## **Brandon Martinez**

After building the PCB adapter from Raspberry Pi to ESP32s2, we tested it by connecting it to the portal box base with the card reader. However, when we connected the ESP32 to the adapter, the ESP couldn't read the card when scanned. We double-checked our pin connections which were fine. So, we decided to use an oscilloscope and monitor the voltages through the adapter. In conclusion, we are troubleshooting the problem, and should be solved before we move on.