

A

A

B

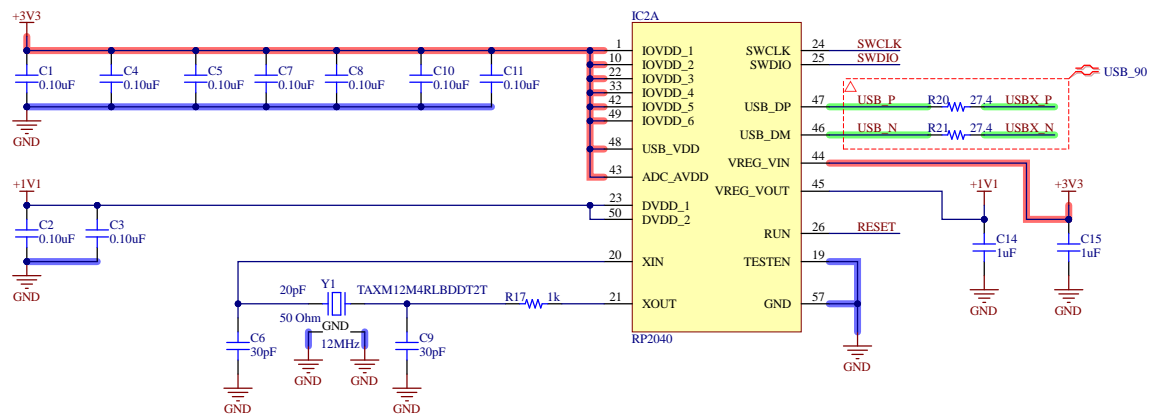
B

C

C

D

D

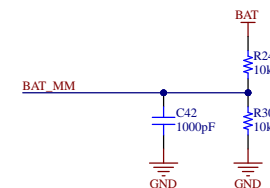
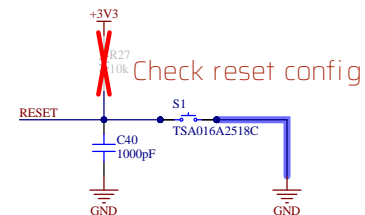
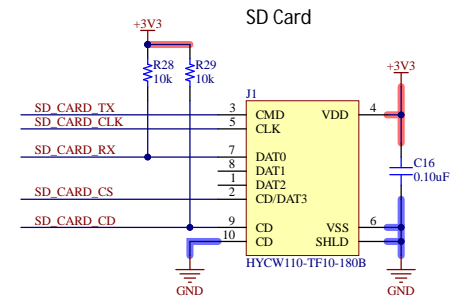
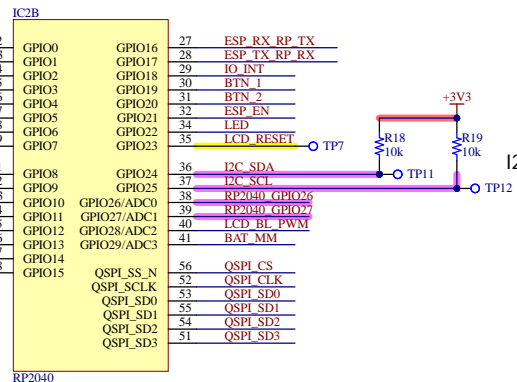


C1 = C2 = 2 * (CL - Cstray)

