

Functional Diagram and Index

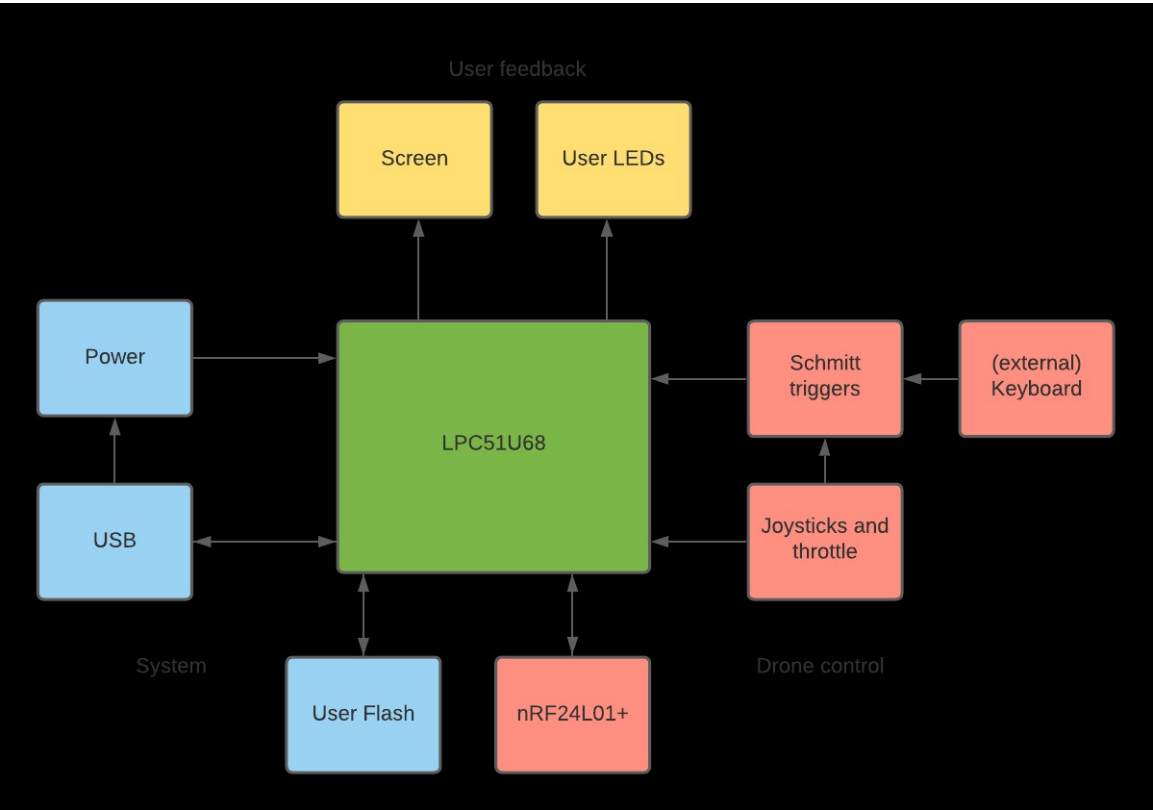


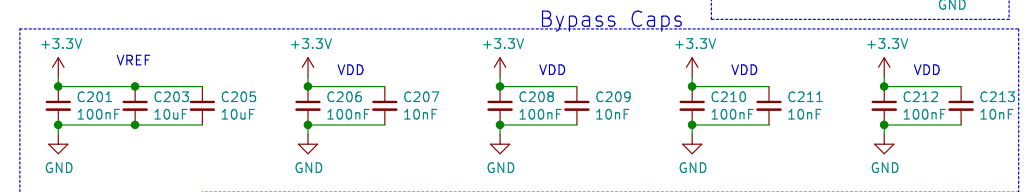
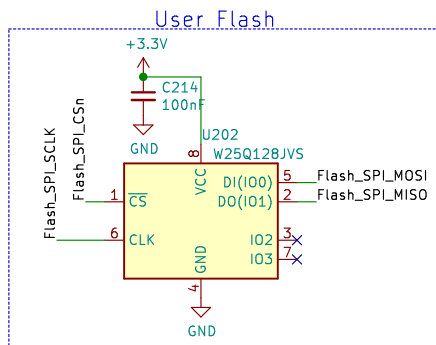
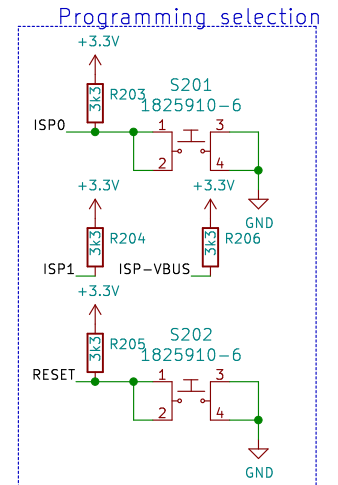
