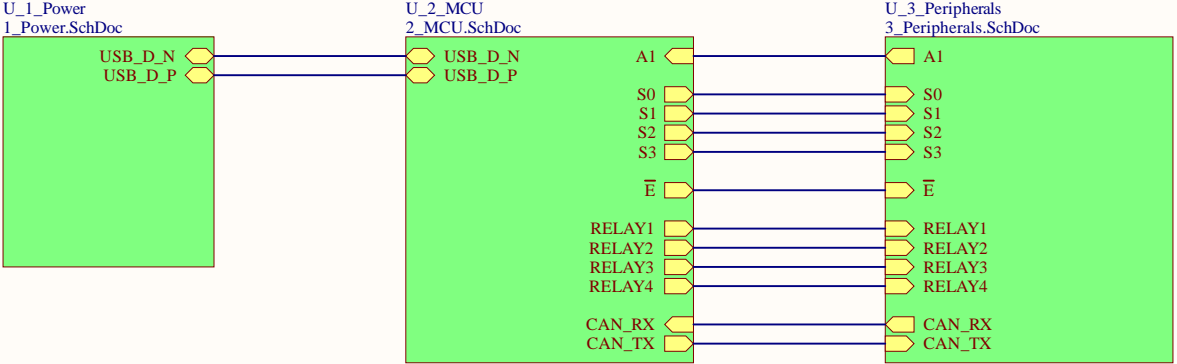


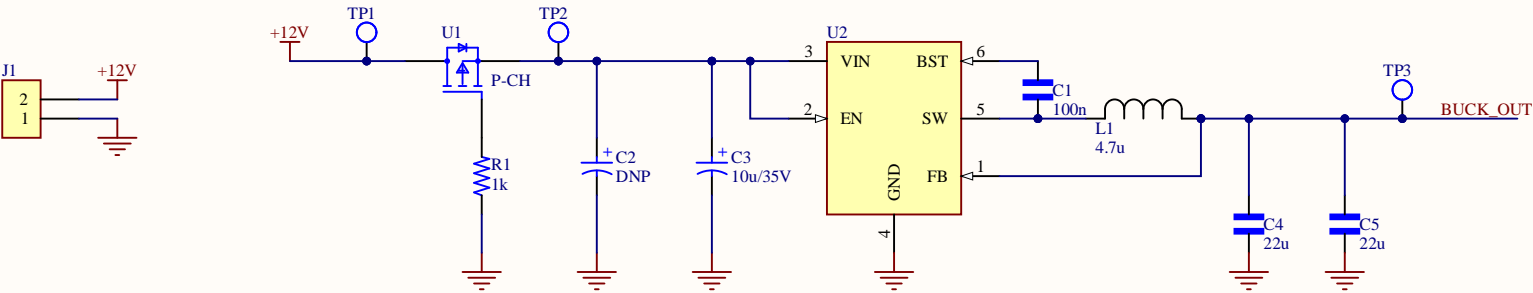
# Battery Temperature Control Unit

## System Overview

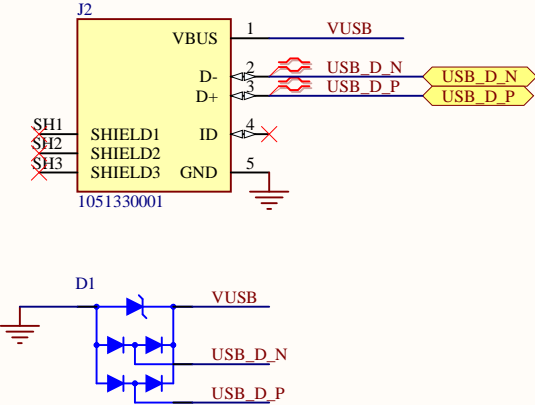


Title			Hyperloop Battery Control Unit - Overview
Size	Number	Revision	
A	0	A	
Date:	3/12/2024	Sheet 1 of 4	
File:	0_Overview.SchDoc	Drawn By: Ephren Manning	

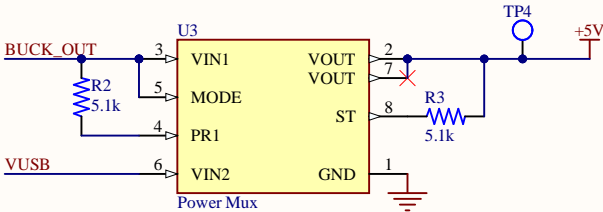
12V to 5V Buck Step-Down



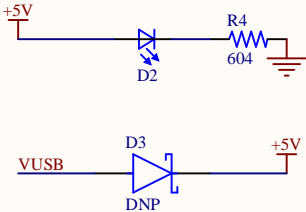
USB Power & Data



Power MUX



5V Status LED + USB RPP



Hyperloop Battery Control Unit - Power

Size	Number	Revision
A	1	A
Date:	3/12/2024	Sheet 2 of 4
File:	1_Power.SchDoc	Drawn By: Ephren Manning

