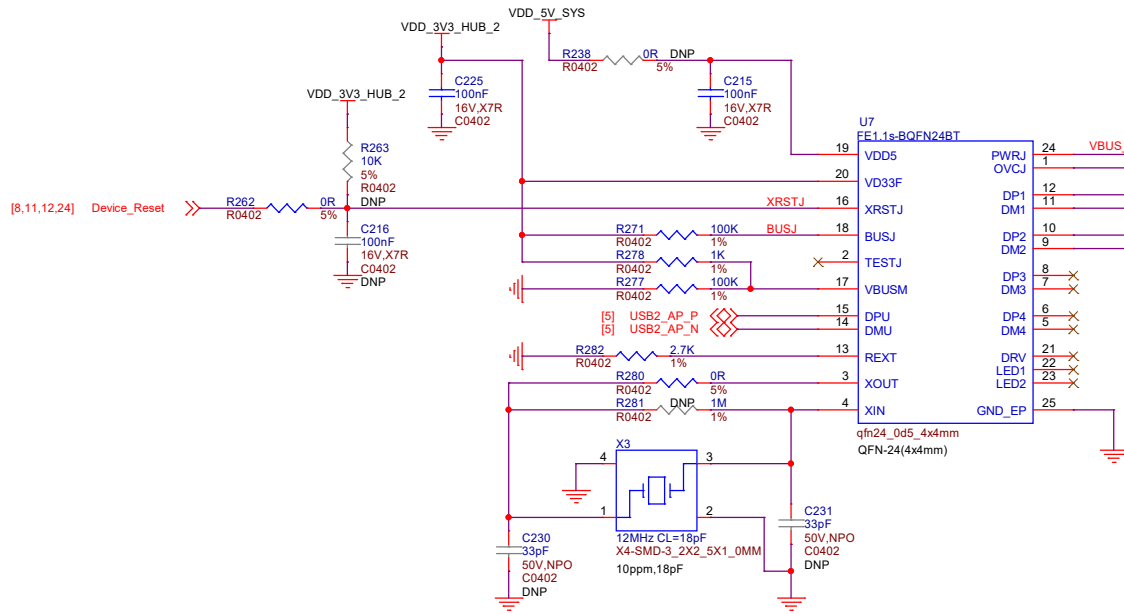
CSI CAM CONNECTOR

CSI 2

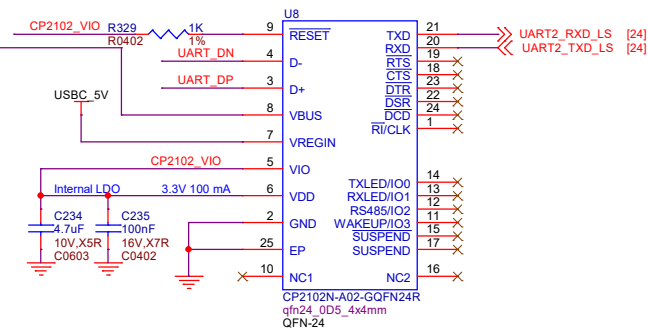
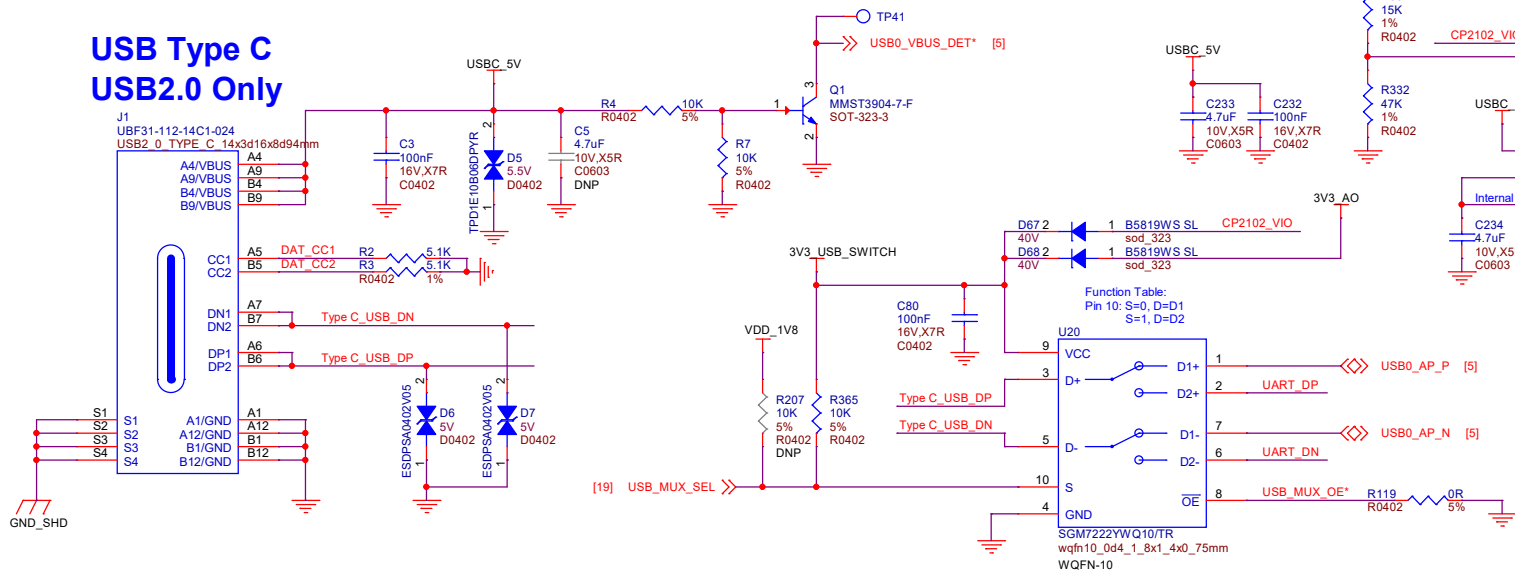
CSI 3