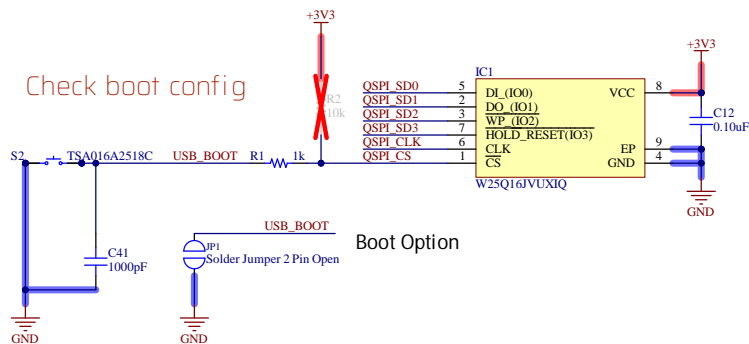
LCD SPI0

SD CARD SPI1

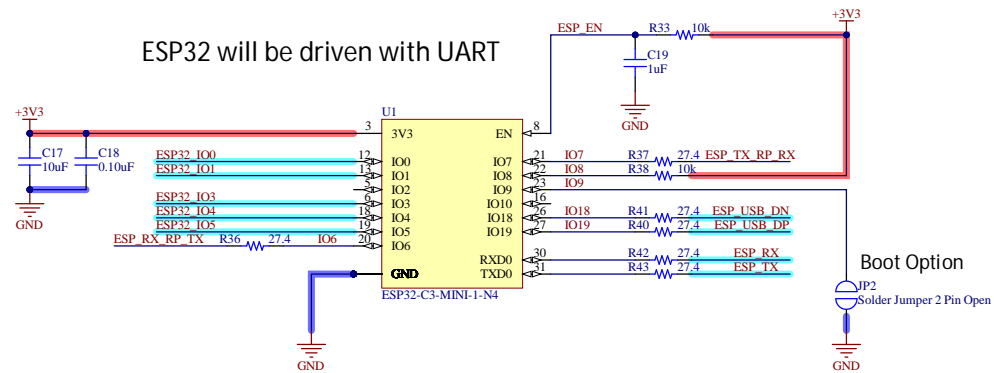
LCD_SPI_I00	R3	27.4	GPIO0	2
LCD_SPI_I01	R4	27.4	GPIO1	3
LCD_SPI_I02	R5	27.4	GPIO2	4
LCD_SPI_I03	R6	27.4	GPIO3	5
LCD_SPI_I04	R7	27.4	GPIO4	6
LCD_SPI_I05	R8	27.4	GPIO5	7
LCD_SPI_I06	R9	27.4	GPIO6	8
LCD_SPI_I07	R10	27.4	GPIO7	9
LCD_WR	R11	27.4	GPIO8	11
LCD_DC	R12	27.4	GPIO9	12
LCD_RD	R13	27.4	GPIO10	13
SD_CARD_TX	R14	27.4	GPIO11	14
SD_CARD_RX	R15	27.4	GPIO12	15
SD_CARD_CS	R16	27.4	GPIO13	16
SD_CARD_CLK	R22	27.4	GPIO17	17
SD_CARD_CD	R23	27.4	GPIO18	18

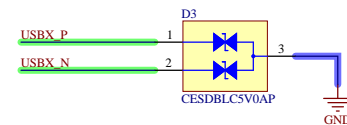


Check boot config

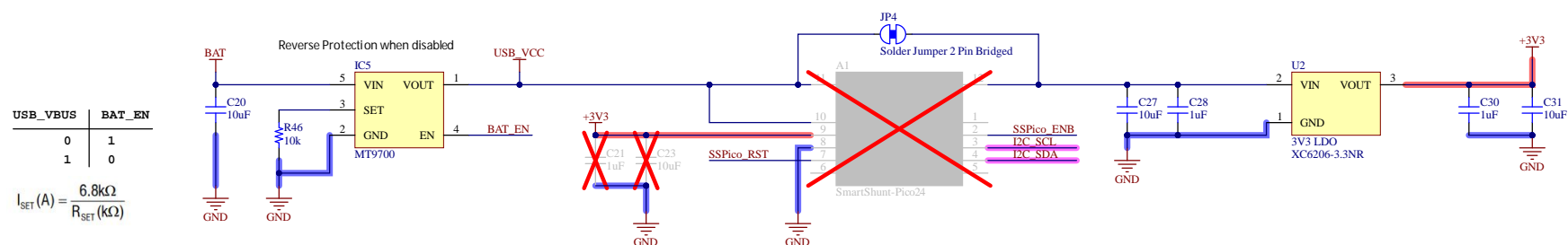


Boot Option





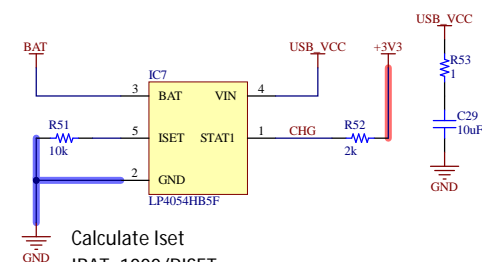
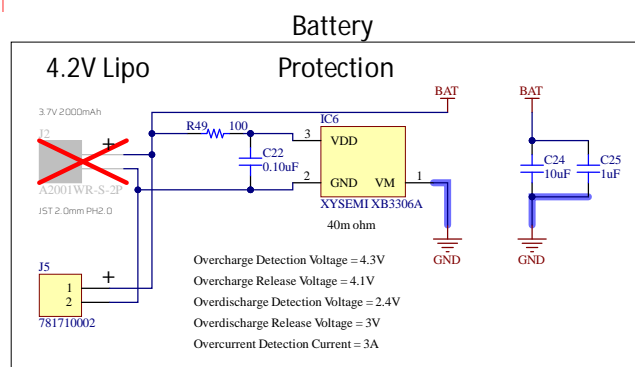
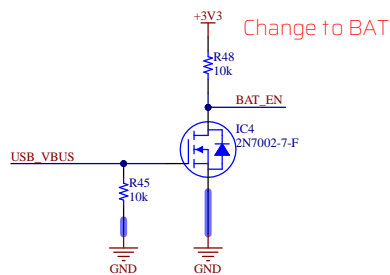
CC1 = 5.1k, CC2 = 5.1k Sink Mode
(current = 500mA for USB2.0 or 900mA in USB3.0).



