Senior Design Progress Report

|  |  |  |  |
| --- | --- | --- | --- |
| **Student**: | Brian Dye | **Team**: | 20 ENIGMA |
| **Semester**: | Spring 2022 | **Position**: | Team Leader |
| **Week**: | **14** | **Hours**: | 30 |

# Network Progress

I’ve been attempting to get each protocol to work together using the FreeRTOS. I ran into the issue when I attempt to send a packet that was generated by a host device. Right now, I can create a packet using the STM32 and send it to another STM32 via the RFM69. However, there is an issue with the bytes that are received by the host device that introduces a bug in the sending process of the RFM69. This weekend I plan on finding the issue and correcting it.

# Printed Circuit Board (PCB)

We have one board fully soldered. One that is fully solder except for the GPS module. We started soldering a third PCB and Hanyu ran into the issue of not being able to program the microcontroller. Early next week we will debug this issue and troubleshoot the issue. Here is our finished PCB:

A picture containing text, electronics, circuit

Description automatically generated

# Case

Received the case. The PCB doesn’t fit with the current location of the buttons. I spoke with Henry about issues, and we made the appropriate changes and submitted a new design for printing. We increased the height of the case by a ¼ of an inch.

A picture containing text

Description automatically generatedA picture containing indoor, wall

Description automatically generatedA hand holding a blue pen

Description automatically generated with medium confidenceA picture containing indoor

Description automatically generatedA picture containing person

Description automatically generated