

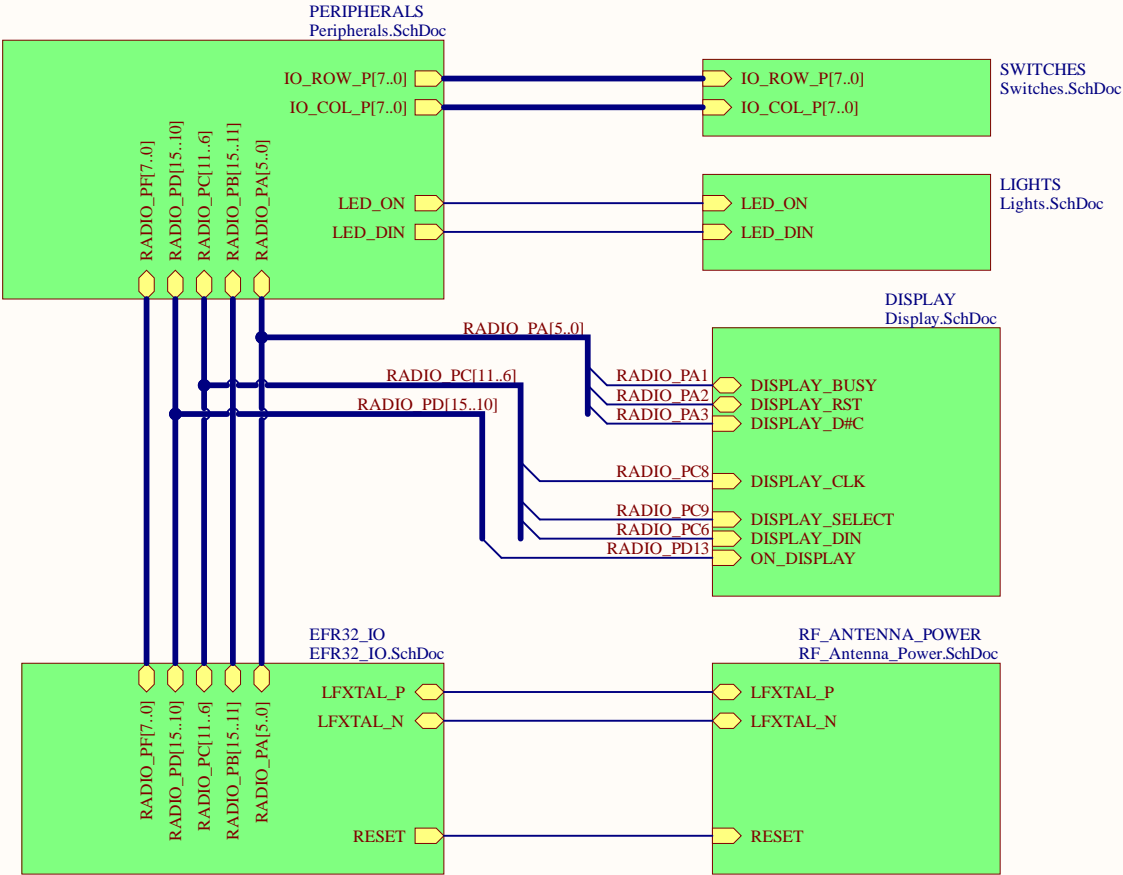
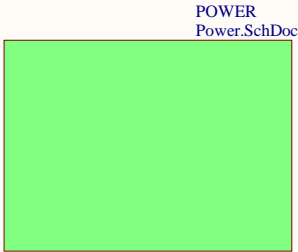
SHEETS

NAME	SHEET
RF_ANTENNA_POWER	2
EFR_GPIO	3
PERIPHERALS	4
POWER	5
SWITCHES	6
LIGHTS	8
DISPLAY	7

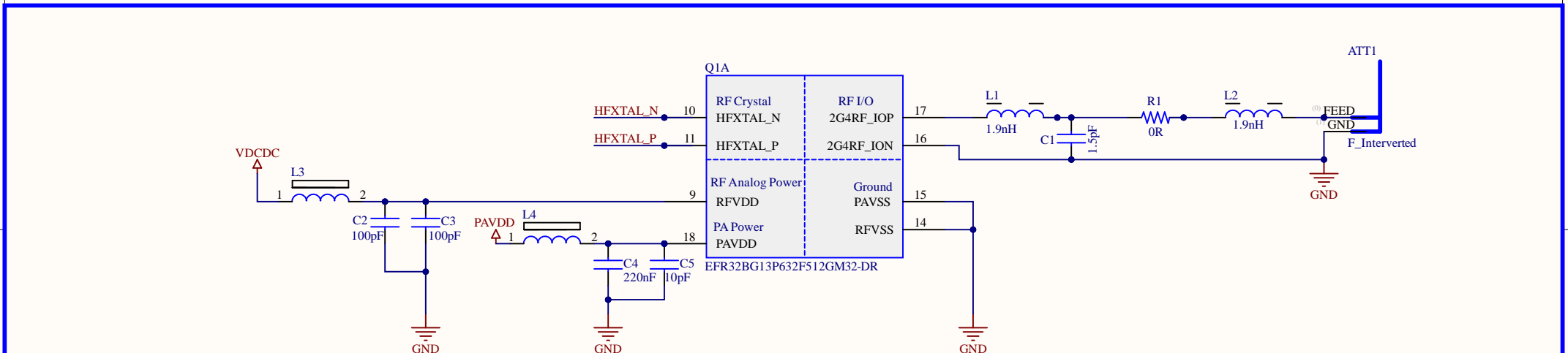
Voltage ranges

	Min	Typ	Max	Units
BlueGecko	1.8		3.8	V
PMIC	0.1		5.1	V
eInk Display	2.2		3.7	V
Load Switch	1.6		5.5	V
Temperature sensor	1.9		3.6	V
IO Expander	1.65		5.5	V

