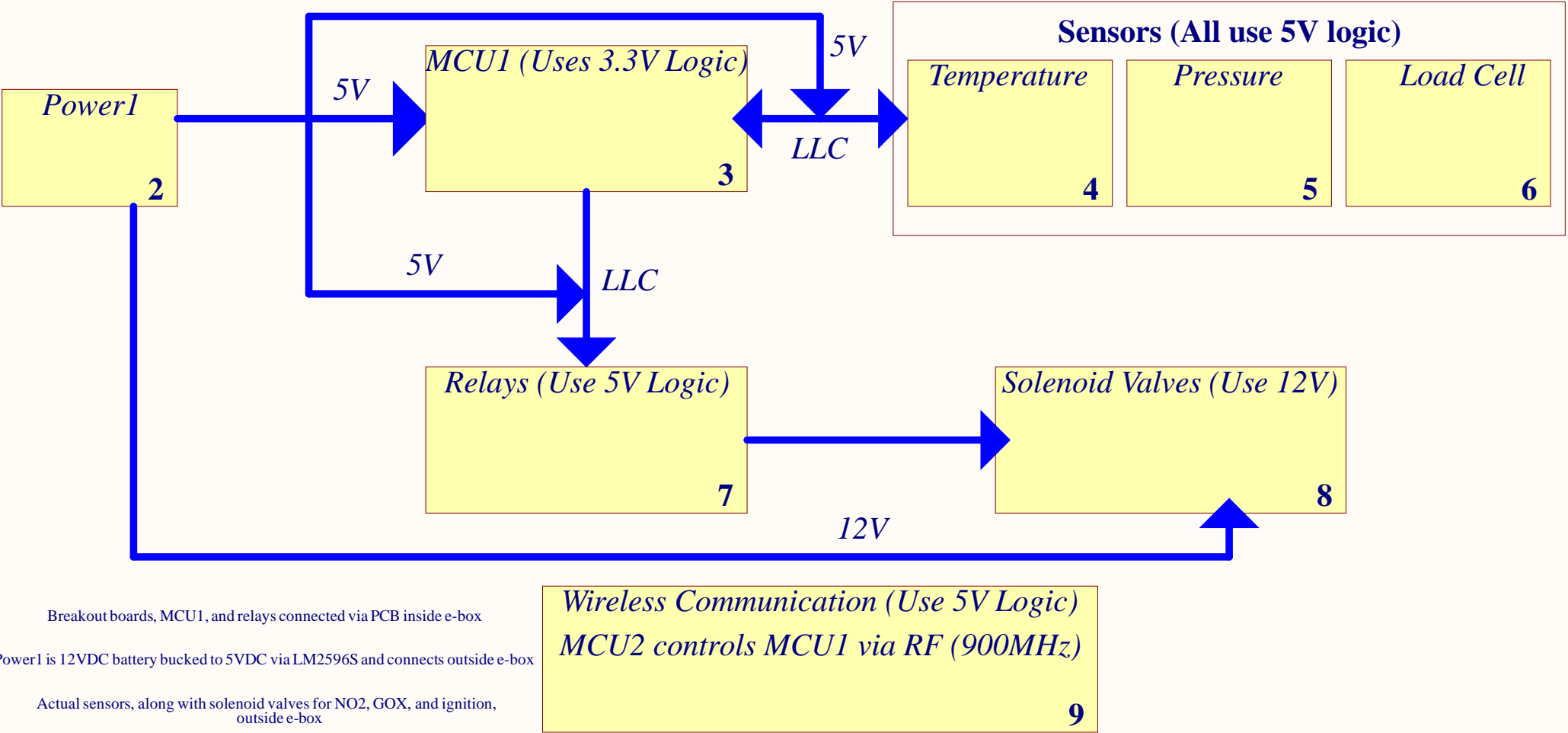


# On-Site

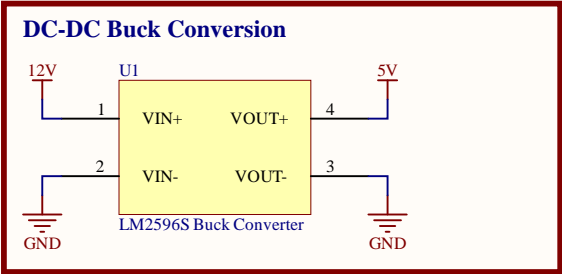
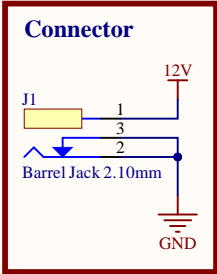
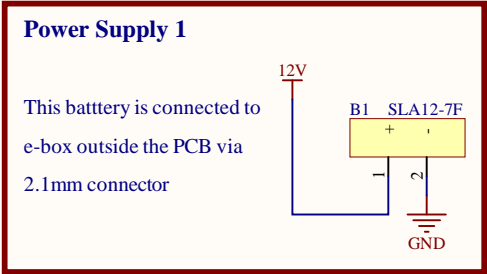


Power2 is 1S LiPo battery connecting directly to MCU2

XBee RF modules allow MCU1/MCU2 to wirelessly communicate