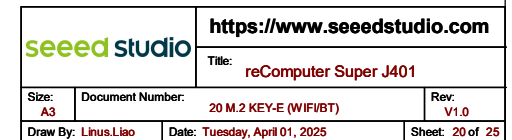
USB2.0_HUB



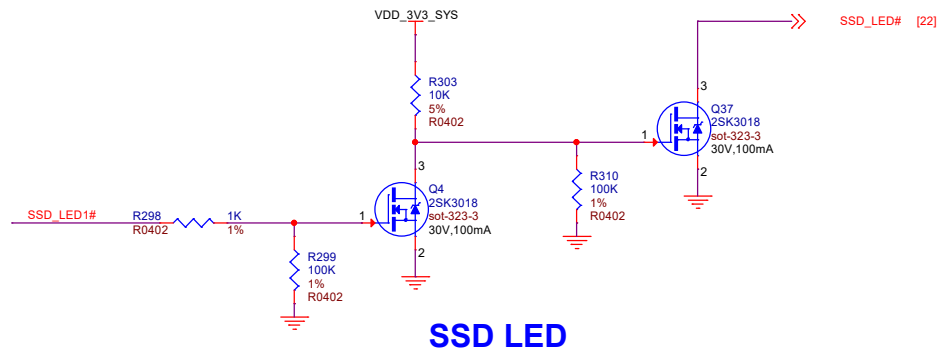
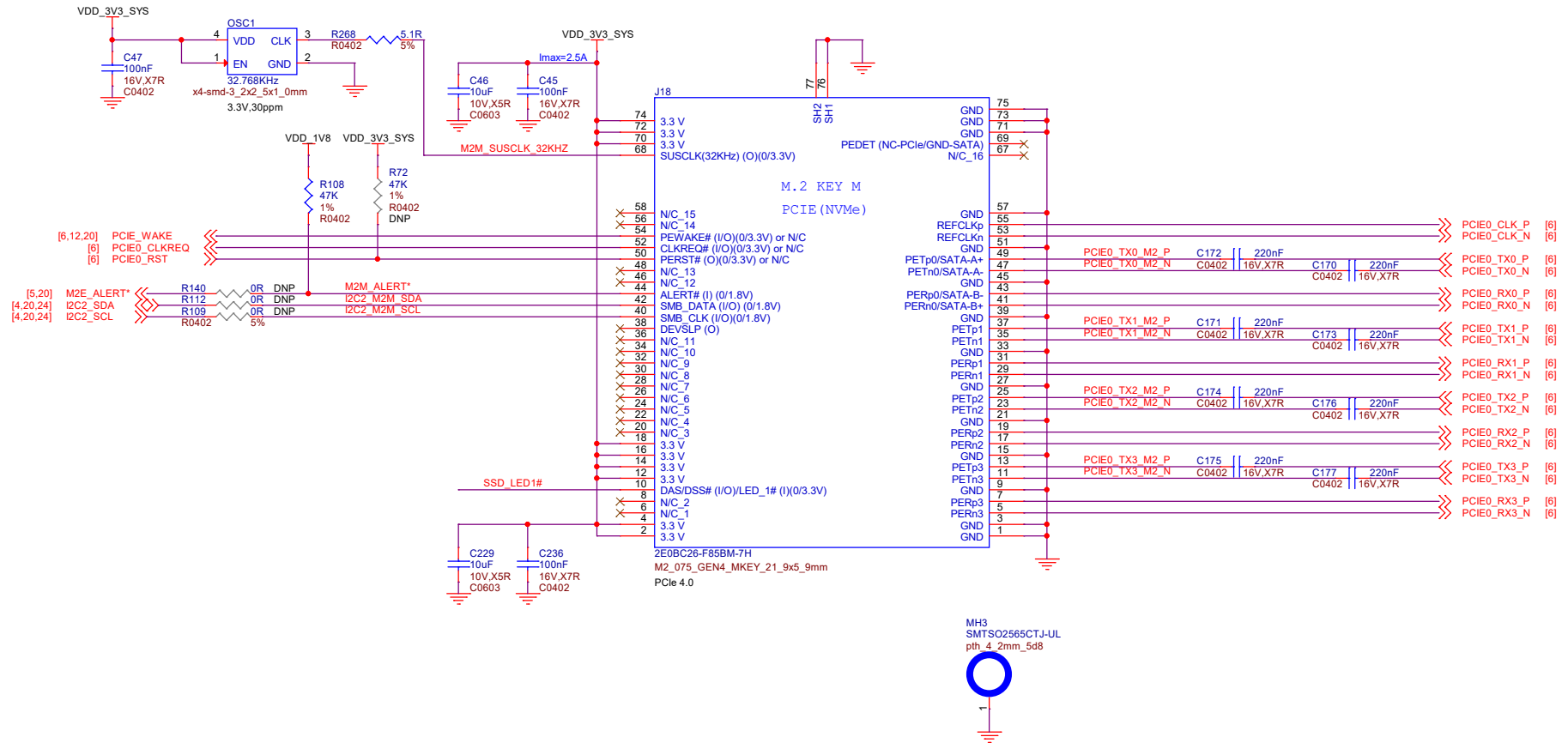
USB Type C
USB2.0 Only