USB_VBUS	BAT_EN
0	1

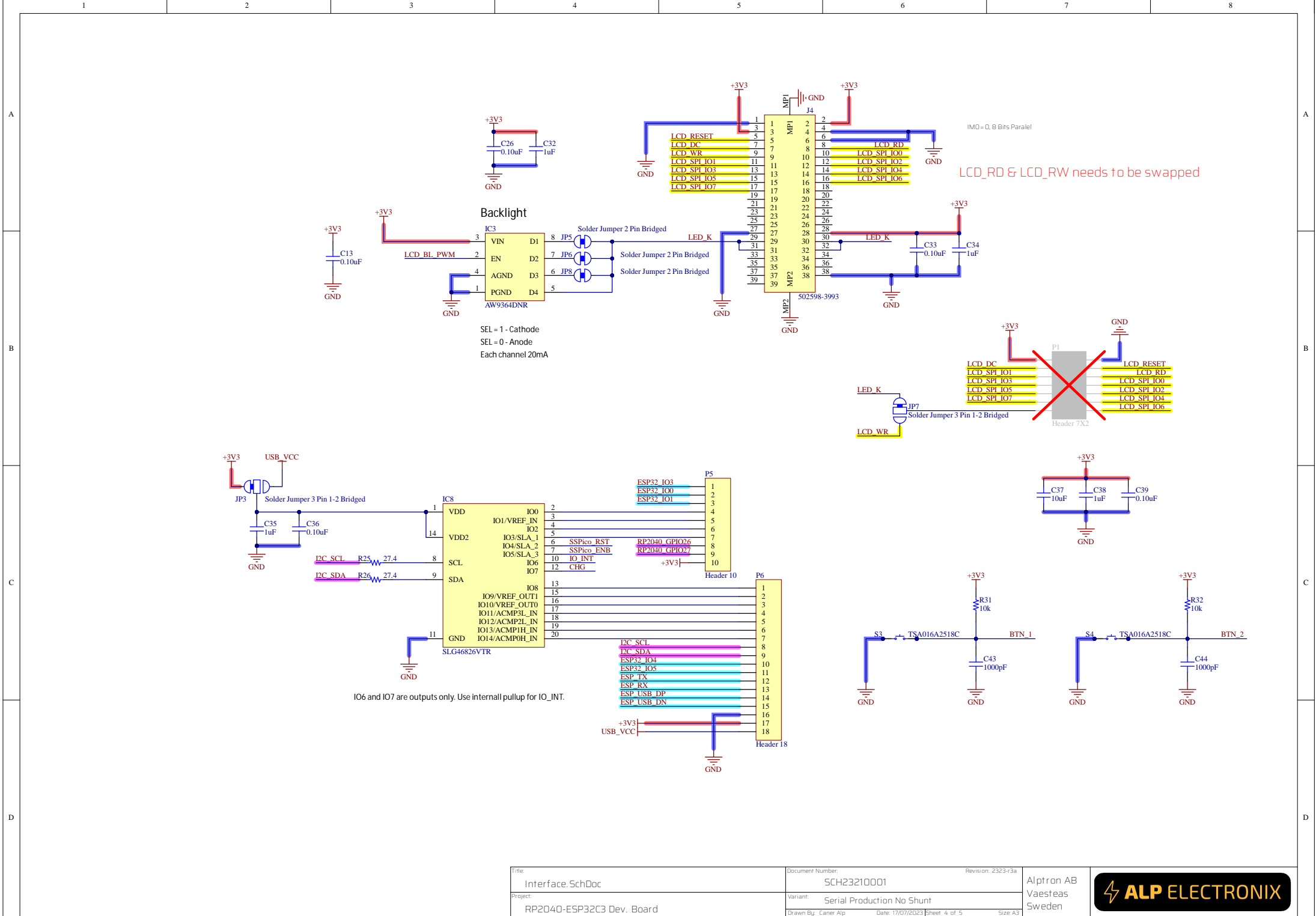
$$I_{SET}(A) = \frac{6.8k\Omega}{R_{SET}(k\Omega)}$$

I_{BI1} (mA)	R_{BI1} (k Ω)
600	11.3
800	8.45
1000	6.8
1500	4.53
2000	3.4



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

$R_{ISET} = 10K$, Current Mode		100		mA
$R_{ISET} = 2K$, Current Mode		500		



1	2	3	4	5	6	7	8	
A	<div>Release History</div> <div>- 4322r1a / First release</div> <div>- Initial Release</div> <div>- 0623r2a / Second release</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>- 2323r3a / Third release</div> <div>- USB-C connector pads have been adjusted for hand soldering.</div> <div>- The layout has been redesigned with 6 layers.</div> <div>- Some components have been put to bottom layer.</div>							A
B								B
C	<div><div>MH1</div><div>Screw Hole</div><div>GND</div></div> <div><div>MH2</div><div>Screw Hole</div><div>GND</div></div> <div><div>MH3</div><div>Screw Hole</div><div>GND</div></div> <div><div>MH4</div><div>Screw Hole</div><div>GND</div></div>							C
D								D
1	2	3	4	5	6	7	8	

Title	Information.SchDoc	Document Number	SCH23210001	Revision	2323-r3a
Project	RP2040-ESP32C3 Dev. Board	Variant	Serial Production No Shunt	Drawn By	Caner Alp
		Date	17/07/2023	Sheet	5 of 5
				Size	A3

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