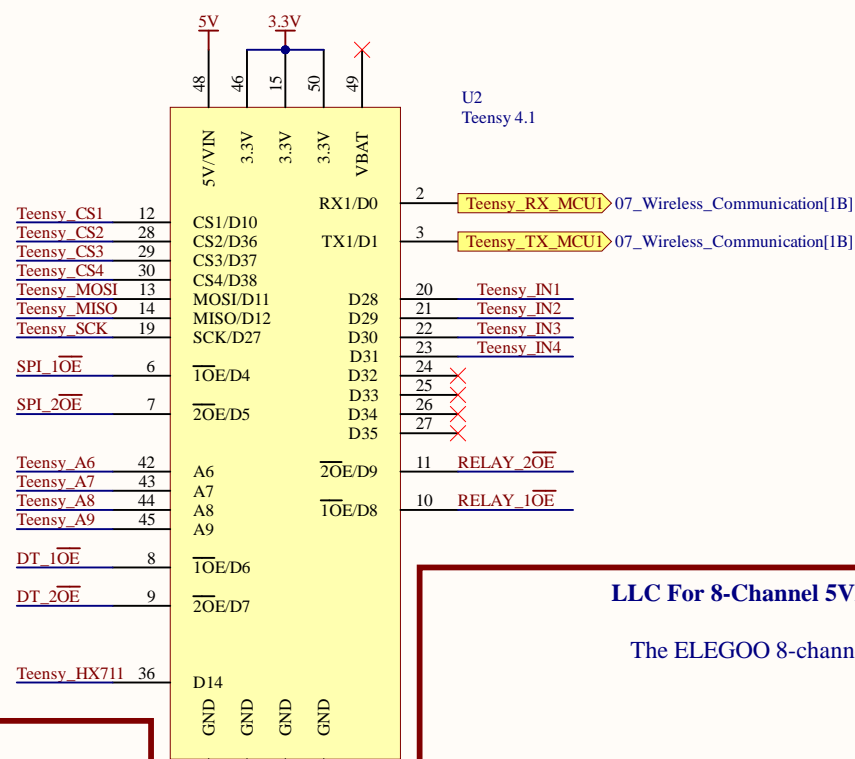
MCU2 can tell MCU1 to start/stop datalogging, or open/close solenoid valves

Title		
01_Overview.SchDoc		
Size	Number	Revision
A4		
Date:	2/17/2023	Sheet of
File:	C:\Users\...\01_Overview.SchDoc	Drawn By: Juan Rafael Munoz, Jr.