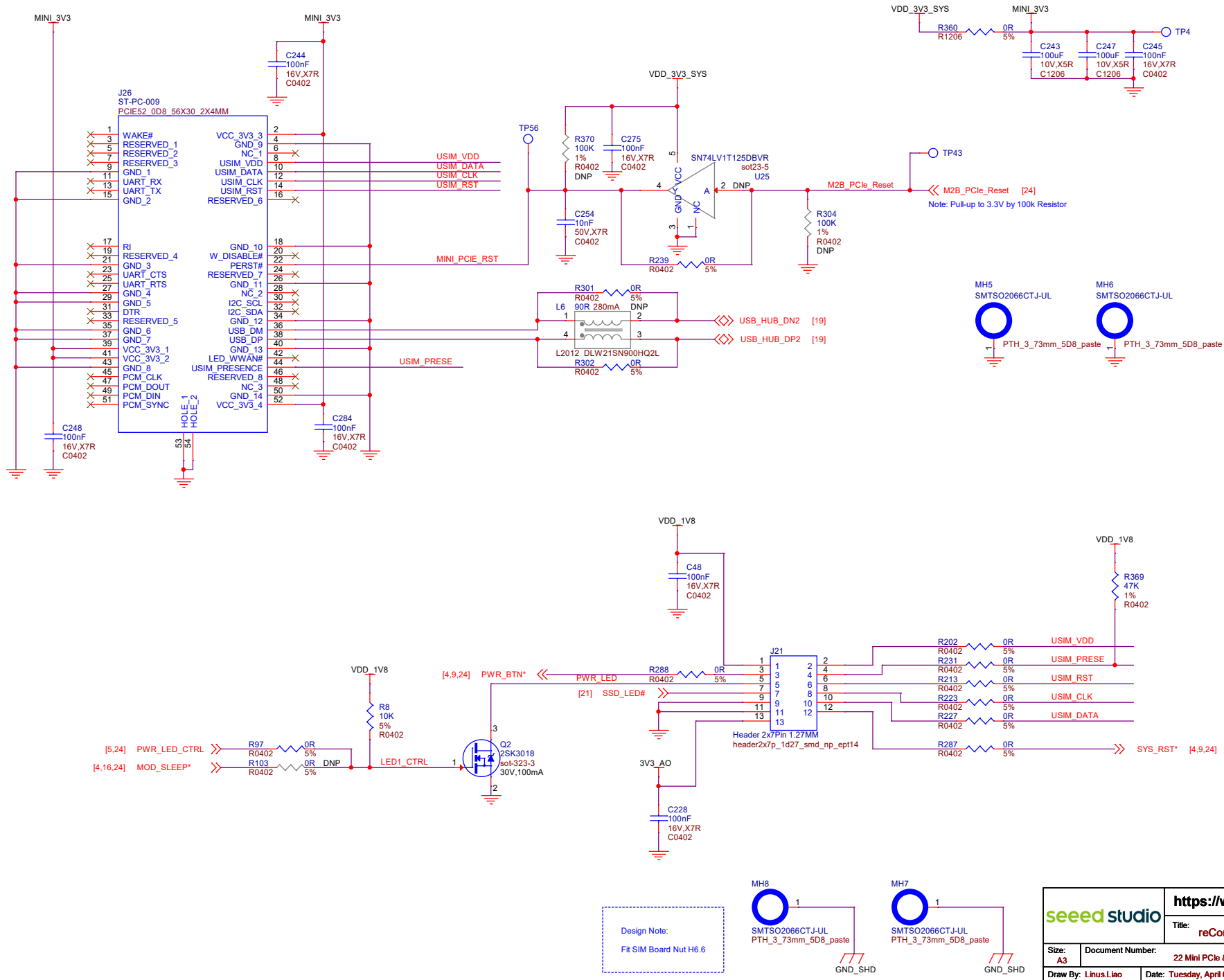
SIZE: 2230



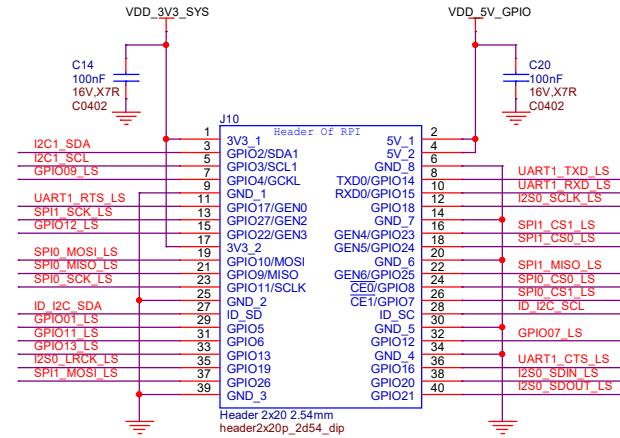
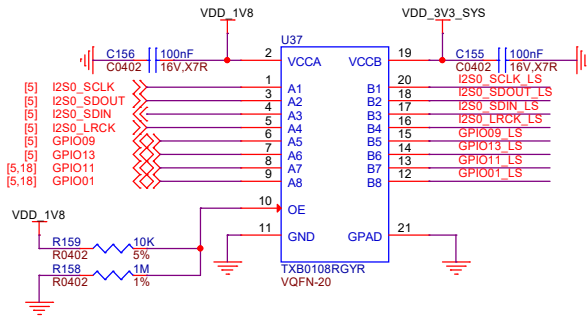