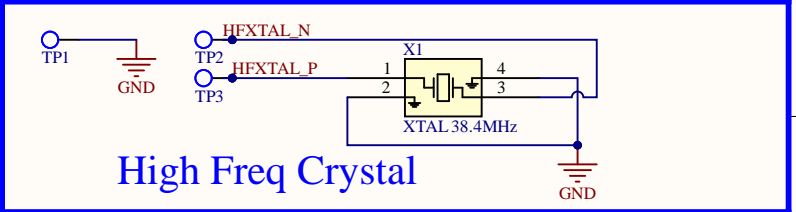
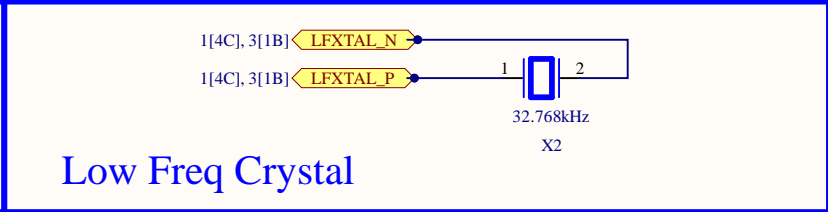
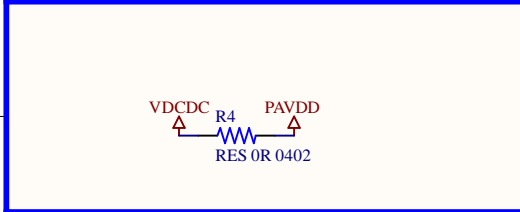
Modules	Test points	Designators	Signal
Interrupts	TP1	IO_ROW_INT	
	TP2	IO_COL_INT	
Temperature sensor	TP3	TEMP_LOAD_SW	
	TP4	RESET	
Mini SWD connector	TP5	SWDIO	
	TP6	PTI_FRAME	
	TP7	VCOM_RX	
	TP8	VCOM_TX	
	TP9	SWCLK	
	TP10	PTI_DATA	
eInk display	TP11	SWO	
	TP12	DISPLAY_D#C	
	TP13	DISPLAY_DIN	
	TP14	DISPLAY_CLK	
I2C communication	TP15	DISPLAY_SELECT	
	TP16	SCL	
	TP17	SDA	
	TP18	VBAT	
Power supply	TP19	Solar Pannel output	
	TP21	VSTOR	
	TP22	+3.3V	
	TP23	VMCU	
	TP25	VMCU	
	TP26	HFXTAL_N	
Crystals	TP27	HFXTAL_P	
	TP28	LFXTAL_P	
	TP29	LFXTAL_N	



Title		
Size	Number	Revision
A4		
Date:	10/24/2024	Sheet of
File:	C:\Users\...\Keyboard-Left.SchDoc	Drawn By:

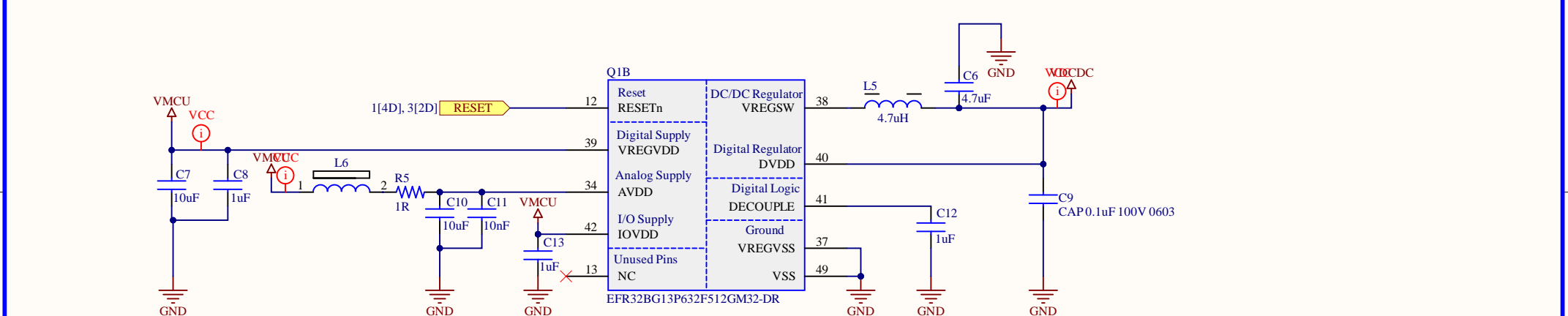


Antenna & Radio Interface



Low Freq Crystal

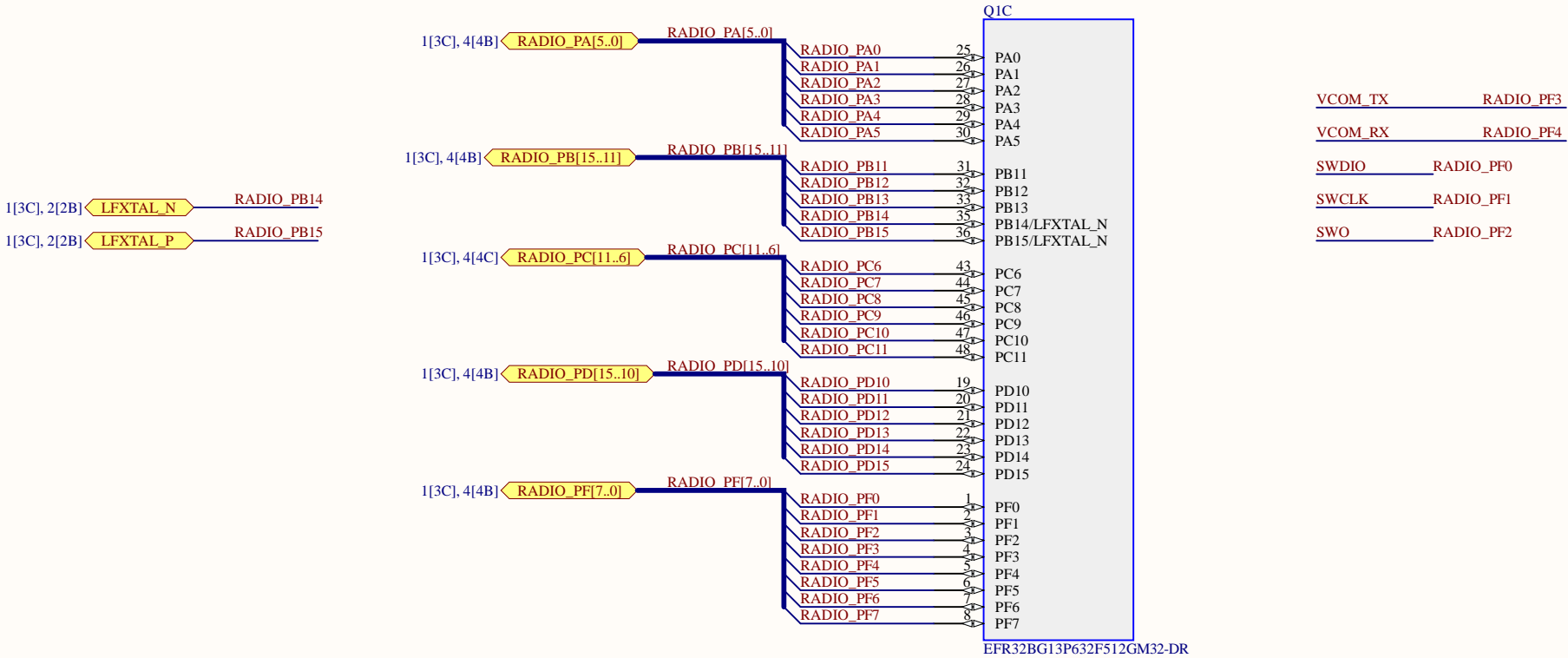
High Freq Crystal



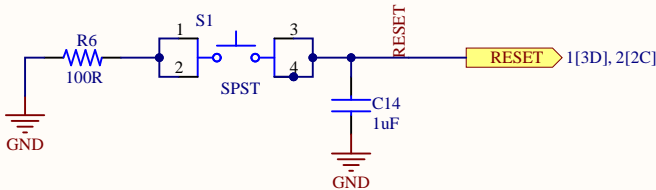
Power & Decoupling

Title		
RF and Crystal		
Size	Number	Revision
A4	2	v1.0
Date:	10/24/2024	Sheet of Low Self Esteem
File:	C:\Users\RF Antenna Power.SchDoc	Drawn By: Parth Thakkar

EFRBG13 GPIOs



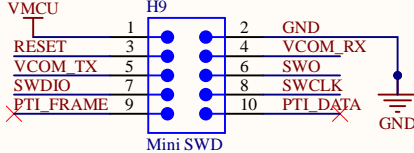
Reset input, active low. This pin is internally pulled up to AVDD. To apply an external reset source to this pin, it is required to only drive this pin low during reset, and let the internal pull-up ensure that reset is released.