# RA4M1 Cortex-M4

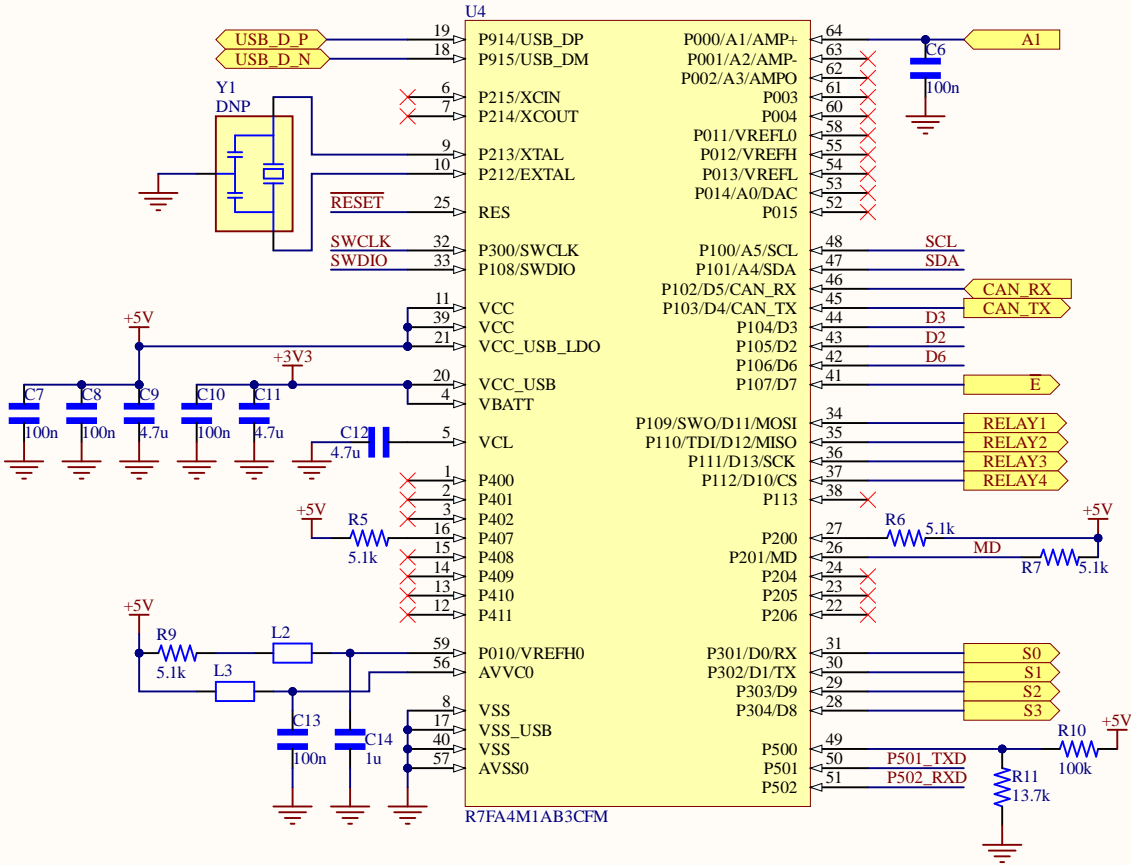
A

B

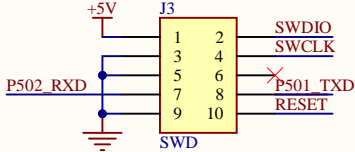
C

## Programmable Button & LED

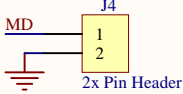
D



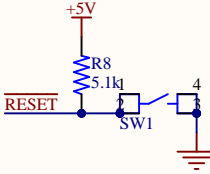
## SWD Header



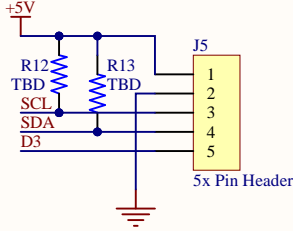
## Boot Header



## Reset Button



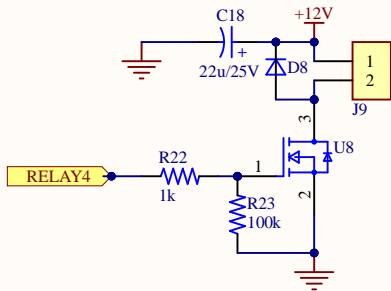
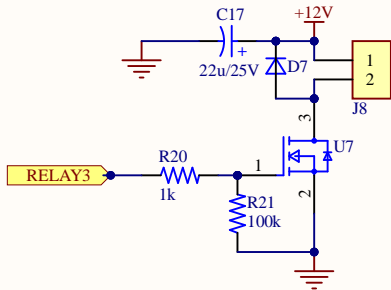
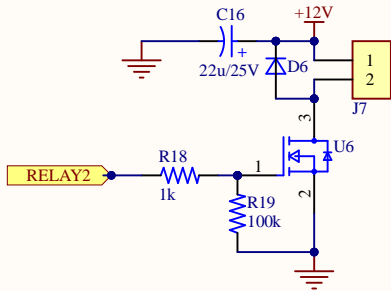
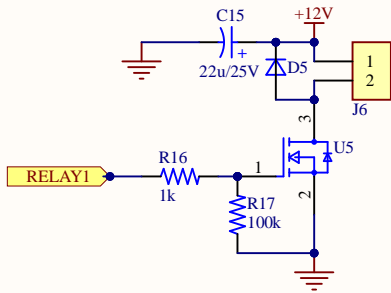