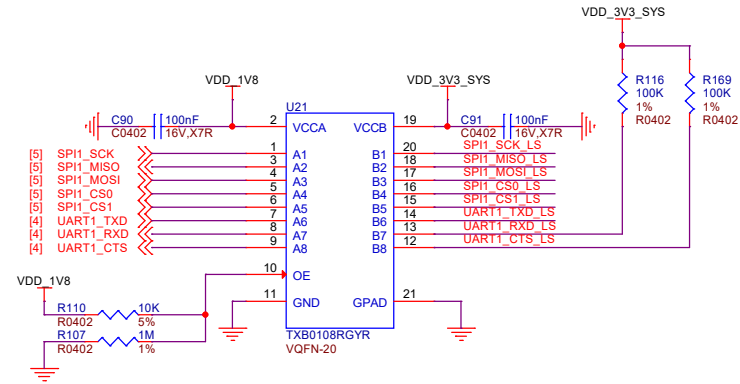
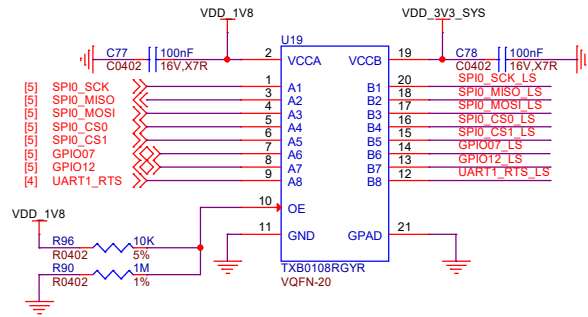
M.2 KEY-M (NVME)