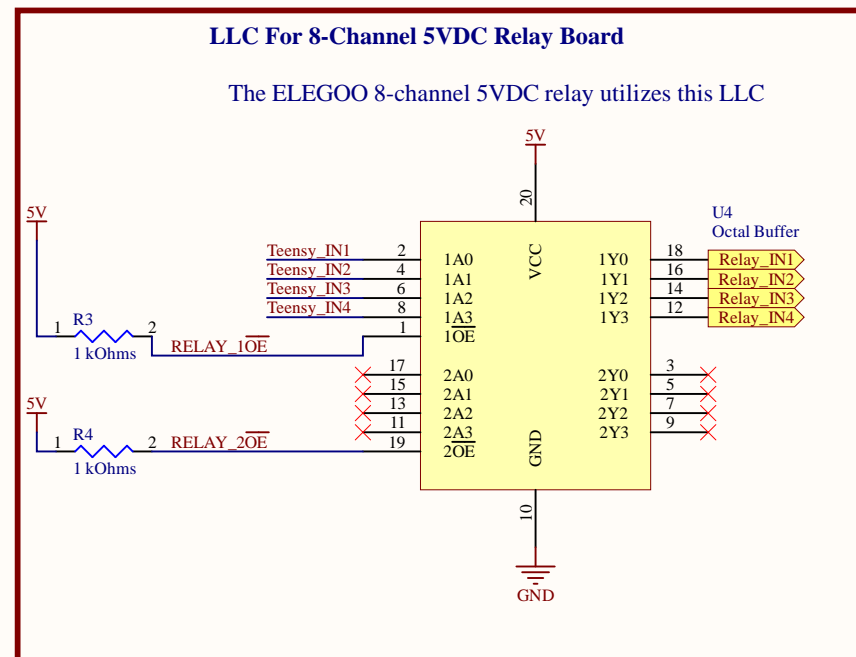


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Size	Number	Revision
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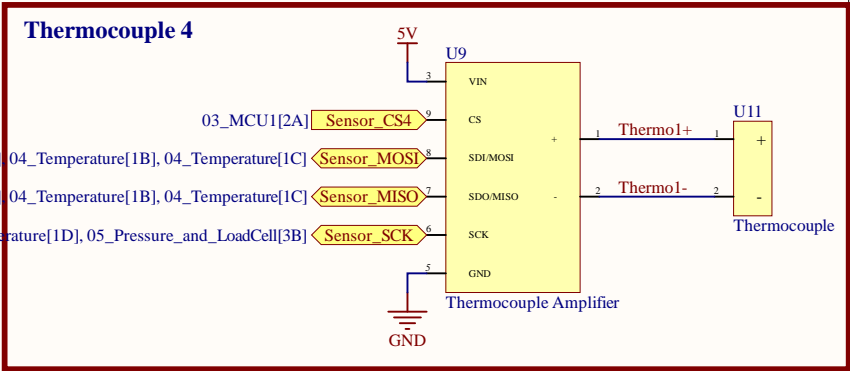
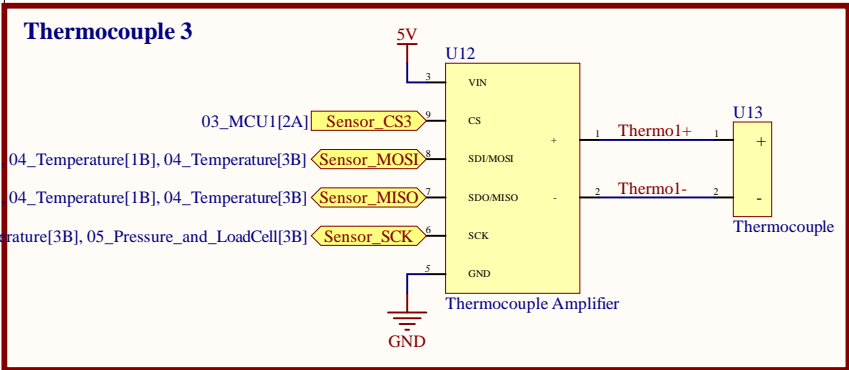
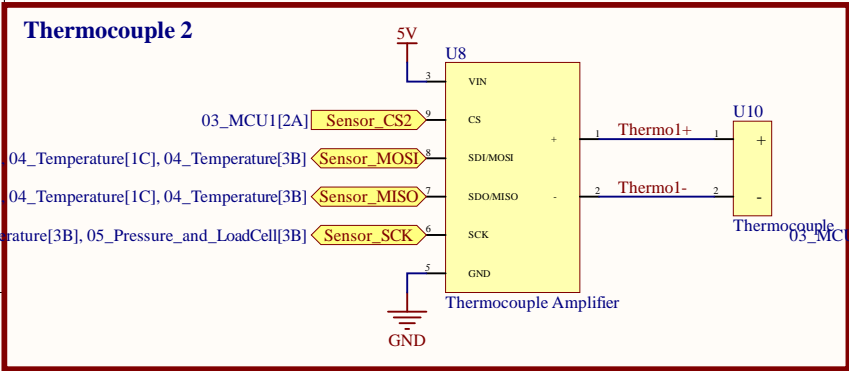
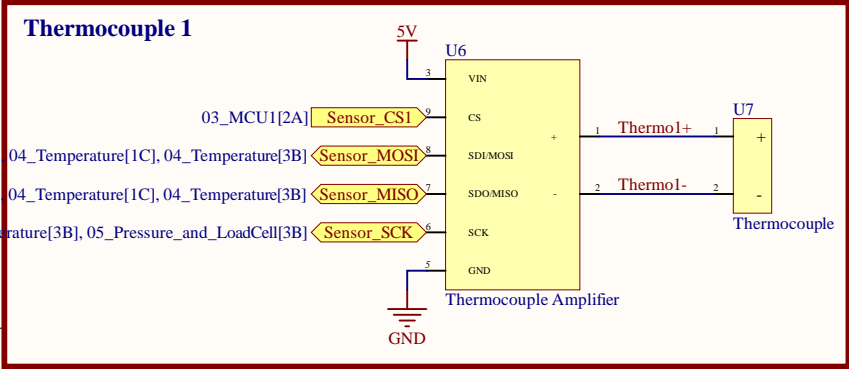
The thermocouple  
and HX711 module for  
load cell utilize this LLC