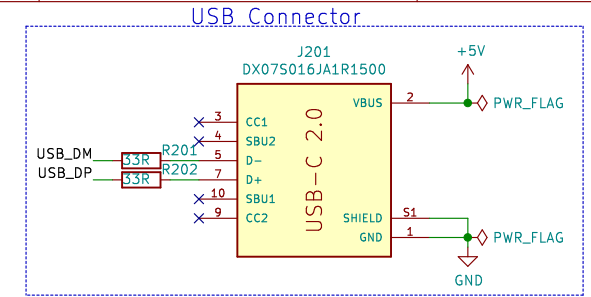
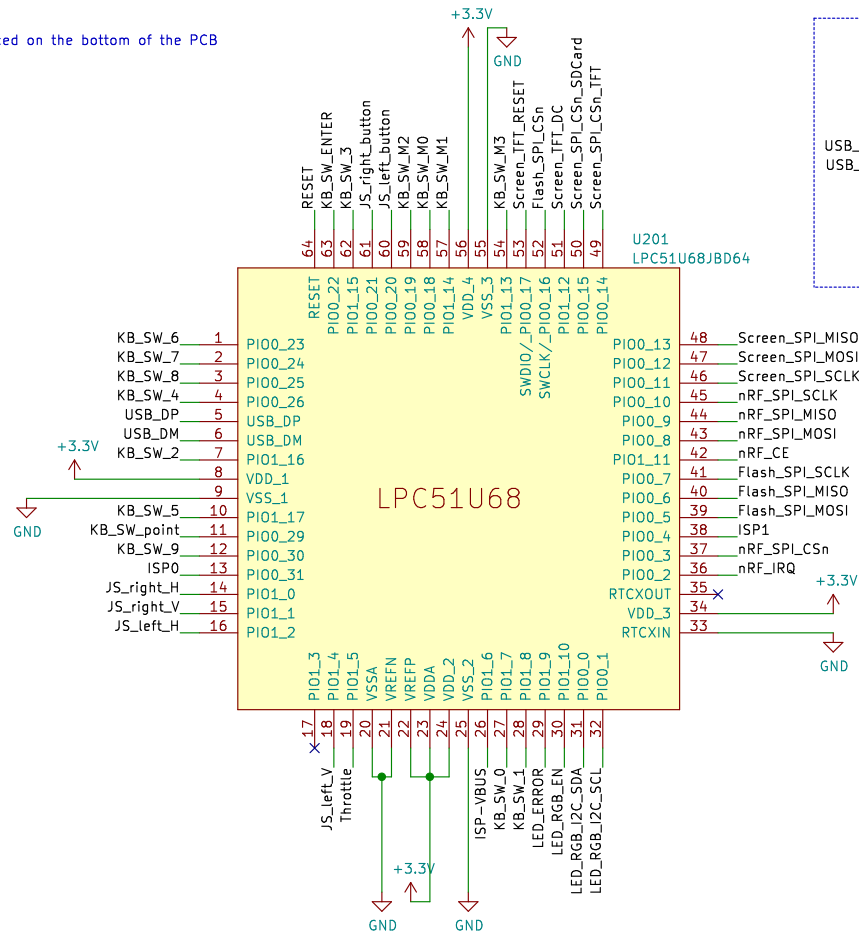
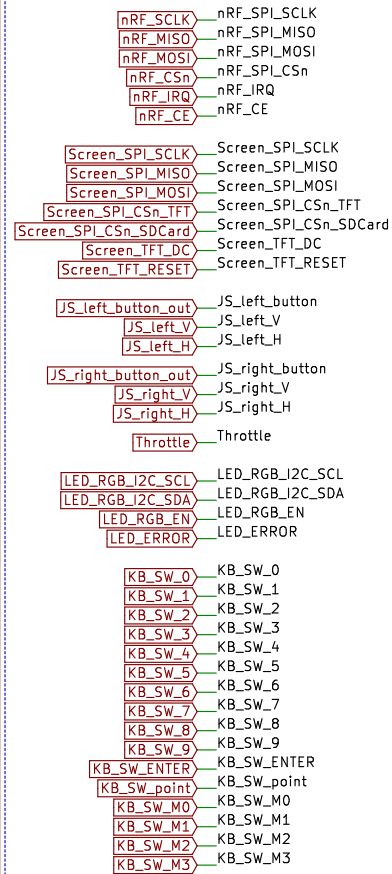
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