

H

G

F

E

D

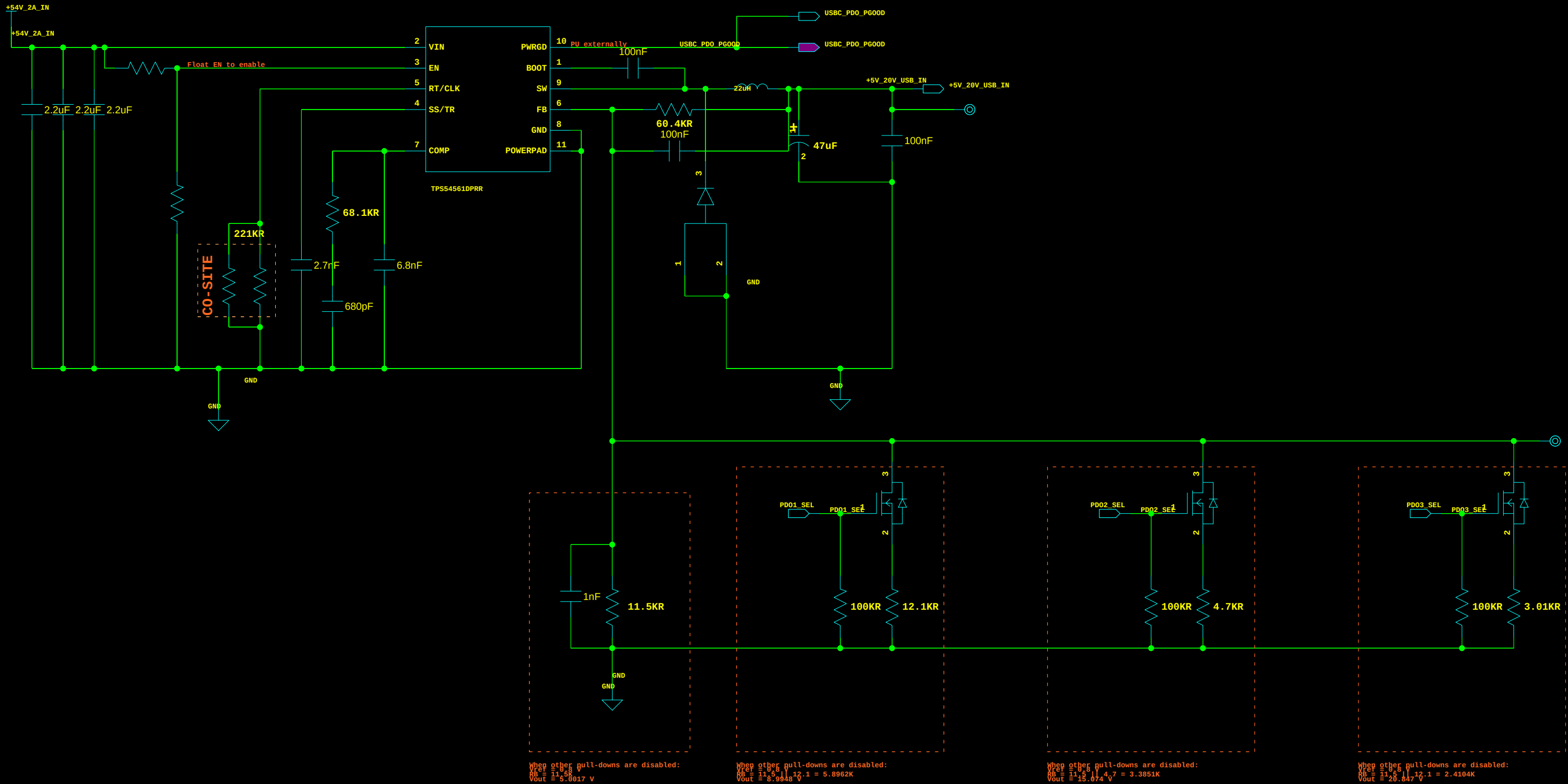