Mini PCIe H=4.0mm



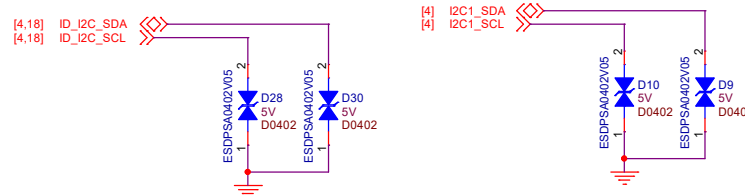
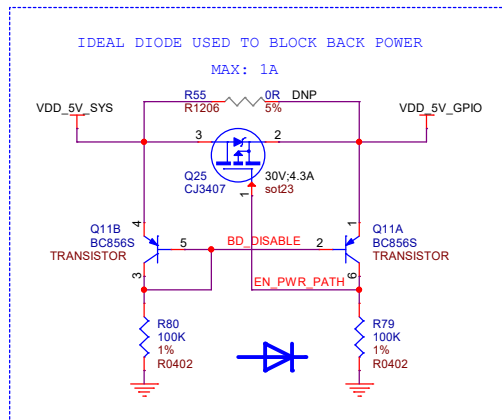
40Pin GPIO Expansion Header & Level Shifters



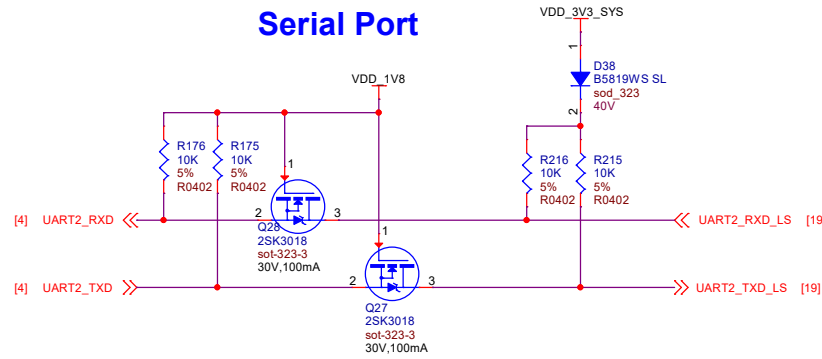
TXB0108:

Note: The driving capability of TXB0108 is quite weak.
If an external pull-up resistor is required, please use a resistor which value at least 100kΩ.