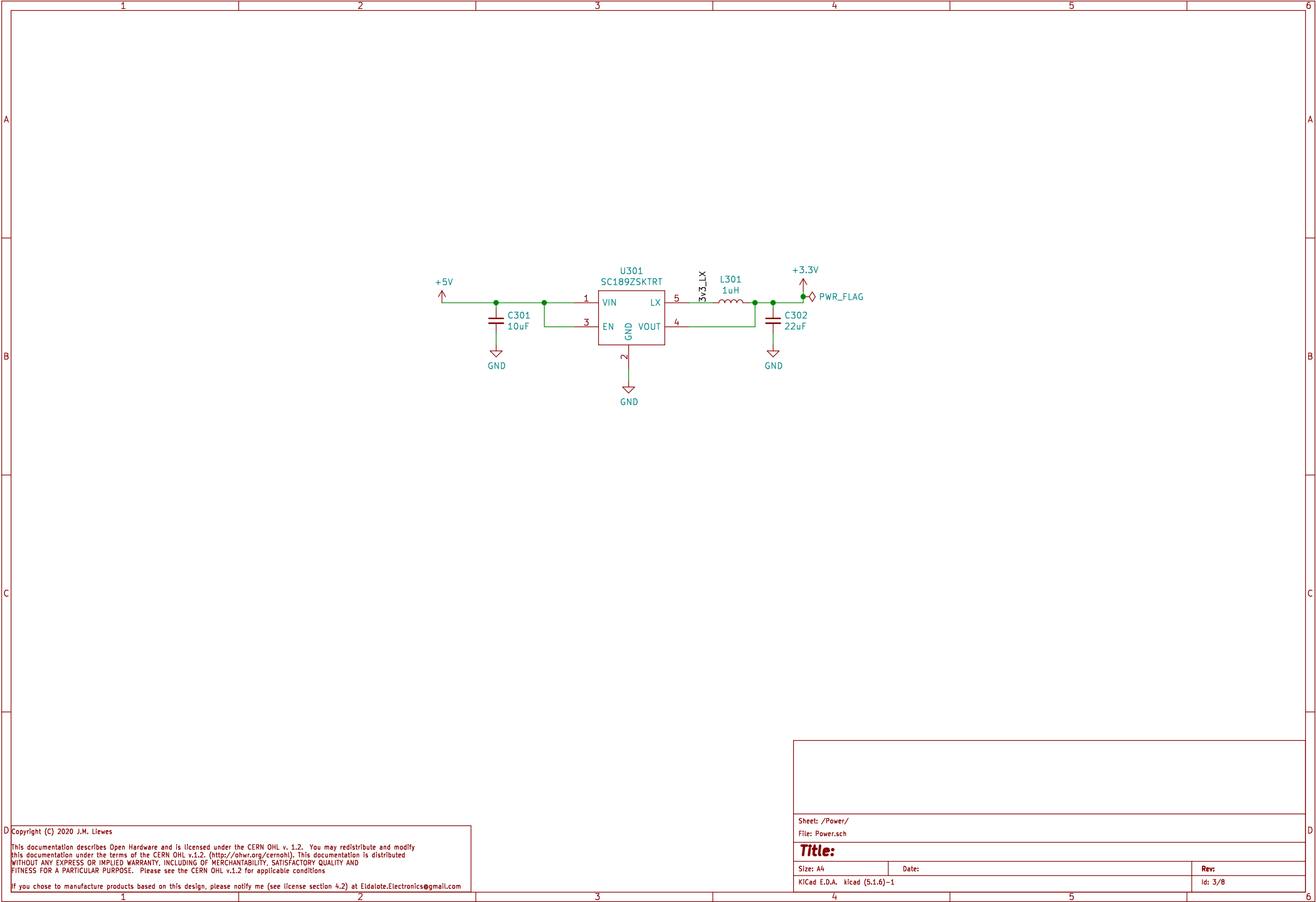
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- H101 MountingHole
- H102 MountingHole
- H103 MountingHole
- H104 MountingHole