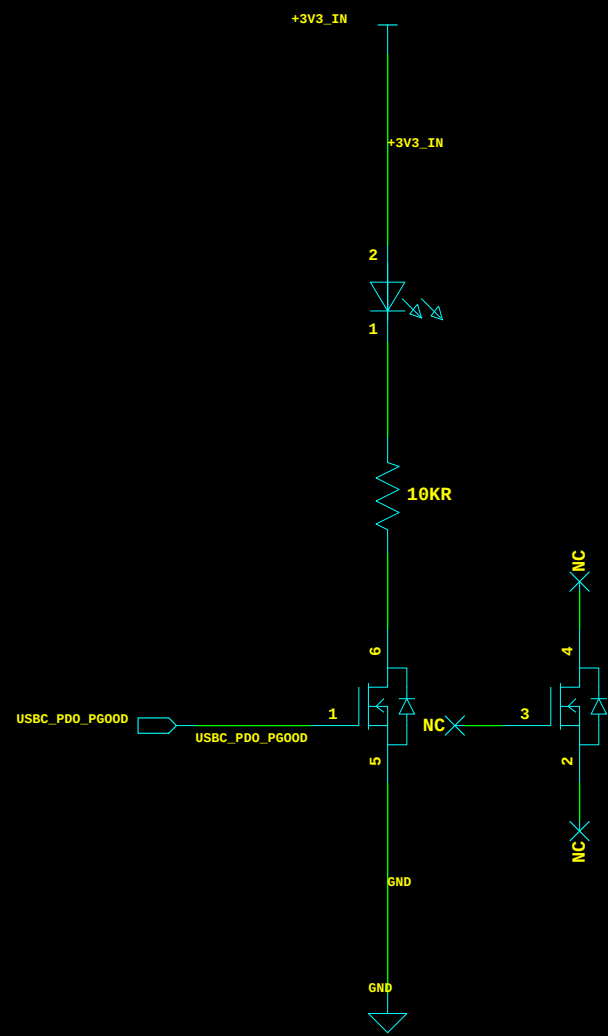
C