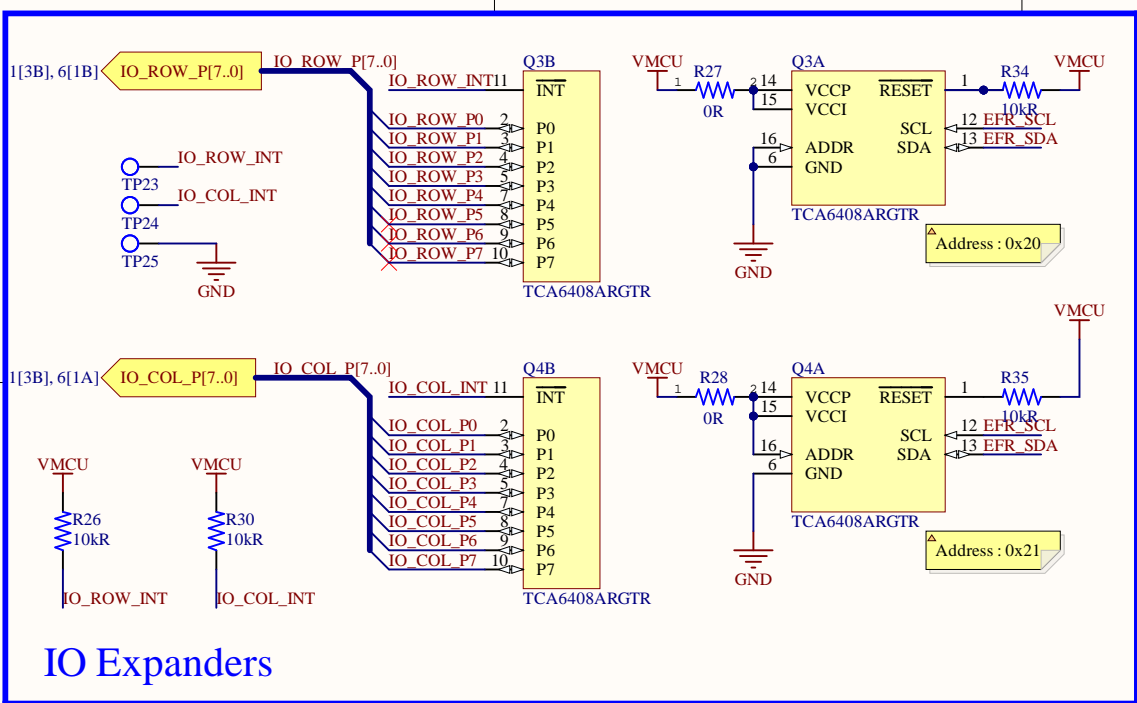
Reset

Mini Simplicity Connector

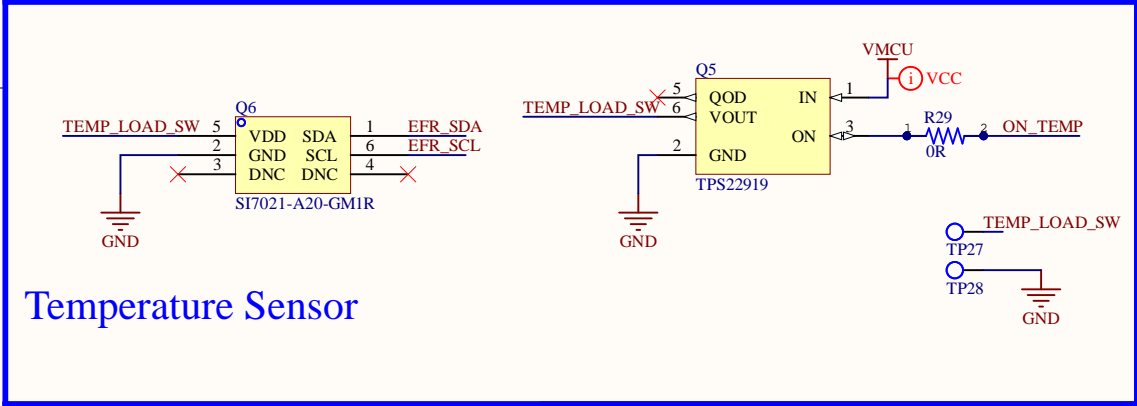
- Serial Wire Debug (SWD) with SWO
- Packet Trace Interface (PTI)
- Virtual COM port (VCOM)
- AEM monitored voltage rail



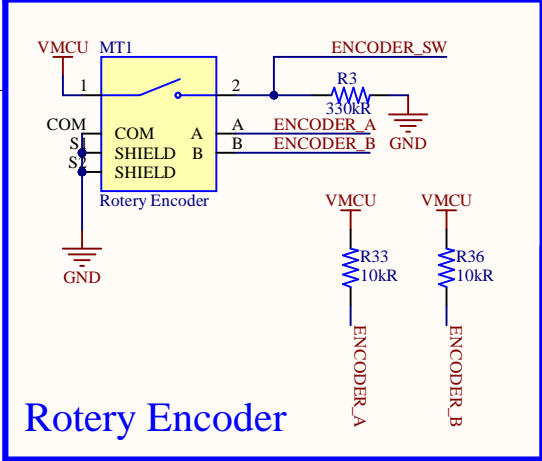
IO Connections		
Title	3	Revision
Size	Number	Letter
Date:	10/24/2024	Sheet of
File:	C:\Users\...\EFR32_IO.SchDoc	Drawn By:



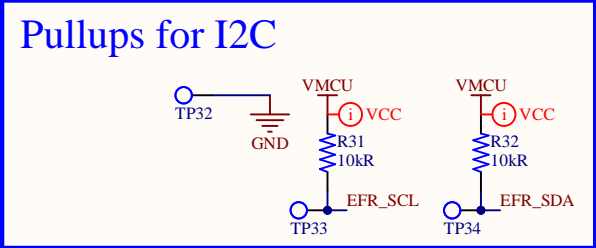
IO Expanders



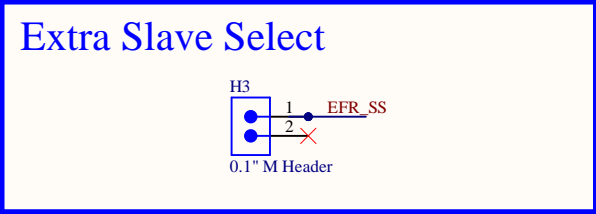
Temperature Sensor



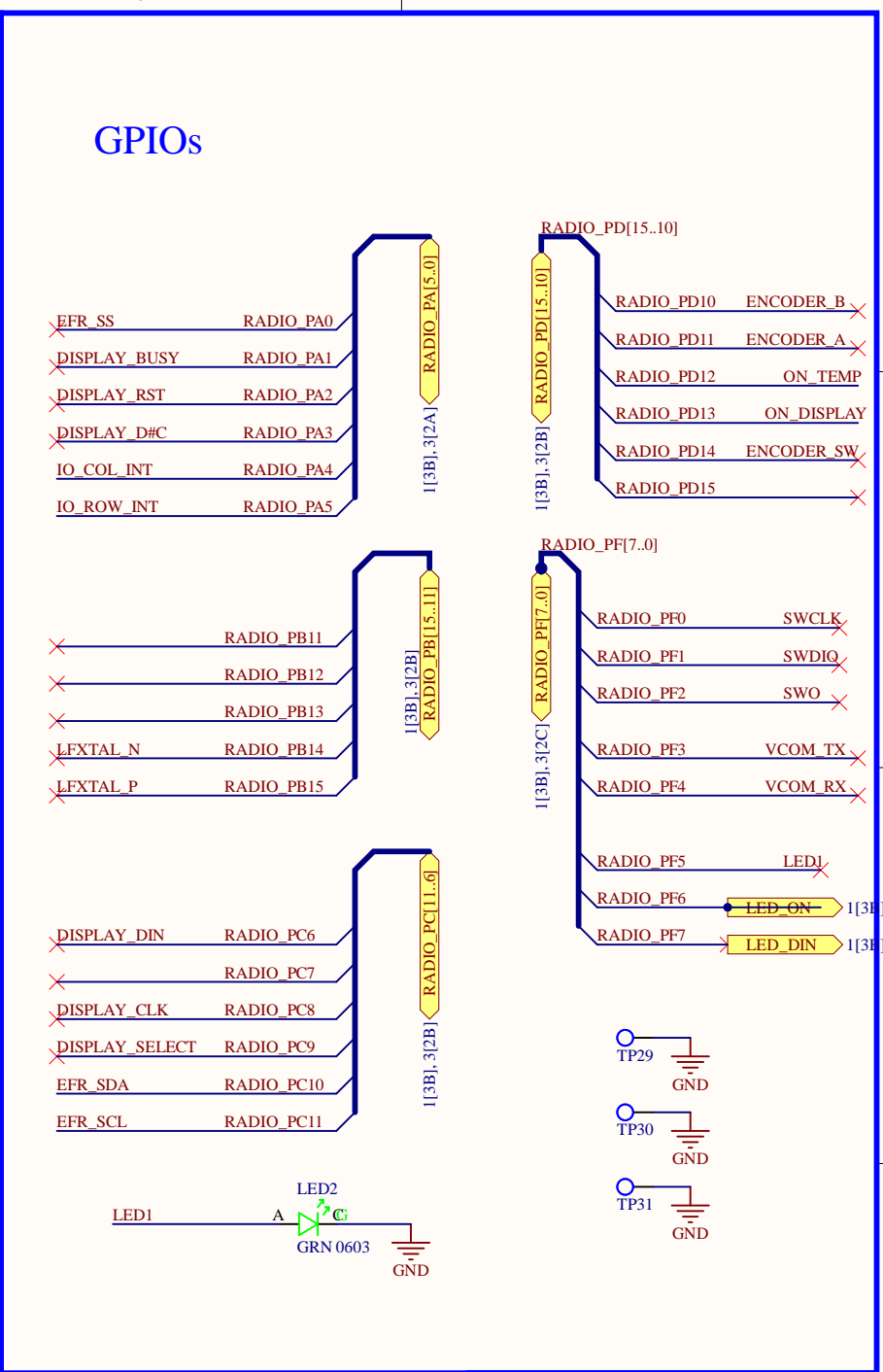
Rotary Encoder



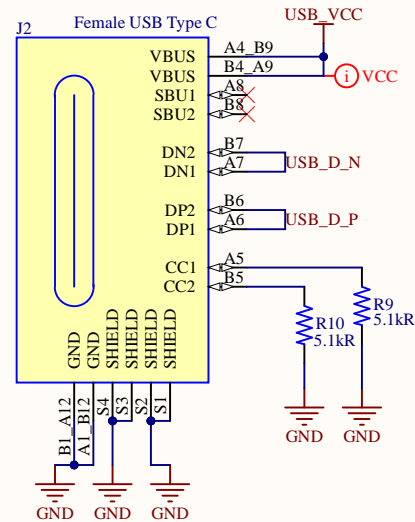
Pullups for I2C



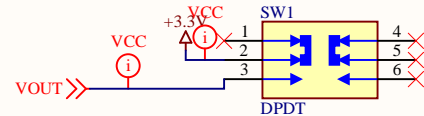
Extra Slave Select



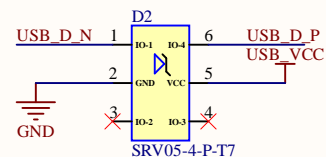
Title *		
Size Letter	Number 4	Revision *
Date:	10/24/2024	Sheet of *
File:	C:\Users\...\Peripherals.SchDoc	Drawn By: *