Sheet 10

Everything on this sheet to be placed on the bottom of the PCB





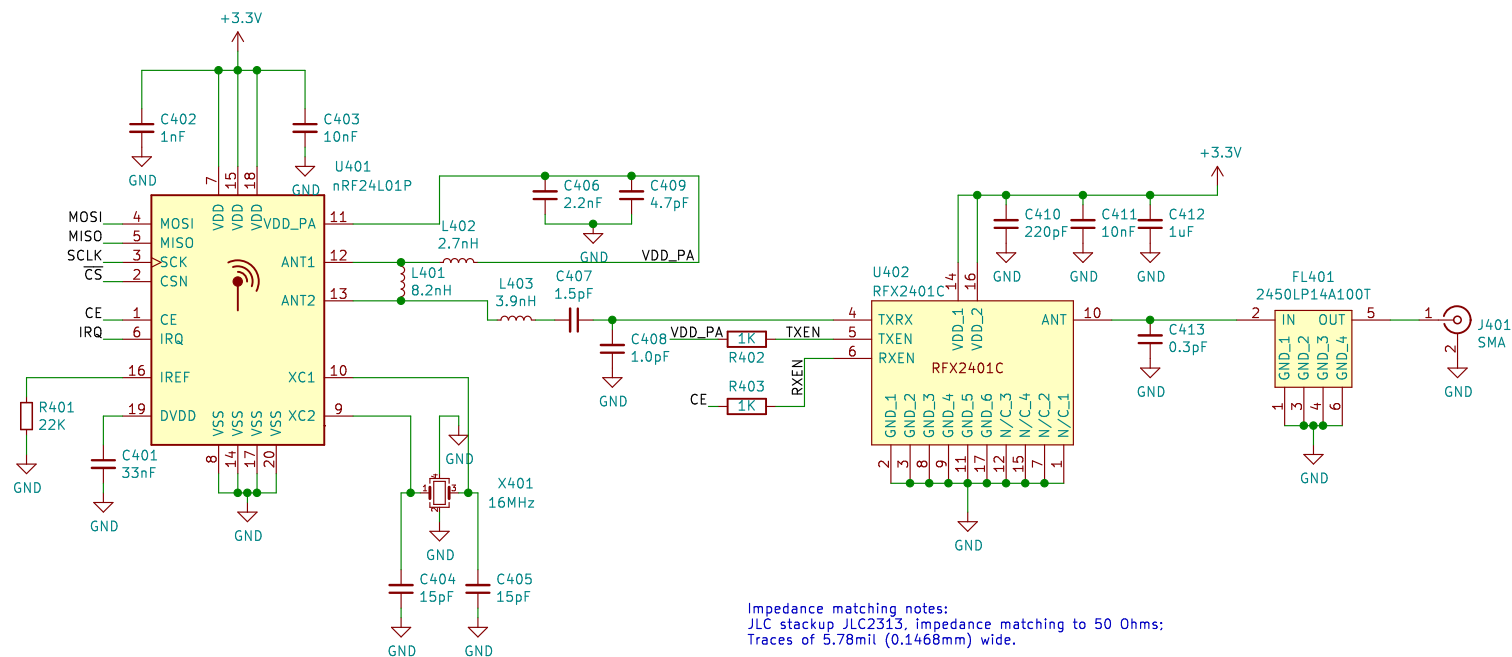
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Sheet 10