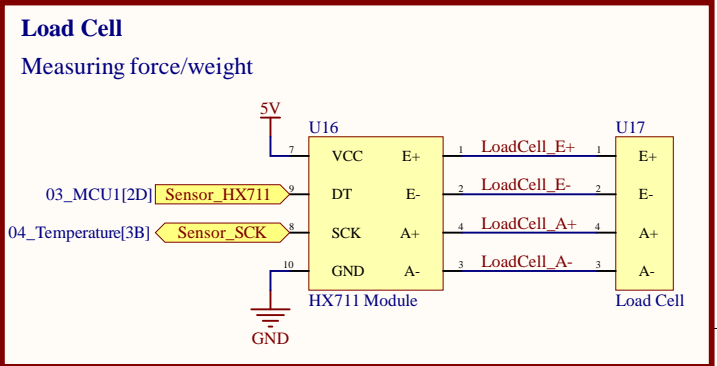
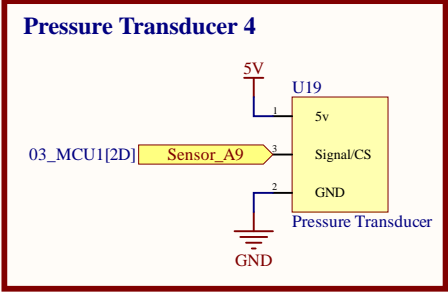
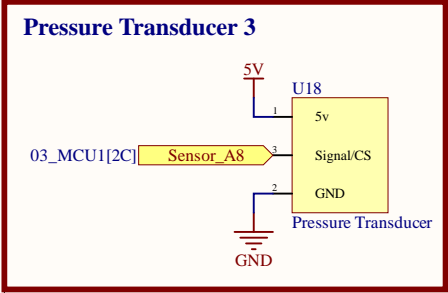
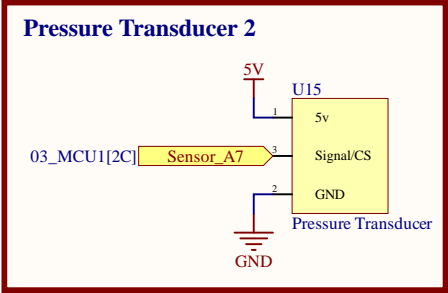
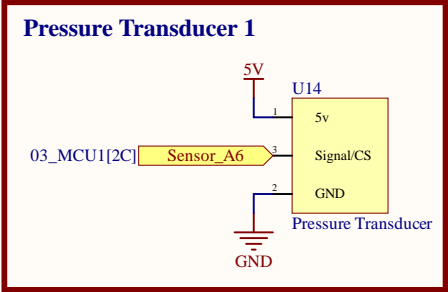
The pressure transducer and HX711 module for load cell utilize this LLC



Title		
03_MCU1.SchDoc		
Size	Number	Revision
A4		
Date:	2/17/2023	Sheet of
File:	C:\Users\...\03_MCU1.SchDoc	Drawn By: Juan Rafael Munoz, Jr.