B

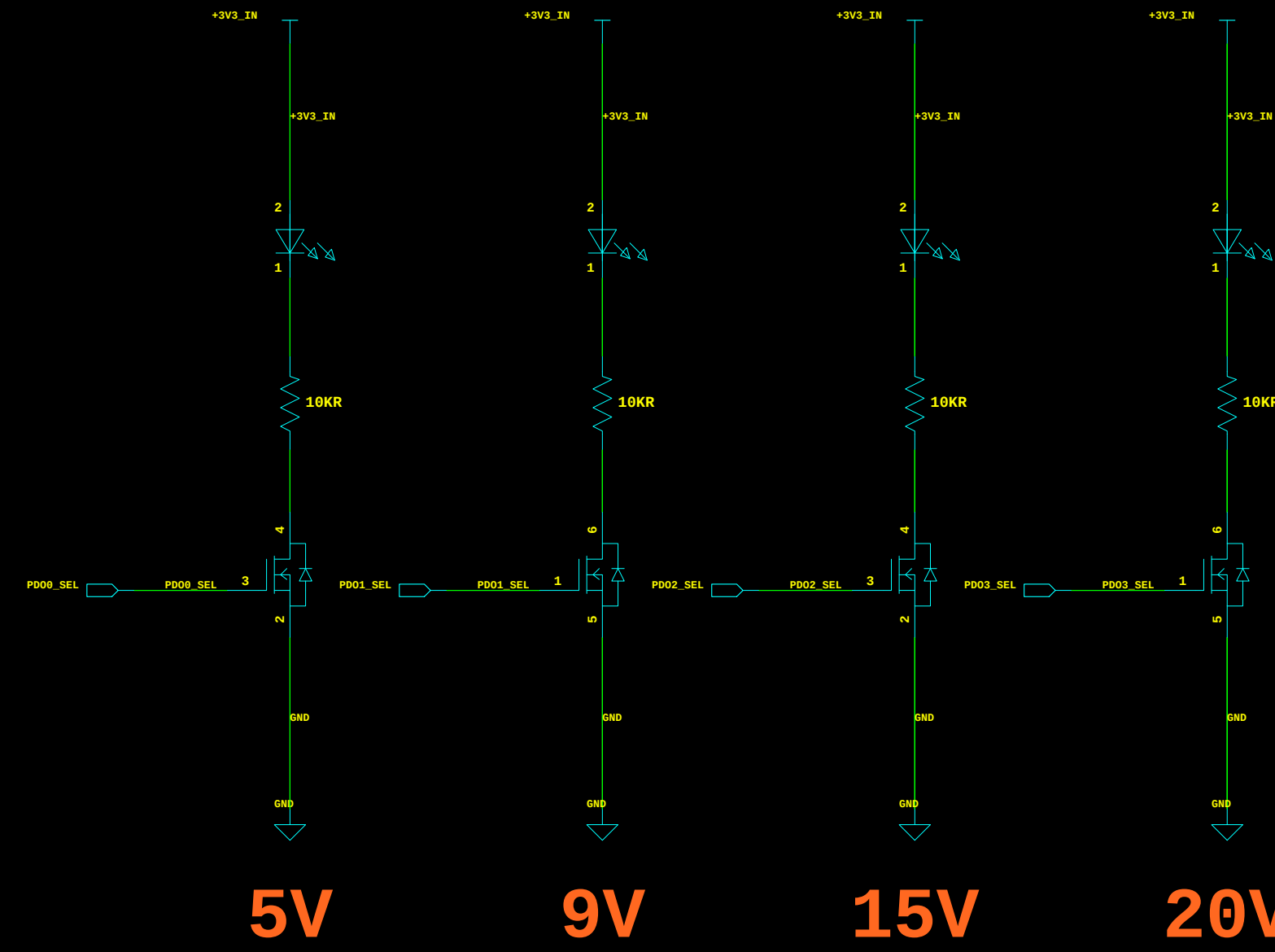
A

POWER SUPPLY

PGOOD LED

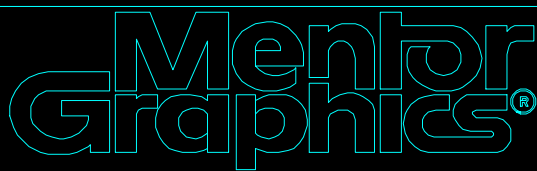


VOLTAGE LEVEL LED



VOLTAGE LEVEL TRUTH TABLE

PD03_SEL	PD02_SEL	PD01_SEL	VOLTAGE
0	0	0	5 V
0	0	1	9 V
0	1	0	15 V
1	0	0	20 V



USBC_DPMUX_PDC_A

SIZE	DWG NO	REV
A1		0

DRAWN BY <YOUR NAME> SCALE SHEET 4 of PSU_TPS646110PR

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12

11

10