nRF_SCLK	SCLK
nRF_MISO	MISO
nRF_MOSI	MOSI
nRF_CS	CS
nRF_IRQ	IRQ
nRF_CE	CE



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Title:

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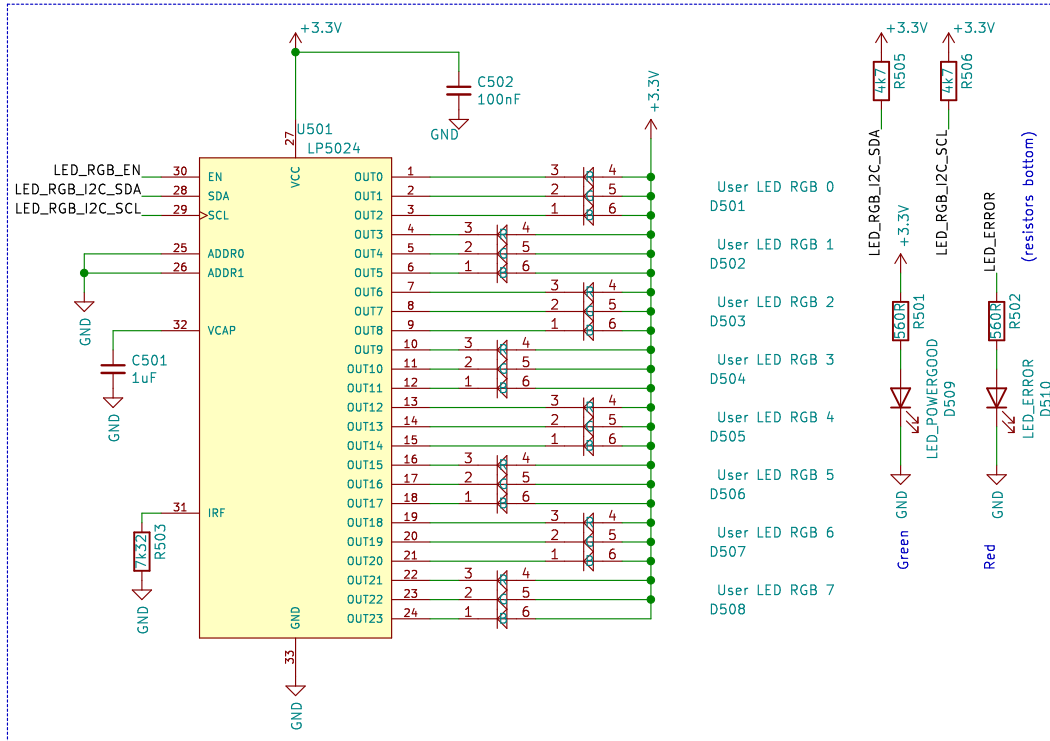
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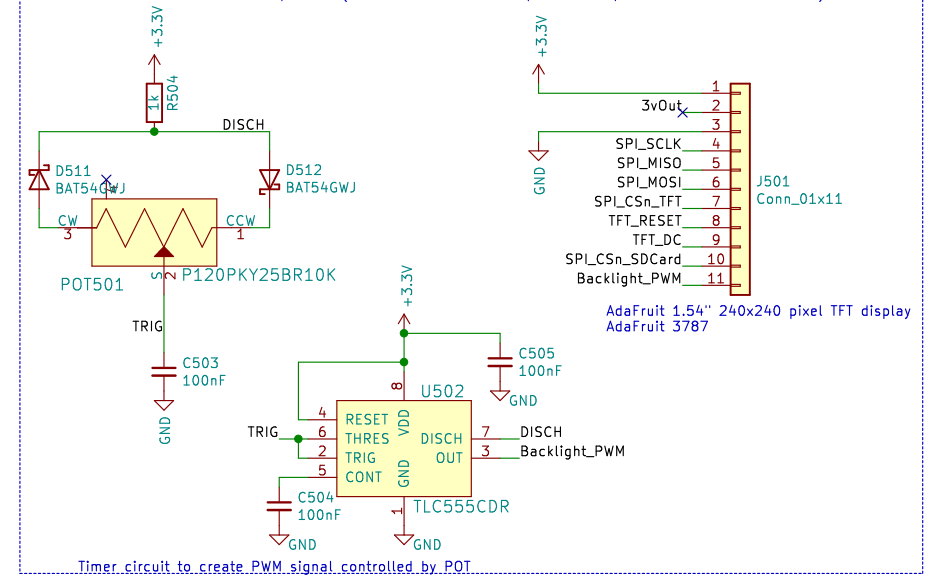
LED_ERROR LED_ERROR
LED_RGB_I2C_SCL LED_RGB_I2C_SCL
LED_RGB_I2C_SDA LED_RGB_I2C_SDA
LED_RGB_EN LED_RGB_EN