Title		
04_Temperature.SchDoc		
Size	Number	Revision
A4		
Date:	2/17/2023	Sheet of
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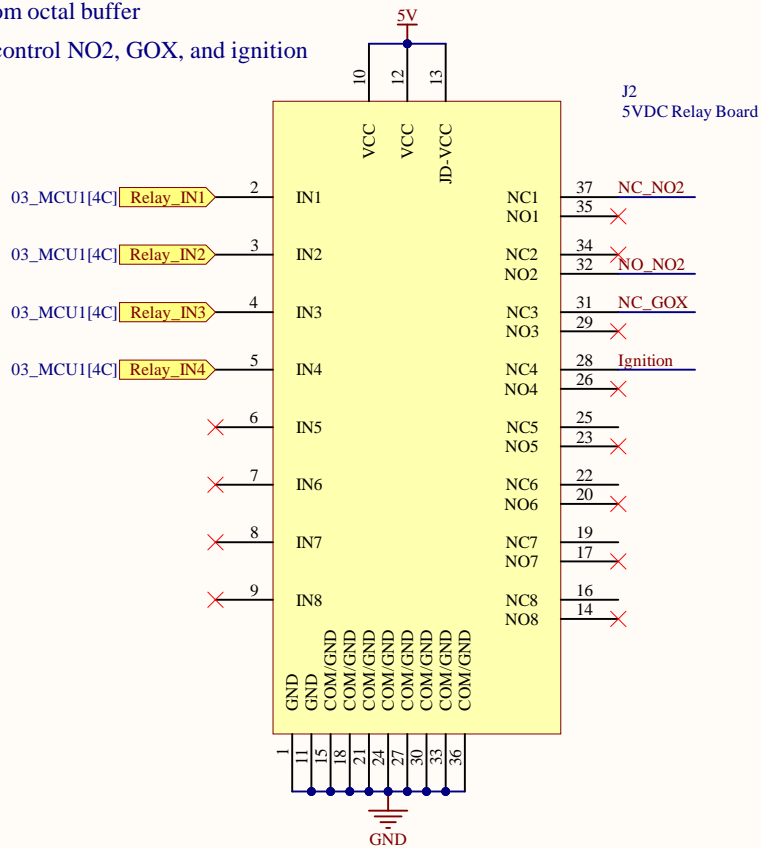


Title		
05_Pressure_and_LoadCell.SchDoc		
Size	Number	Revision
A4		
Date:	2/17/2023	Sheet of
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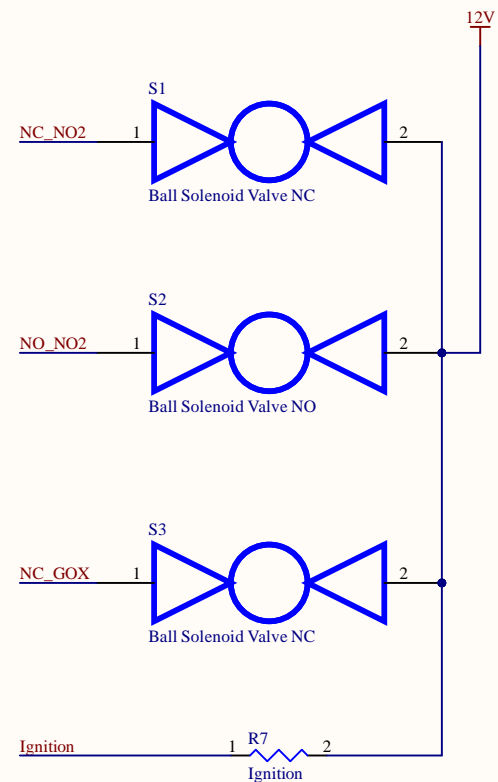
Relay Control

Inputs from octal buffer

Outputs control NO2, GOX, and ignition




Solenoid Valves

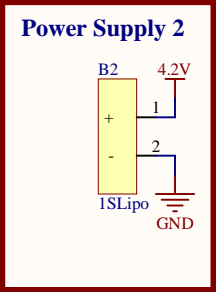


Title		
06_Relays_and_SolenoidValves.SchDoc		
Size	Number	Revision
A4		
Date:	2/17/2023	Sheet of
File:	C:\Users\...06_Relays_and_SolenoidValves.SchDoc	By: Juan Rafael Munoz, Jr.

## Power Supply 2



The diagram shows a yellow battery symbol labeled B2 and ISLipo. The positive terminal (+) is connected to a 4.2V source, and the negative terminal (-) is connected to a ground symbol labeled GND.