9

8

7

6

5

4

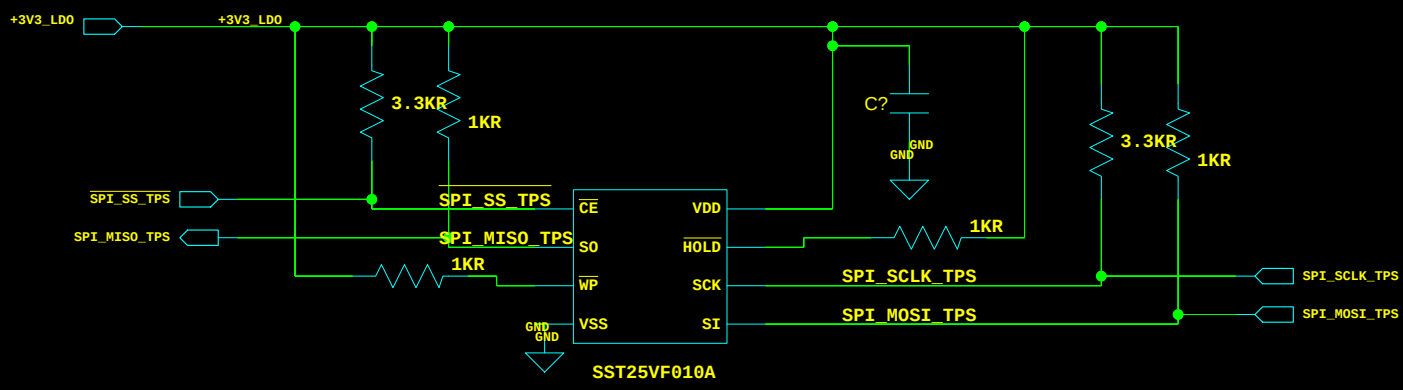
3

2

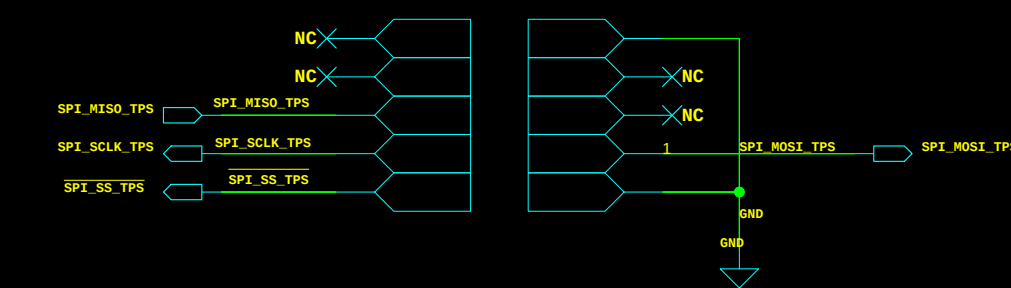
1

PD CONTROLLER

PDC EEPROM



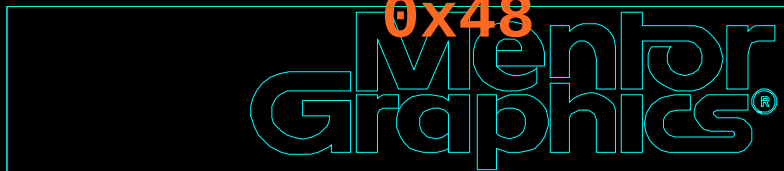
PDC EEPROM PROGRAMMING HEADER



PDC I2C ADDRESS

DIV = R2/(R1+R2)

DIV min:	DIV max:	i2C1 Unique Address:	i2C2 Unique Address:
Short to GND	0.18	0x20	0x38
0.2	0.38	0x21	0x39
0.4	0.58	0x22	0x3A
0.6	Short to LDO_3V3	0x23	0x3B