## I2C Header



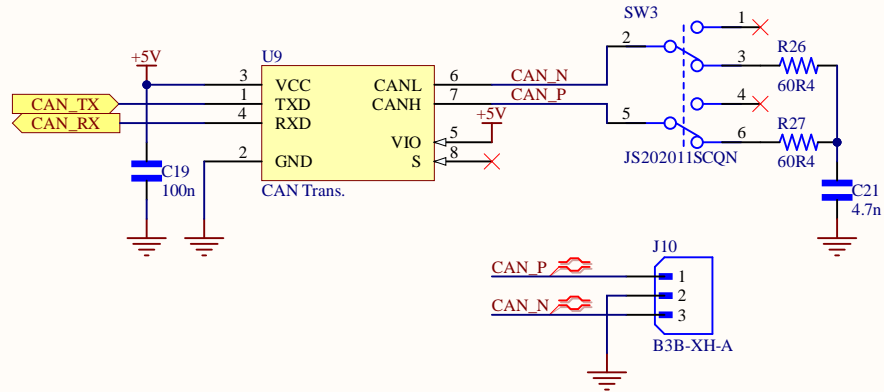
## Hyperloop Battery Control Unit - Power

Size	Number	Revision
A	2	A
Date:	3/12/2024	Sheet 3of 4
File:	2_MCU.SchDoc	Drawn By: Ephren Manning

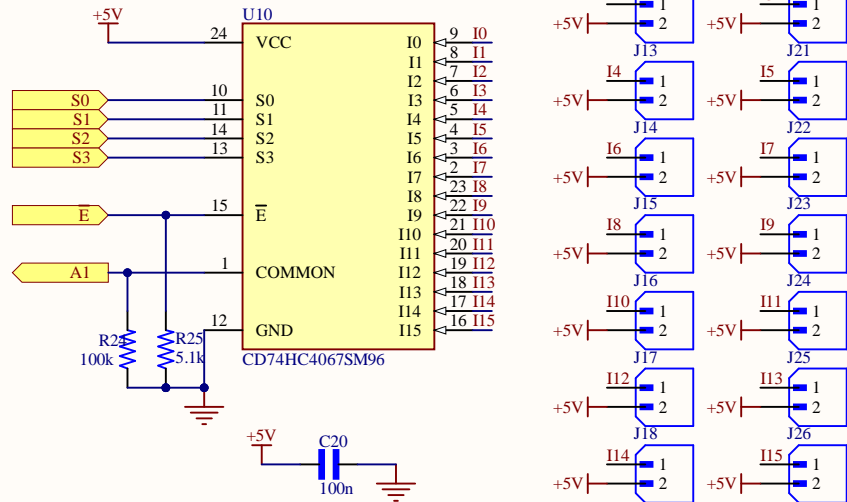
# Relay Drivers



# CAN Transceiver



# Thermistor MUX



Title		
Hyperloop Battery Control Unit - Peripherals		
Size	Number	Revision
A	3	A
Date:	3/12/2024	Sheet 4 of 4
File:	3_Peripherals.SchDoc	Drawn By: Ephren Manning