Screen_SPI_SCLK SPI_SCLK
Screen_SPI_MISO SPI_MISO
Screen_SPI_MOSI SPI_MOSI
Screen_SPI_CS_n_TFT SPI_CS_n_TFT
Screen_SPI_CS_n_SDCard SPI_CS_n_SDCard
Screen_TFT_DC TFT_DC
Screen_TFT_RESET TFT_RESET

LEDs (top)



Screen with pot (Screen and pot top, rest bottom)



Timer circuit to create PWM signal controlled by POT

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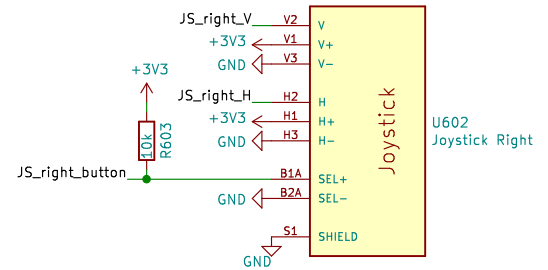
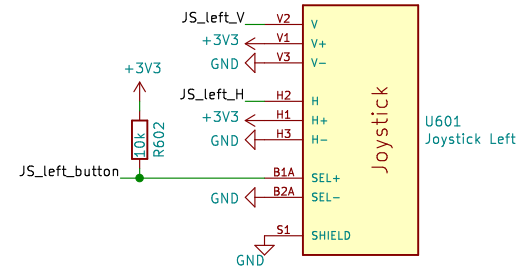
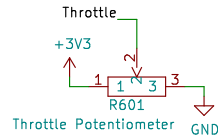