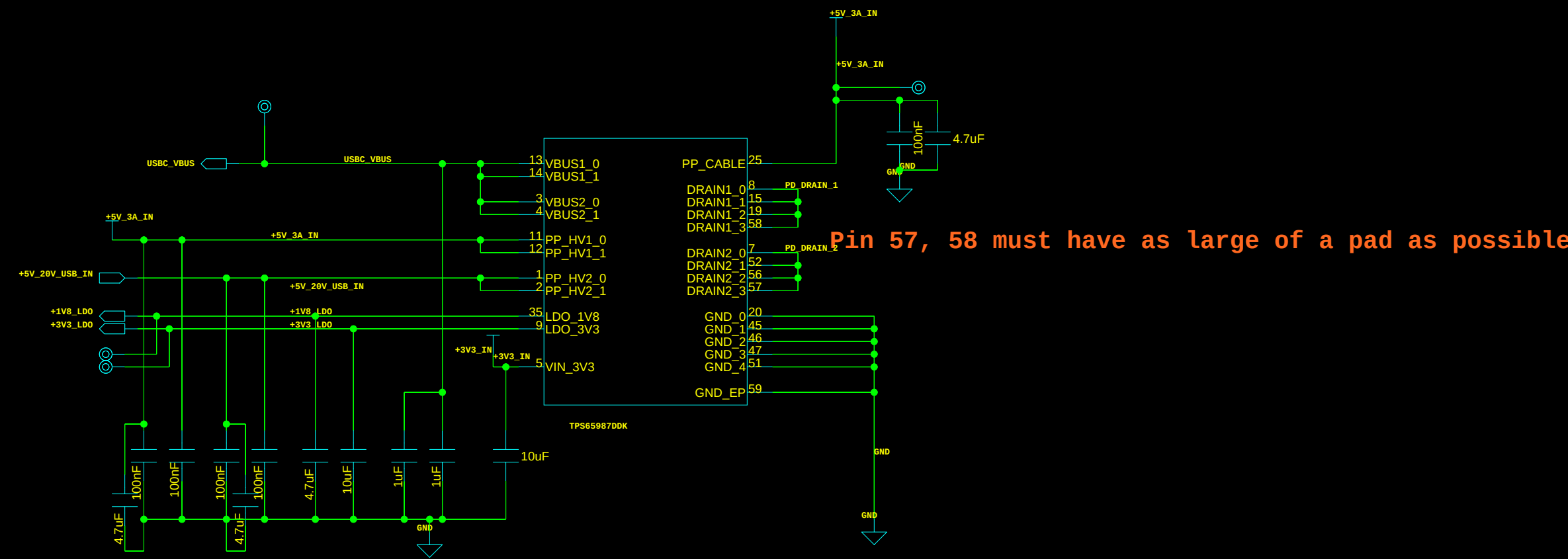
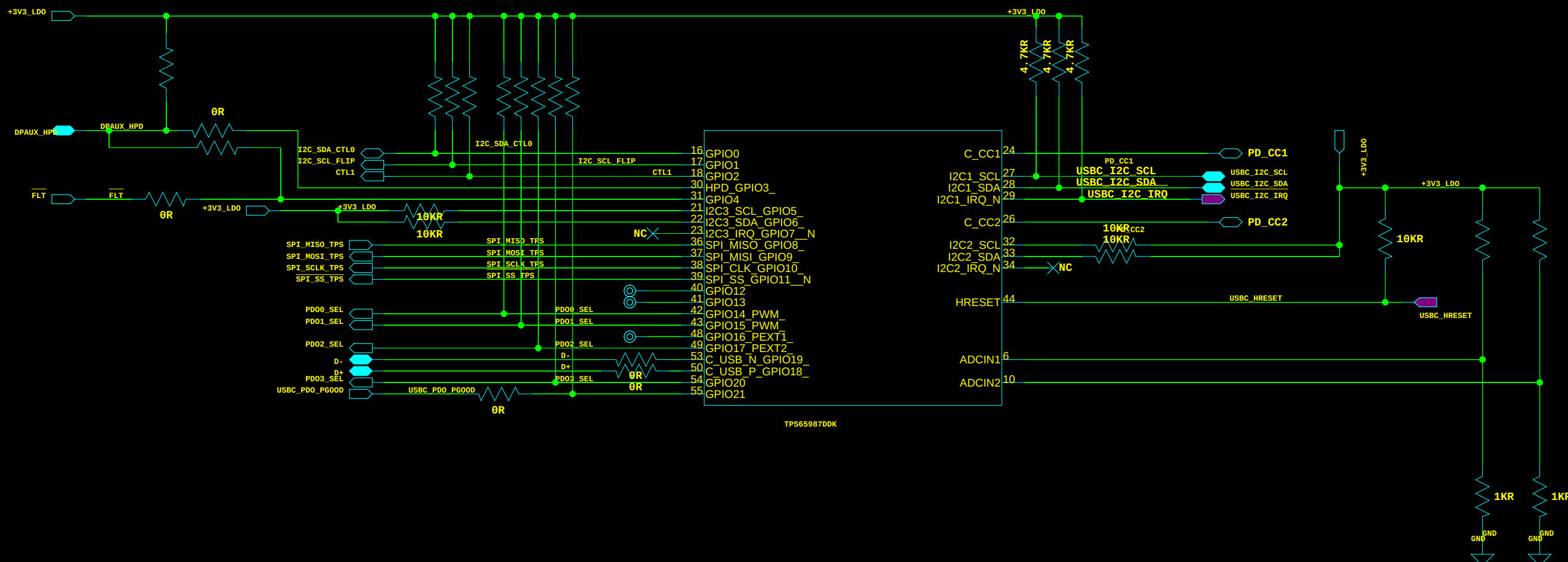