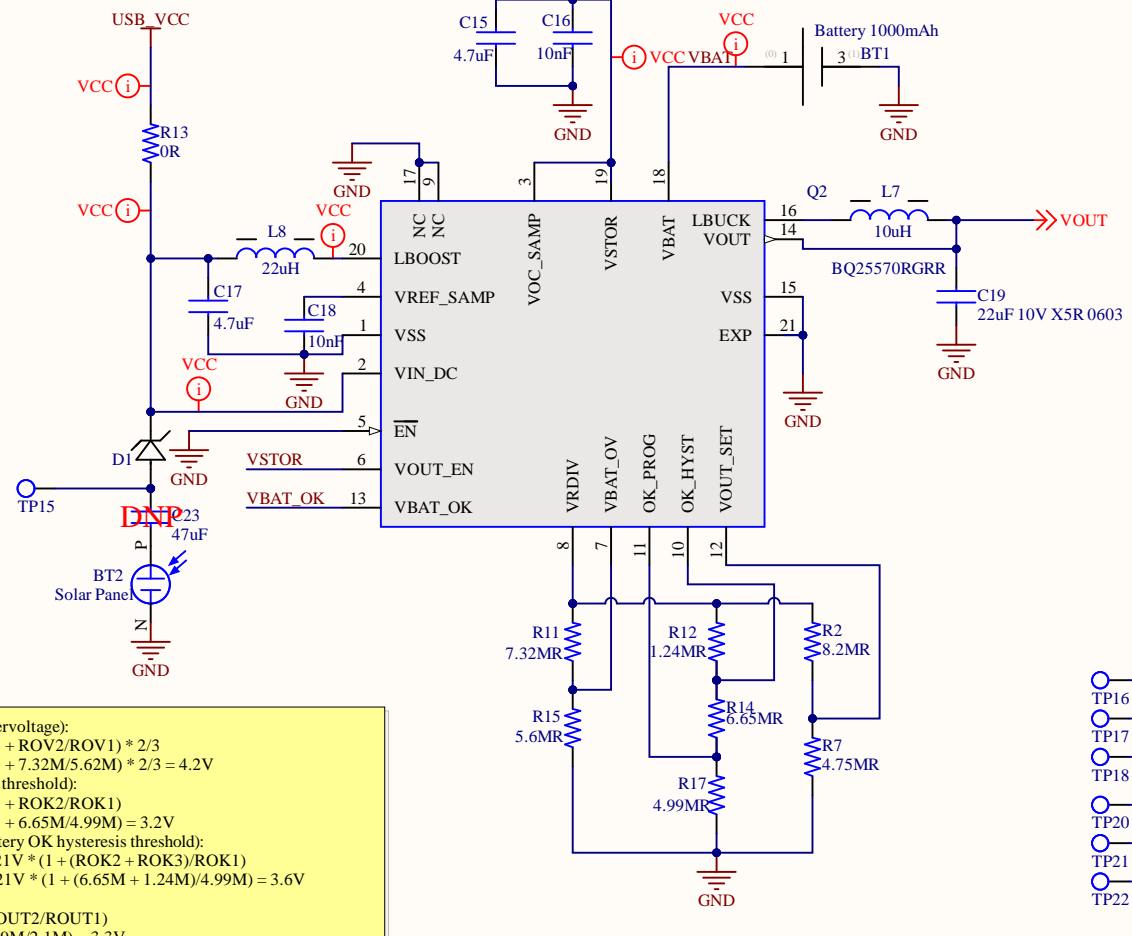
Type C



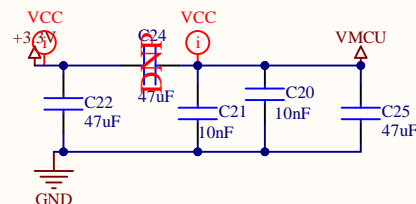
DPDT Switch



TVS Diode



Power Management IC

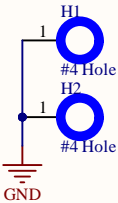
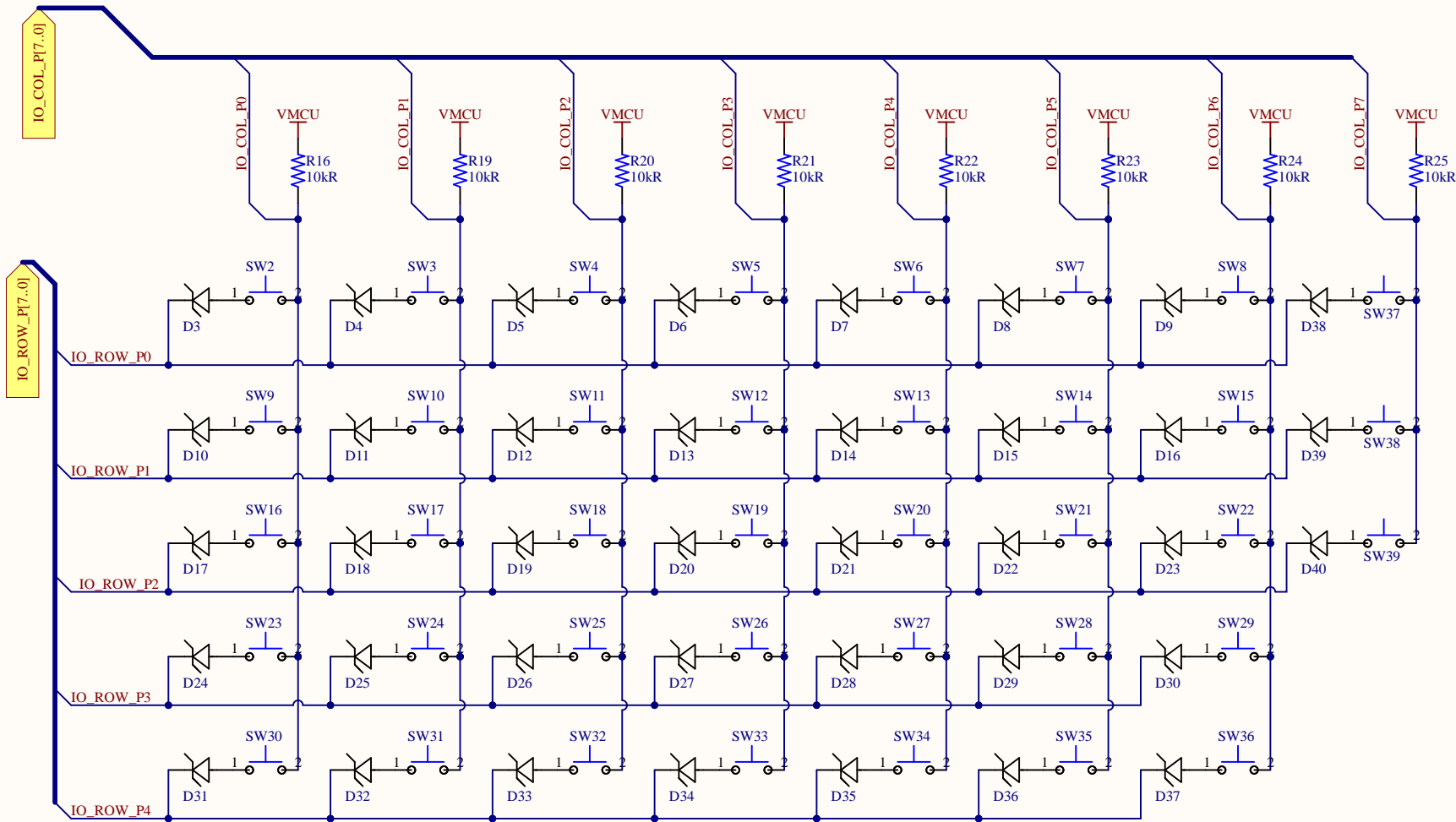


Decoupling and Bulk Cap



Title			
Power Management			
Size	Number	Revision	
A4	5	v1.0	
Date:	10/24/2024	Sheet of	Low Self Esteam
File:	C:\Users\Power.SchDoc	Drawn By:	Parth Thakkar

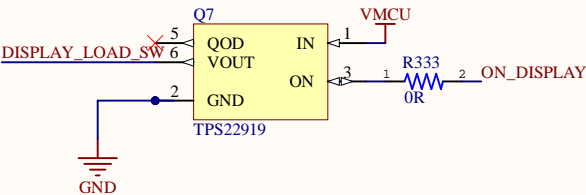
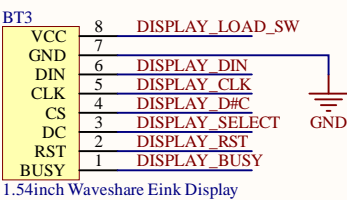
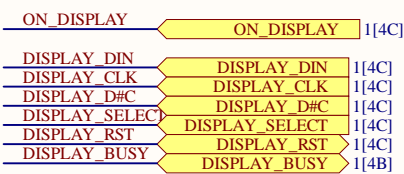
Mechanical Switches



