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For this week’s progress report, I will discuss my progress on building the PCB adapter for the Raspberry Pi to the ESP32S2. I took the following steps with my group: Alex Rogers and Mark Mitchell.

1. Look at the functions for each GPIO pin that both RPI and ESP can do. Match those functions accordingly with each other by connecting them in the PCB.
2. Build the header for the ESP-CAM. Look at the datasheet for the camera and add pins for circuit components to the PCB. Order female pins from a vendor.
3. Connect the header pins with their corresponding GPIO pin in the PCB. Professor Marchiori helped with each pin correspondence.
4. Prepare PCB design as a .cbf file and mill the PCB.
5. Solder circuit components. We used 2 SMT capacitors and 2 SMT resistors.
6. Wait for female pins to arrive for RPI, ESP-CAM, and ESP32 insertion. Solder the pins to the PCB.
7. Test and see if the PCB can connect both MCU’s. Go back if necessary.
8. Job Finished!

We made an excel sheet to record our connections and our parts needed for the PCB.