USBC_DPMUX_PDC_A

SIZE	DWG NO	REV
A1		0

SCALE SHEET of PDC_TP5655

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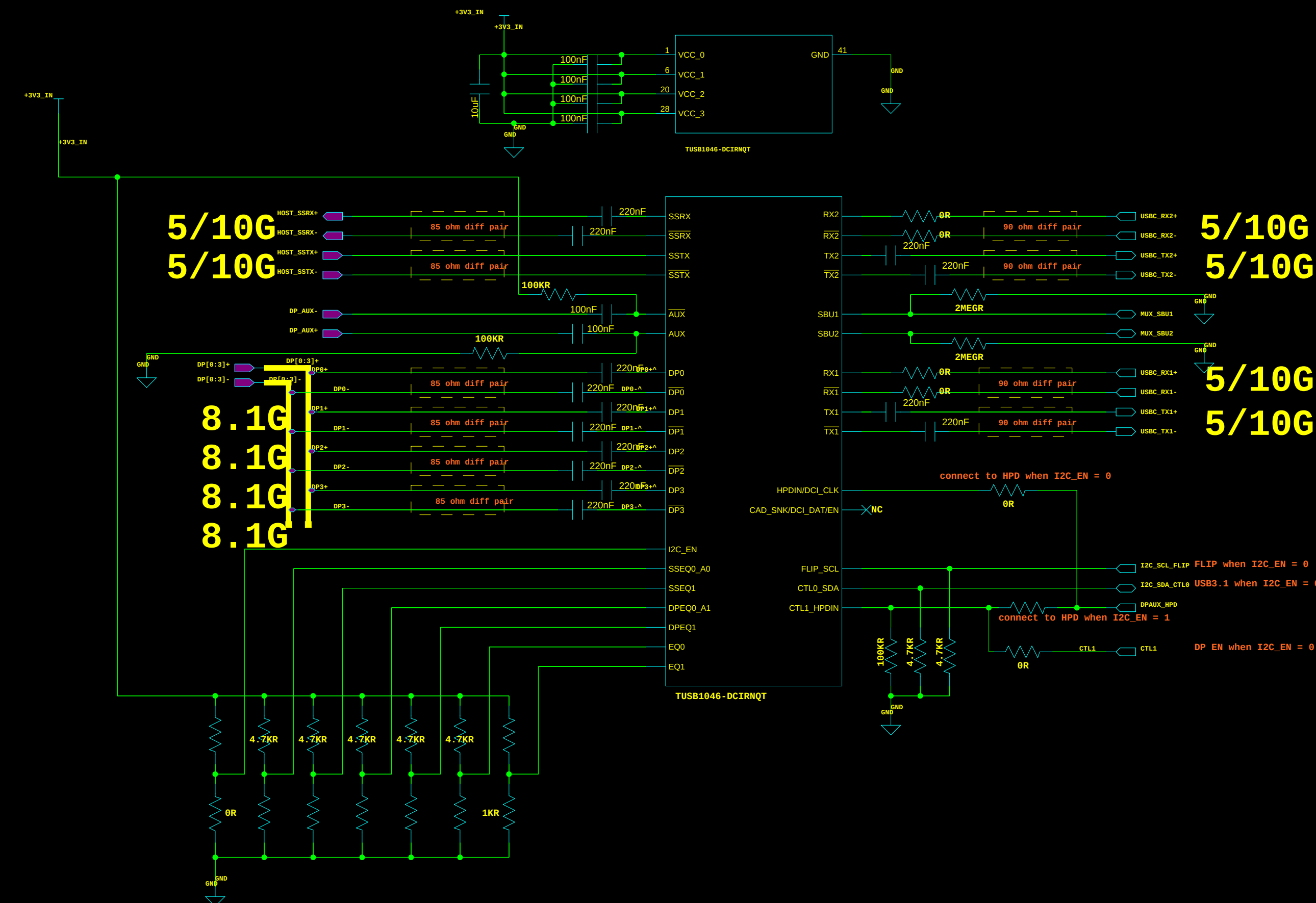


Pin 57, 58 must have as large of a pad as possible

USB-C DisplayPort Alt Mode MUX

HIGH-SPEED LAYOUT GUIDE

- ```
- High-speed differential pairs are 90 Ohm
- Intra-pair length match ≤ 2 mils
- Length match near mismatch locations
- Clearance $\geq 3 \times$ trace width
- Bend angle ≥ 135 degrees
- # of vias ≤ 2
- Route all diff. pairs on same layer (top)
- Maintain reference plane continuity
- Place AC-coupling caps near MUX pin
```