Mechanical Holes

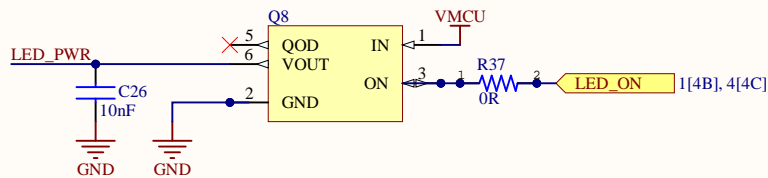
Title		
Mechanical Switches		
Size	Number	Revision
A	6	v1.0
Date:	10/24/2024	Sheet of Low Self Esteem
File:	C:\Users\...\Switches.SchDoc	Drawn By: Parth Thakkar

DISPLAY

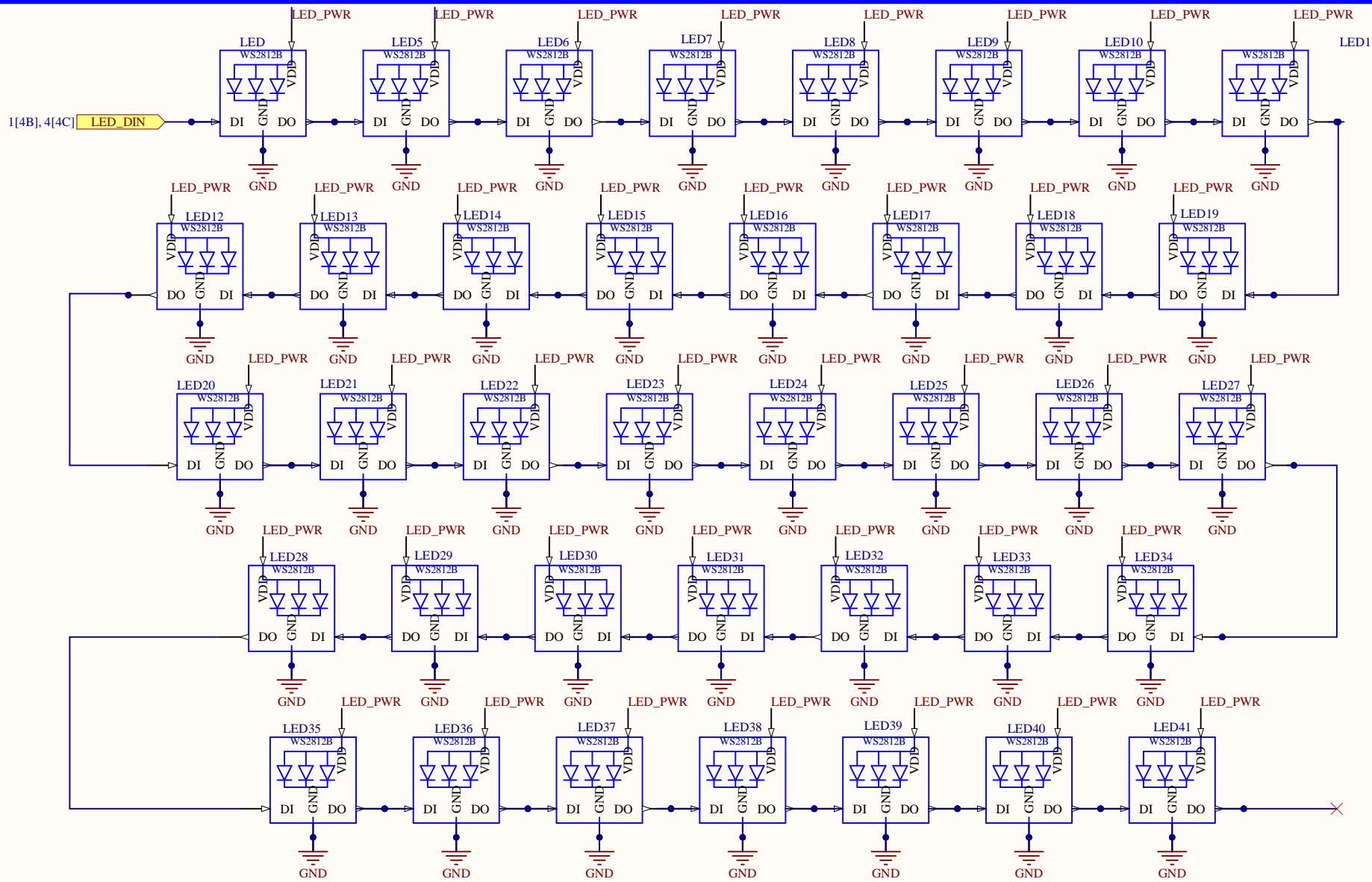


Waveshare's e 1.5inch e-Paper V2					
Parameter	Test condition	Min	Typ	Max	
VDD		2.2		3.7	V
Operating temp		-40		105	degC
Current during update			0.0015	0.008	A
Sleep current				0.000002	A
Refresh time				2	s

Title			Display		
Size	A	Number	7	Revision	v1.0
Date:	10/24/2024		Sheet of	Insane Corp	
File:	C:\Users\...\Display.SchDoc		Drawn By:	Parth Thakkar	



Load Switch



RGB LEDs

Title *		
Size	Number	Revision
Letter	8	*
Date:	10/24/2024	Sheet of *
File:	C:\Users\...\Lights.SchDoc	Drawn By: *