### On-Site Receiver

3.3V

U22

VCC

Tx

Rx

GND

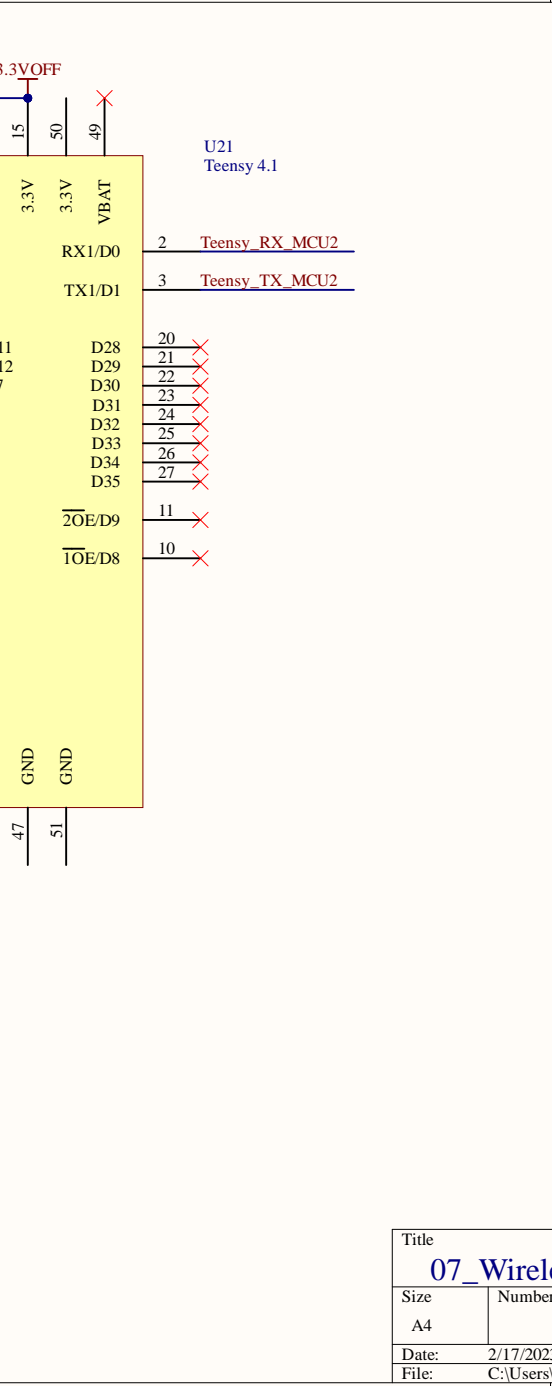
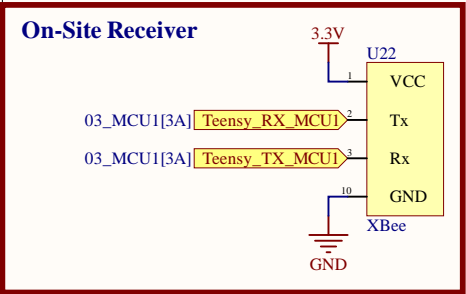
XBee

03\_MCU1[3A] Teensy\_RX\_MCU1 2

03\_MCU1[3A] Teensy\_TX\_MCU1 3

10

GND



## Off-Site Transmitter

3.3V OFF

U20

VCC

1

2

Teensy\_RX\_MCU2

3

Teensy\_TX\_MCU2

10

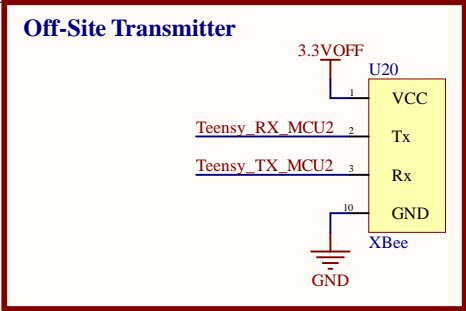
GND

XBee

Tx

Rx

GND



Title		
07_Wireless_Communication.SchDoc		
Size	Number	Revision
A4		
Date:	2/17/2023	Sheet of
File:	C:\Users\...07_Wireless_Communication.SchDoc	By: Juan Rafael Munoz, Jr.