USBC\_DPMUX\_PDC\_A A

|      |        |     |
|------|--------|-----|
| SIZE | DWG NO | REV |
| A1   |        | 0   |

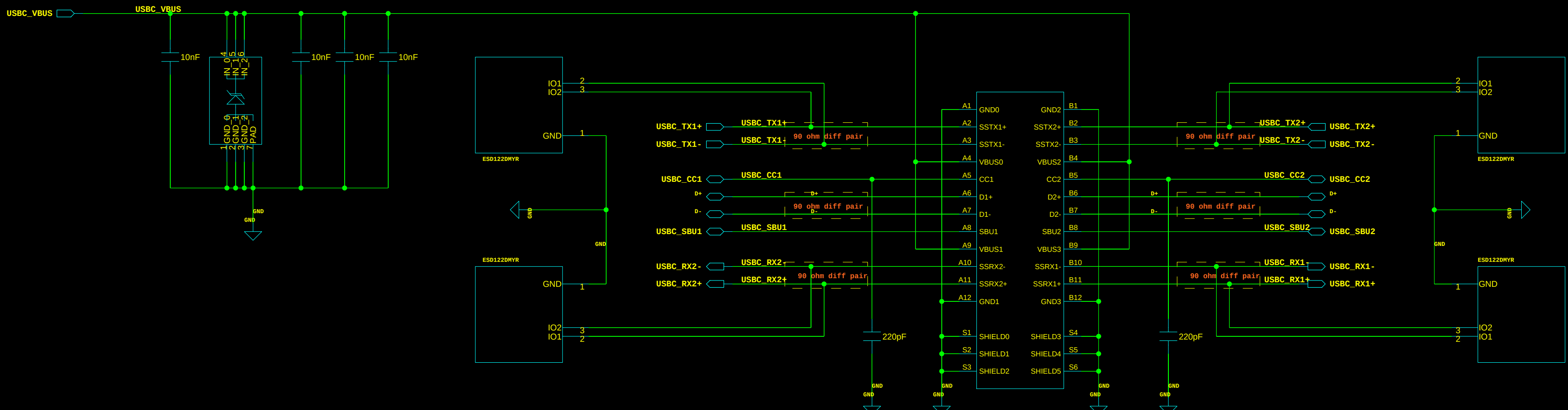
|       |       |    |              |     |
|-------|-------|----|--------------|-----|
| SCALE | SHEET | of | MUX TUSB1046 | 202 |
|-------|-------|----|--------------|-----|

|                    |       |                       |          |
|--------------------|-------|-----------------------|----------|
| DRAWN BY<br>C.YOUR | SCALE | SHEET<br>MUX TUSB1016 | of<br>16 |
|--------------------|-------|-----------------------|----------|

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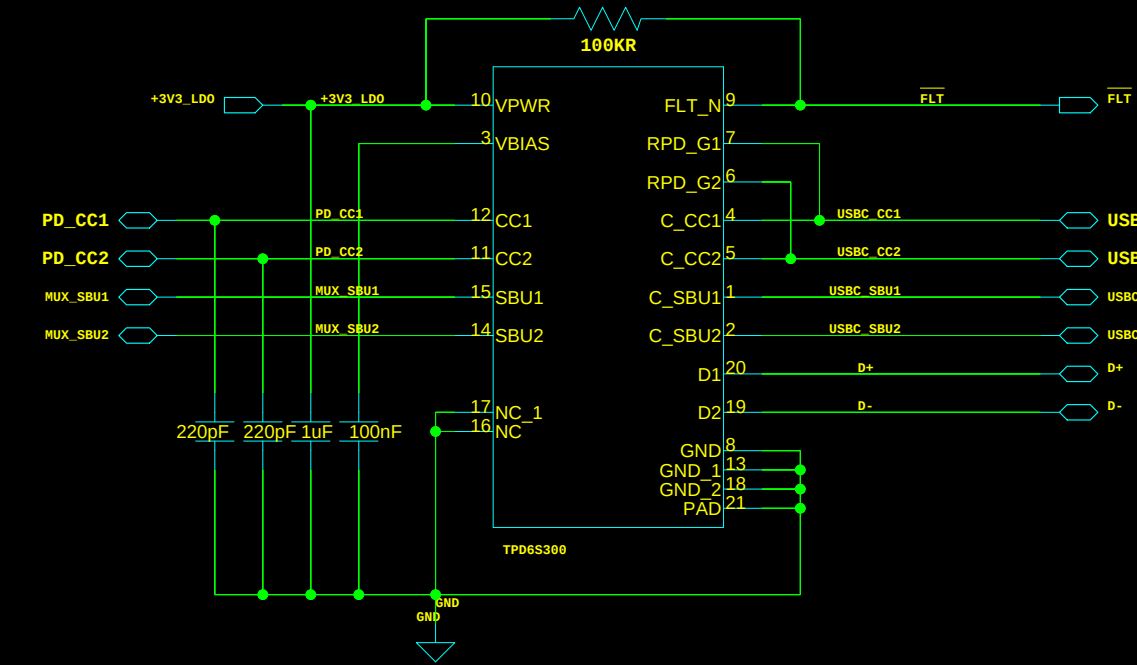