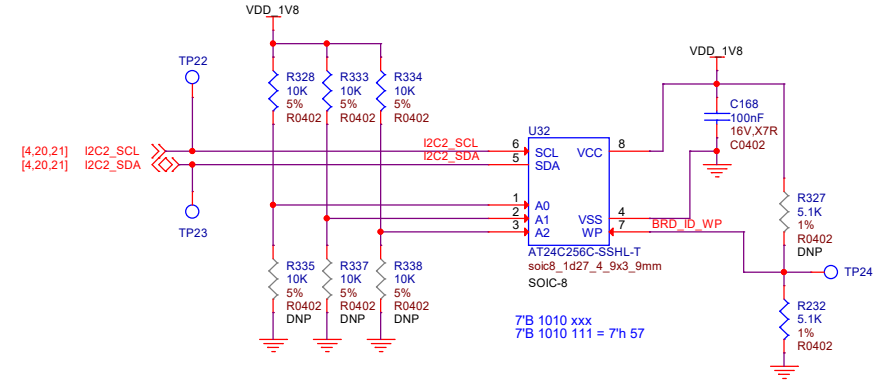
Date rate: Up to 60 Mbps



Serial Port

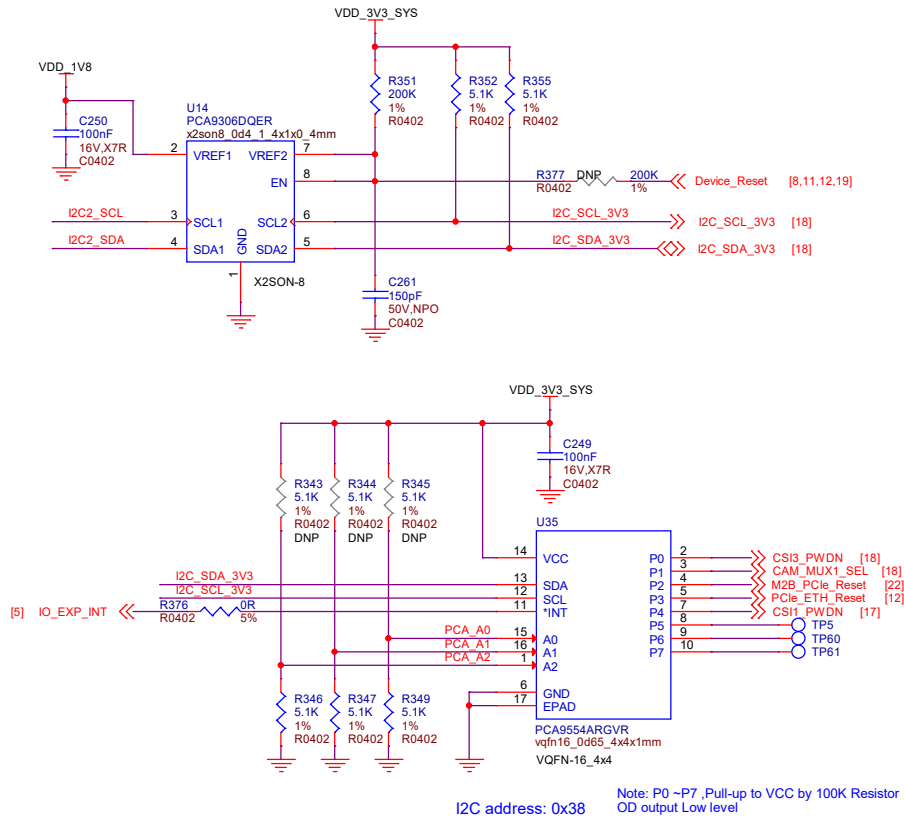


Carrier Board Config



PCB1
reComputer Super J401 PCB

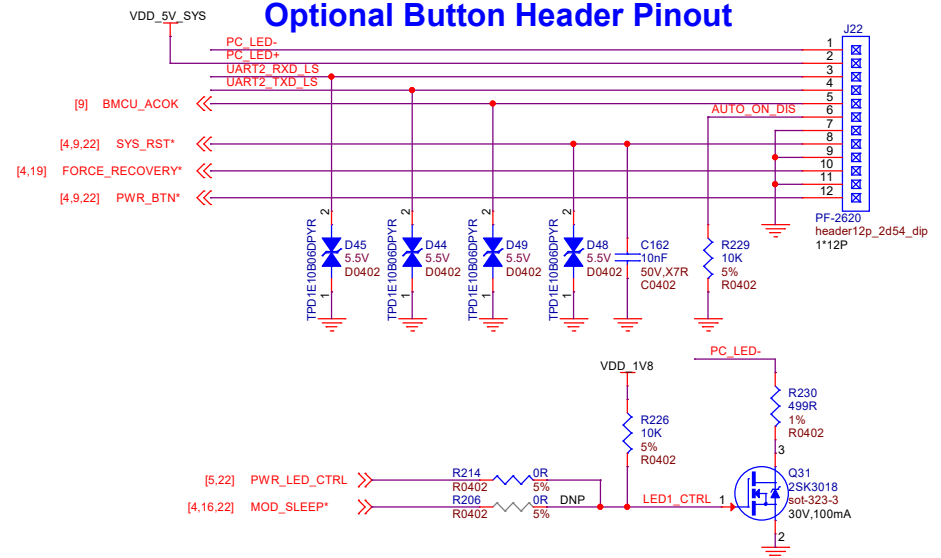
IO Extension



I2C address: 0x38

Note: P0 ~P7 Pull-up to VCC by 100K Resistor
OD output Low level

Optional Button Header Pinout



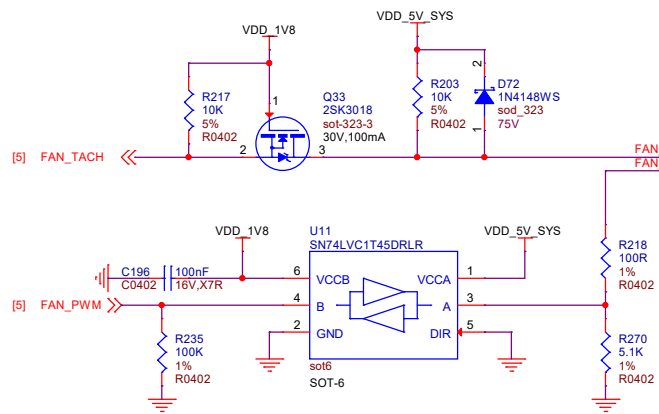
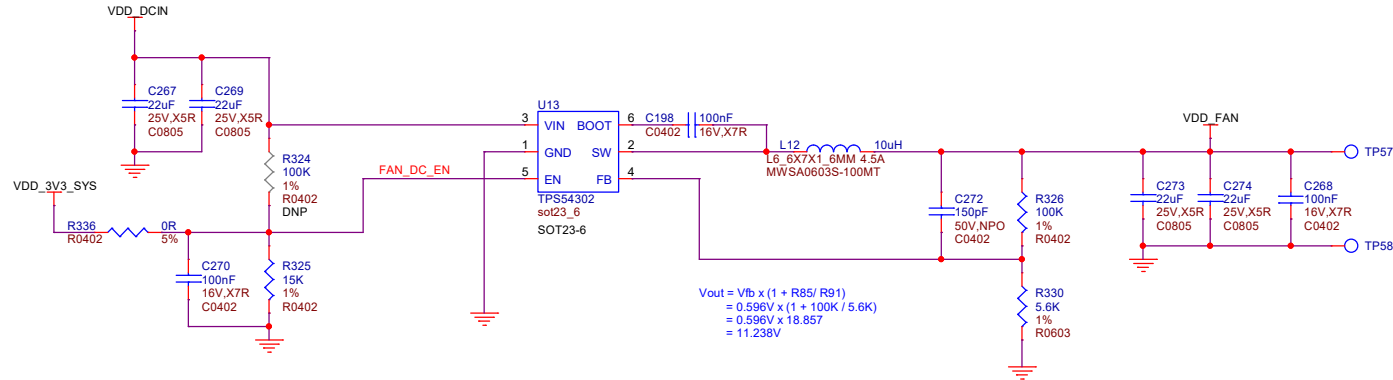
