

A

A

B

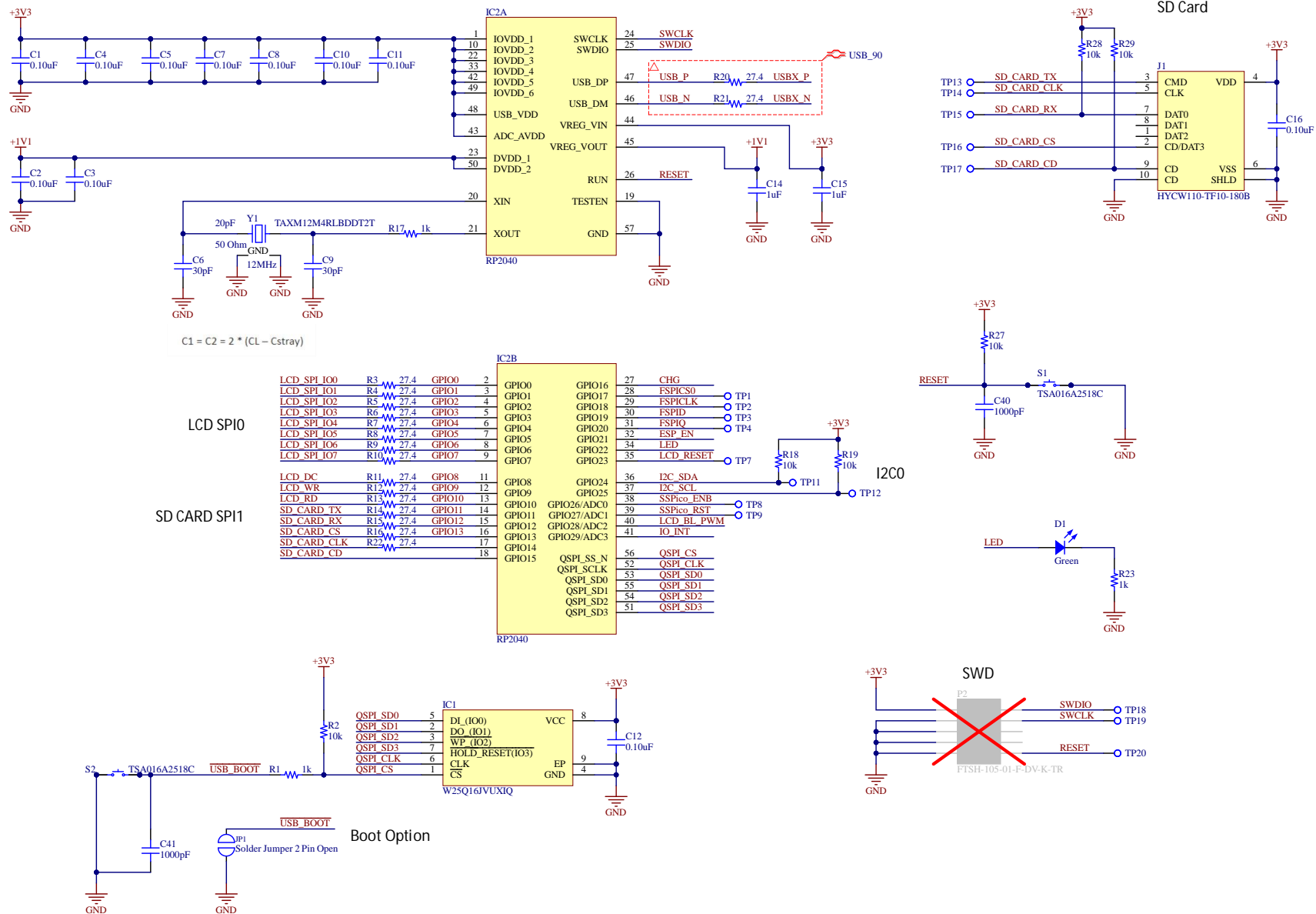
B

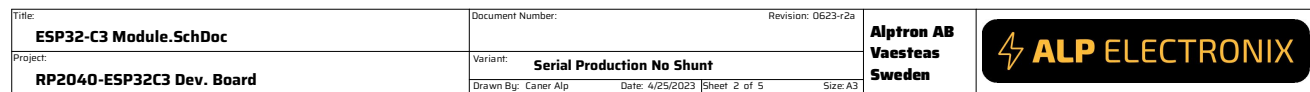
C

C

D

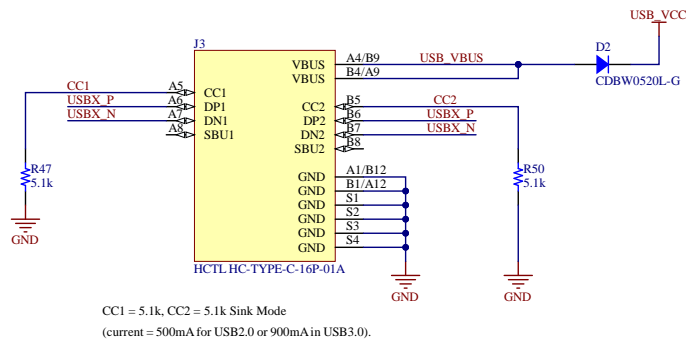
D





A

A



B

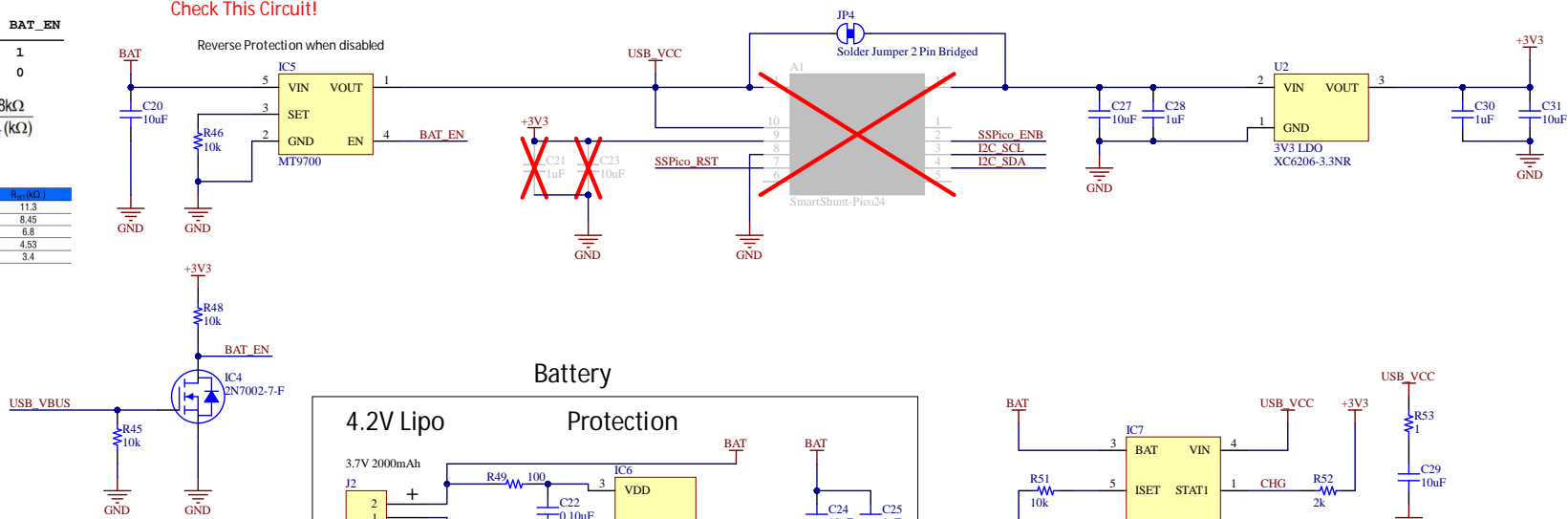
B

| USB_VBUS | BAT_EN |
|----------|--------|
| 0        | 1      |
| 1        | 0      |

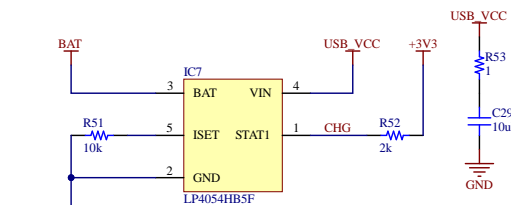
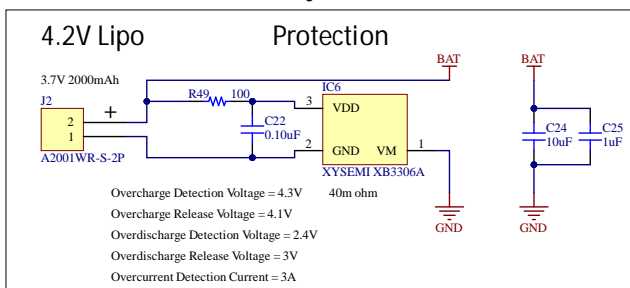
$$I_{SET} (A) = \frac{6.8k\Omega}{R_{SET} (k\Omega)}$$

Check This Circuit!

| I <sub>SET</sub> (mA) | R <sub>SET</sub> (kΩ) |
|-----------------------|-----------------------|
| 600                   | 11.3                  |
| 800                   | 8.45                  |
| 1000                  | 6.8                   |
| 1500                  | 4.53                  |
| 2000                  | 3.4                   |



### Battery



Calculate Iset  
IBAT=1000/RISET  
125C Thermal Protection  
4.2V Li-Ion

|                            |     |    |
|----------------------------|-----|----|
| RISET = 10K , Current Mode | 100 | mA |
| RISET = 2K , Current Mode  | 500 |    |