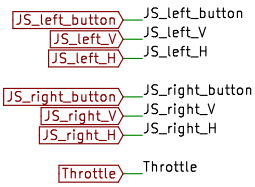
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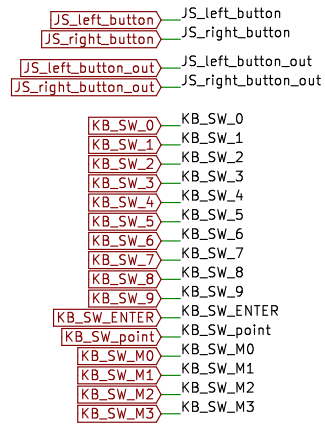
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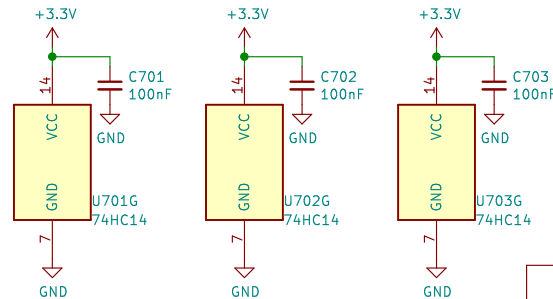
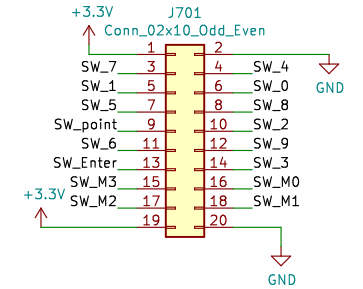
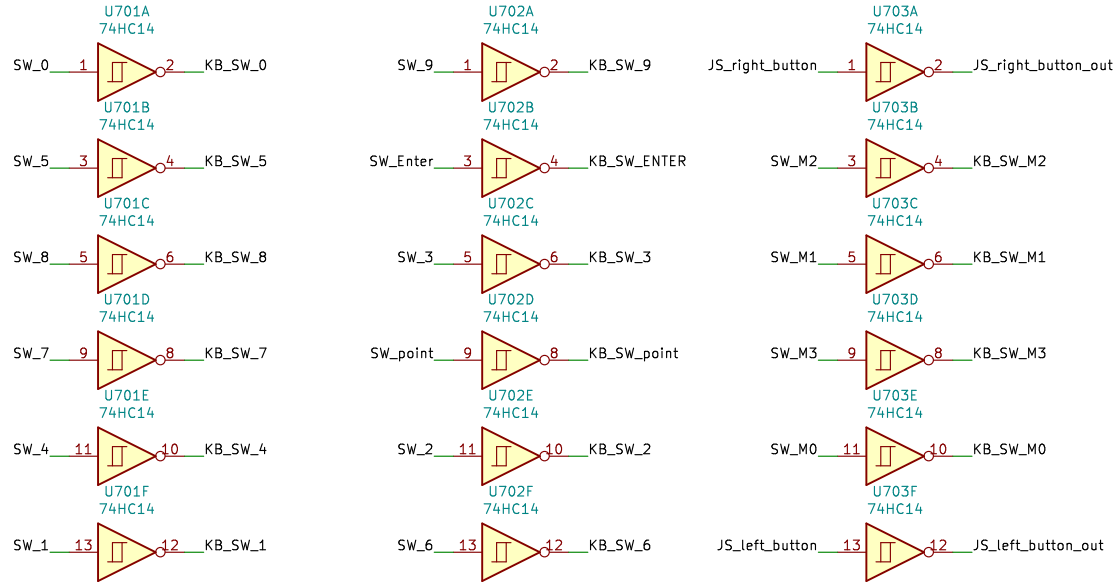
Sheet 10



Sheet 10



Everything on this sheet on the bottom of the PCB



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Title:

Size: A4

Date:

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Rev:

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By Pin

Pin	Function	Functional block
1	KB_SW_6	GPIO0_23
2	KB_SW_7	GPIO0_24
3	KB_SW_8	GPIO0_25
4	KB_SW_4	GPIO0_26
5	USB_DP	USB
6	USB_DM	USB
7	KB_SW_2	GPIO1_16
8	VDD_1	System
9	VSS_1	System
10	KB_SW_5	GPIO1_17
11	KB_SW_point	GPIO0_29
12	KB_SW_9	GPIO0_30
13	ISP0	System
14	Joystick_Right_H	ADC0 3
15	Joystick_Right_V	ADC0 4
16	Joystick_Left_H	ADC0 5
17	NC	Not connected
18	Joystick_Left_V	ADC0 7
19	Throttle pot	ADC0 8
20	VSSA	System
21	VREFN	System
22	VREFP	System
23	VDDA	System
24	VDD_2	System
25	VSS_2	System
26	ISP_VBUS	System
27	KB_SW_0	GPIO0_7
28	KB_SW_1	GPIO1_8
29	LED_ERROR	GPIO1_9
30	LED_RGB_EN	GPIO1_10
31	LED_RGB_I2C_SDA	Flexcom 0
32	LED_RGB_I2C_SCL	Flexcom 0
33	RTCXIN/GND	System
34	VDD_3	System
35	DNC	Do not connect
36	nRF_IRQ	GPIO0_2
37	nRF_Csn	Flexcom 2
38	ISP1	System
39	Flash_SPI_MOSI	Flexcom 6
40	Flash_SPI_MISO	Flexcom 6
41	Flash_SPI_SCLK	Flexcom 6
42	nRF_CE	GPIO1_11
43	nRF_MOSI	Flexcom 2
44	nRF_MISO	Flexcom 2
45	nRF_SCLK	Flexcom 2
46	Screen_SPI_SCLK	Flexcom 3
47	Screen_SPI_MOSI	Flexcom 3
48	Screen_SPI_MISO	Flexcom 3
49	Screen_SPI_Csn_TFT	Flexcom 3
50	Screen_SPI_Csn_SDCARD	Flexcom 3
51	Screen_TFT_DC	GPIO1_12
52	Flash_SPI_Csn	Flexcom 6
53	Screen_TFT_RESET	GPIO0_17
54	KB_SW_M3	GPIO1_13
55	VSS_3	System
56	VDD_4	System
57	KB_SW_M1	GPIO1_14
58	KB_SW_M0	GPIO0_19
59	KB_SW_M2	GPIO0_20
60	JS_left_button	GPIO1_15
61	JS_right_button	GPIO0_22
62	KB_SW_3	GPIO0_18
63	KB_SW_Enter	GPIO0_21
64	RESET	System

By Function

Function	Functional block	Pin
USB_DP	USB	5
USB_DM	USB	6
nRF_SCLK	Flexcom 2	45
nRF_Csn	Flexcom 2	37
nRF_MOSI	Flexcom 2	43
nRF_MISO	Flexcom 2	44
nRF_IRQ	GPIO0_2	36
nRF_CE	GPIO1_11	42
Screen_SPI_SCLK	Flexcom 3	46
Screen_SPI_MOSI	Flexcom 3	47
Screen_SPI_MISO	Flexcom 3	48
Screen_SPI_Csn_TFT	Flexcom 3	49
Screen_SPI_Csn_SDCARD	Flexcom 3	50
Screen_TFT_DC	GPIO1_12	51
Screen_TFT_RESET	GPIO0_17	53
Flash_SPI_SCLK	Flexcom 6	41
Flash_SPI_Csn	Flexcom 6	52
Flash_SPI_MOSI	Flexcom 6	39
Flash_SPI_MISO	Flexcom 6	40
LED_RGB_I2C_SDA	Flexcom 0	31
LED_RGB_I2C_SCL	Flexcom 0	32
LED_RGB_EN	GPIO1_10	30
LED_ERROR	GPIO1_9	29
Throttle pot	ADC0 8	19
Joystick_Left_V	ADC0 7	18
Joystick_Left_H	ADC0 5	16
JoyStick_left_button	GPIO1_15	62
Joystick_Right_V	ADC0 4	15
Joystick_Right_H	ADC0 3	14
JoyStick_right_button	GPIO0_22	63
KB_SW_0	GPIO0_7	27
KB_SW_1	GPIO1_8	28
KB_SW_2	GPIO1_16	7
KB_SW_3	GPIO0_18	58
KB_SW_4	GPIO0_26	4
KB_SW_5	GPIO1_17	10
KB_SW_6	GPIO0_23	1
KB_SW_7	GPIO0_24	2
KB_SW_8	GPIO0_25	3
KB_SW_9	GPIO0_30	12
KB_SW_point	GPIO0_29	11
KB_SW_Enter	GPIO0_21	61
KB_SW_M0	GPIO0_19	59
KB_SW_M1	GPIO1_14	57
KB_SW_M2	GPIO0_20	60
KB_SW_M3	GPIO1_13	54

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