USB-C RECEPTACLE

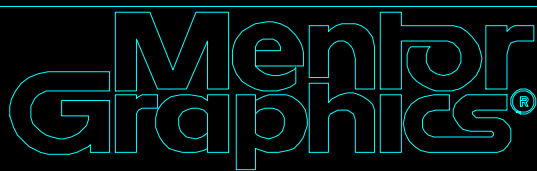
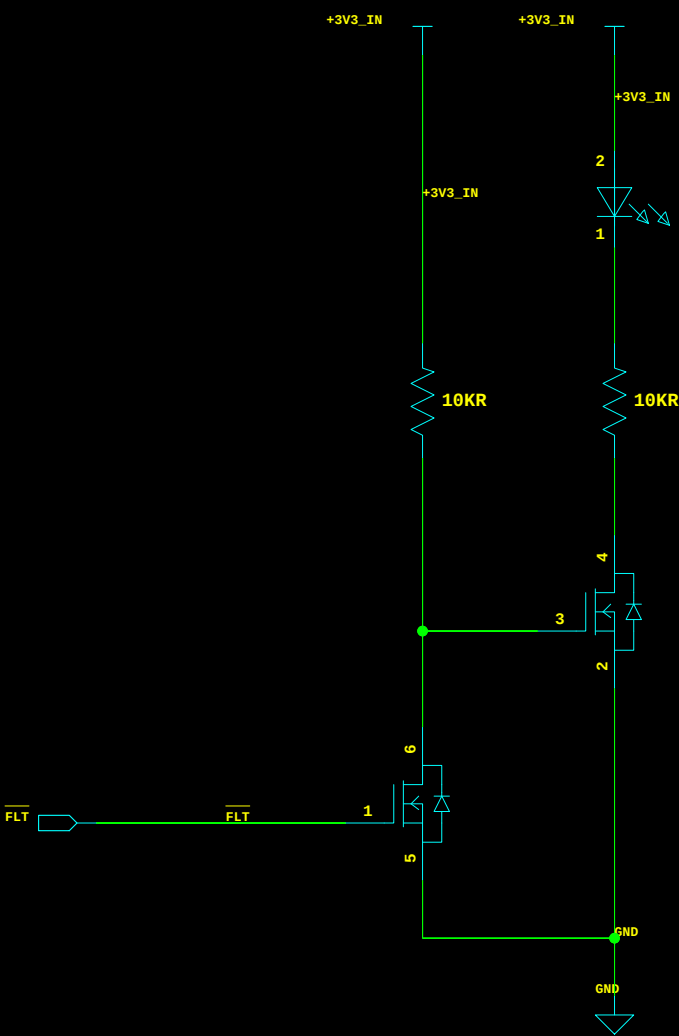


Type C USB Connector

PROTECTION



PROTECTION FAULT LED



USBC\_DPMUX\_PDC\_A

| SIZE | DWG NO | REV |
|------|--------|-----|
| A1   |        | 0   |

| DRAWN BY | SCALE | SHEET | of | REC. PROT |
|----------|-------|-------|----|-----------|
| <YOUR    |       | 4     |    |           |

2025/08/05:15