D

D

1

2

3

4

5

6

7

8

A

B

C

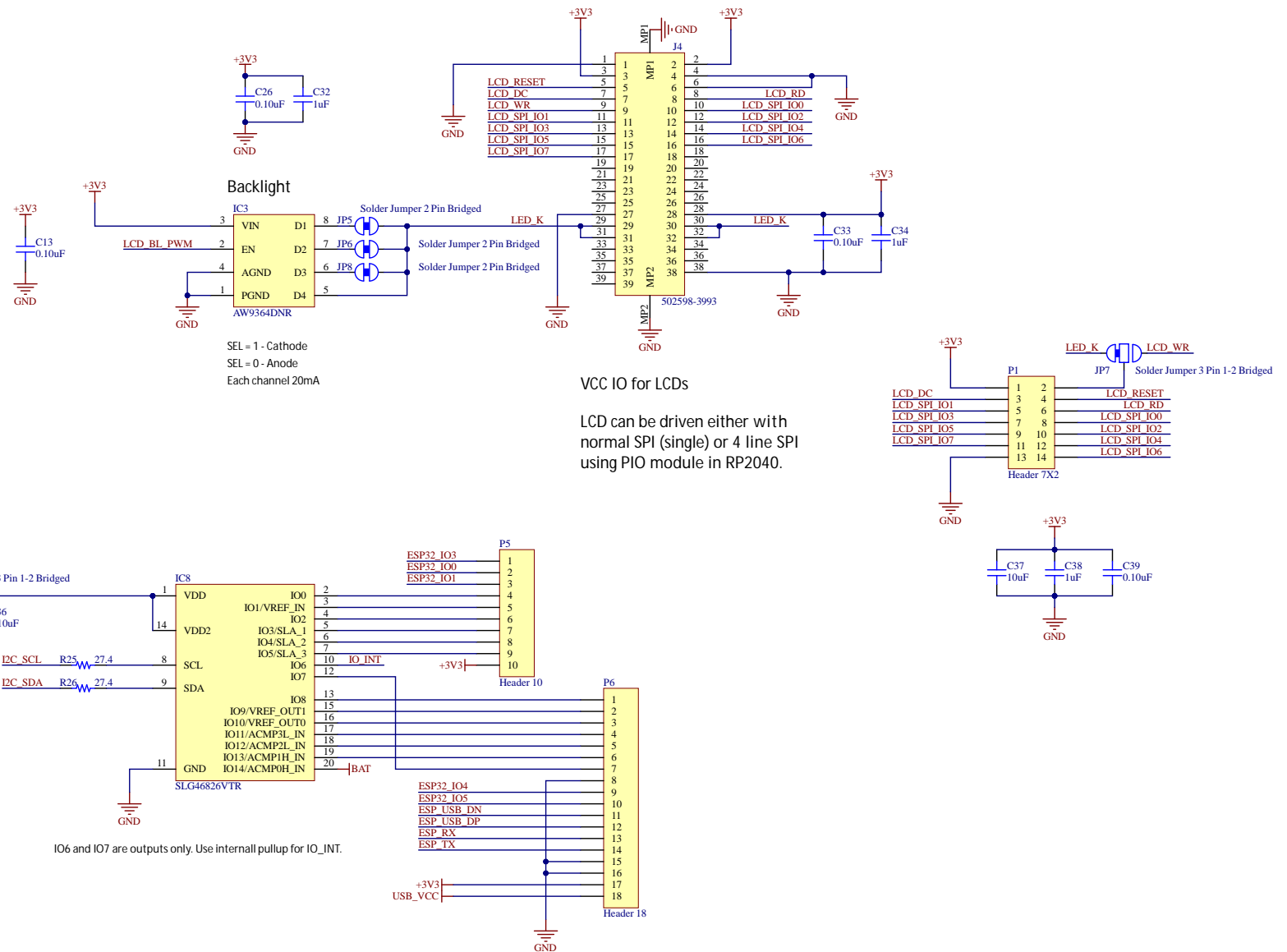
D

A

B

C

D



|  |  |   |   |   |   |  |  |  |   |
|--|--|---|---|---|---|--|--|--|---|
| 1  | 2  | 3 | 4 | 5   | 6 | 7  | 8  |  |   |
| A  | <div>Release History</div> <div><div>- 4322r1a / First release</div><div>- Initial Release</div><div>- 0623r2a / Second release</div><div><div>- Paste layer has been adjusted for components IC3, IC8, IC1 and IC2</div><div>- Paste layer has been adjusted for Test Points</div><div>- Paste layer has been adjusted for J4</div><div>- Reset button and Pull-up resistor and a capacitor are placed.</div><div>- Boot button and Pull-up resistor and a capacitor are placed.</div><div>- LDO (U2) Footprint Error corrected. (Wrong pinout)</div></div></div> |   |   |   |   |  |  | A  |   |
| B  |  |   |   |   |   |  |  | B  |   |
| C  | <div><div>MH1</div><div>MH2</div><div>MH3</div><div>MH4</div><div>Screw Hole</div><div>Screw Hole</div><div>Screw Hole</div><div>Screw Hole</div><div>GND</div></div>  |   |   |   |   |  |  | C  |   |
| D  |  |   |   |   |   |  |  | D  |   |
| <div><div>Title</div><div>Information.SchDoc</div><div>Project</div><div>RP2040-ESP32C3 Dev. Board</div></div> |  |   |   | <div><div>Document Number:</div><div></div><div>Variant:</div><div>Serial Production No Shunt</div><div>Drawn By: Caner Alp</div></div> |   | <div><div>Revision:</div><div>0623-r2a</div></div> | <div><div>Alptron AB</div><div>Vaesteas</div><div>Sweden</div></div> | <div><div>⚡</div><div>ALP ELECTRONIX</div></div> | 8 |
| 1  | 2  | 3 | 4 | 5   | 6 | 7  | 8  |  |   |