seeed studio

<https://www.seeedstudio.com>

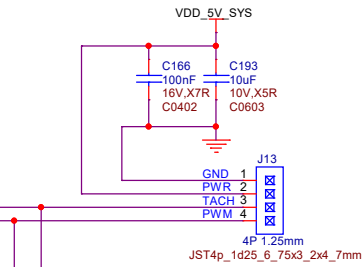
Title: reComputer Super J401

Size: A3	Document Number: 24 Debug & EEPROM & IO EXP	Rev: V1.0
Draw By: Linus.Liao	Date: Tuesday, April 01, 2025	Sheet: 24 of 25

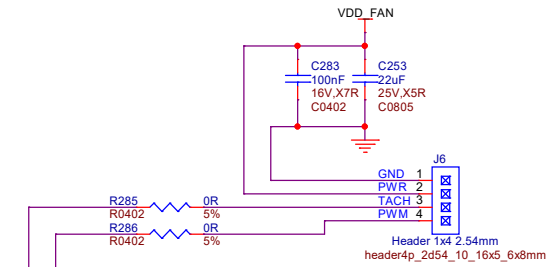
DC-DC 11.2V



Level Shifter



Optional 1: 5V Fan 4Pin 1.25mm



Optional 2: 12V Fan 4Pin 2.54mm

SoC Fan Header 4pin