

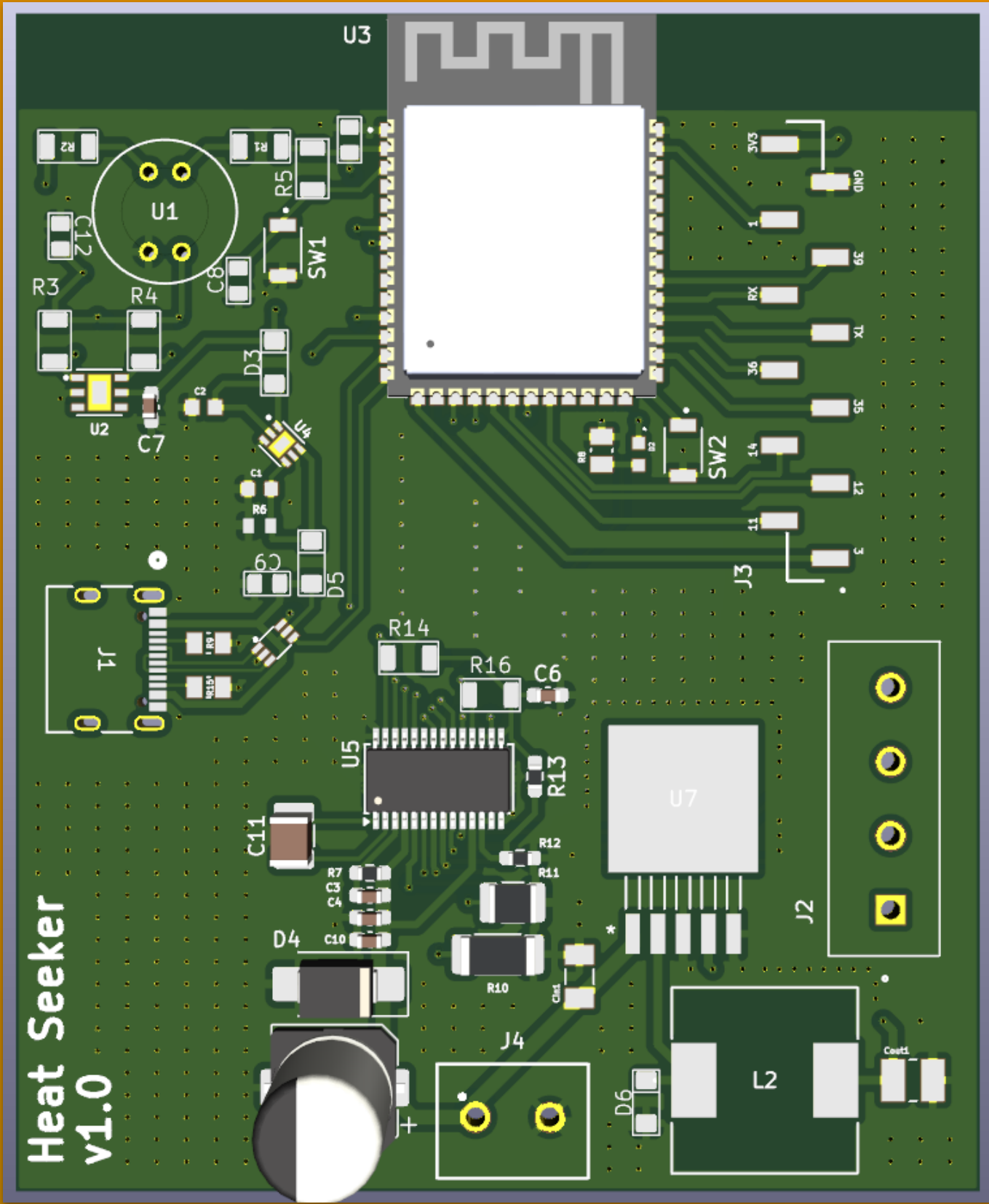
Heat Seekers

EGR314 Spring 2025: Embedded Systems Design Project II

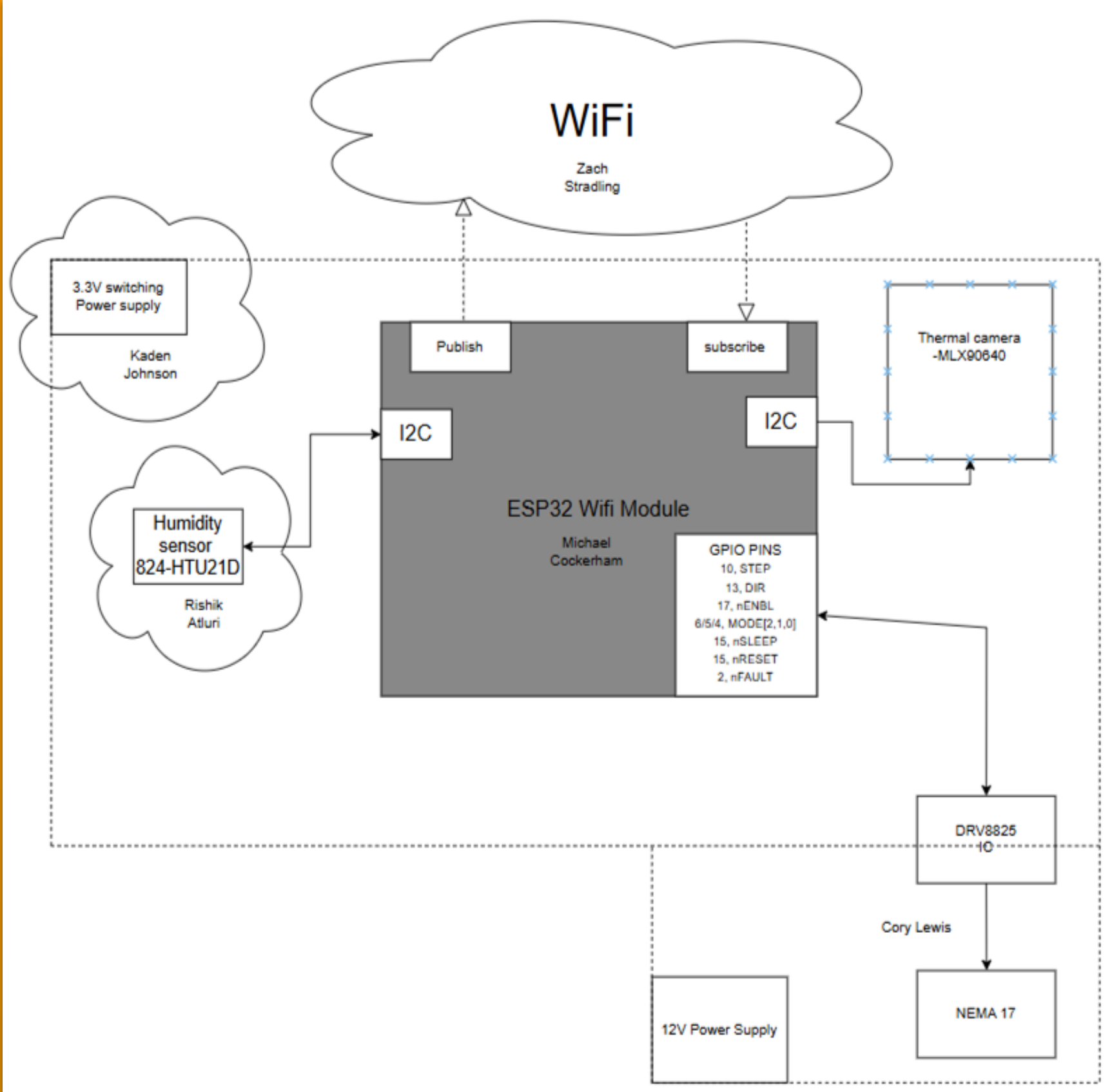
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Our mission is to utilize infrared technology to detect hot spots and alert forest services to prevent wildfires from spreading.

Final PCB

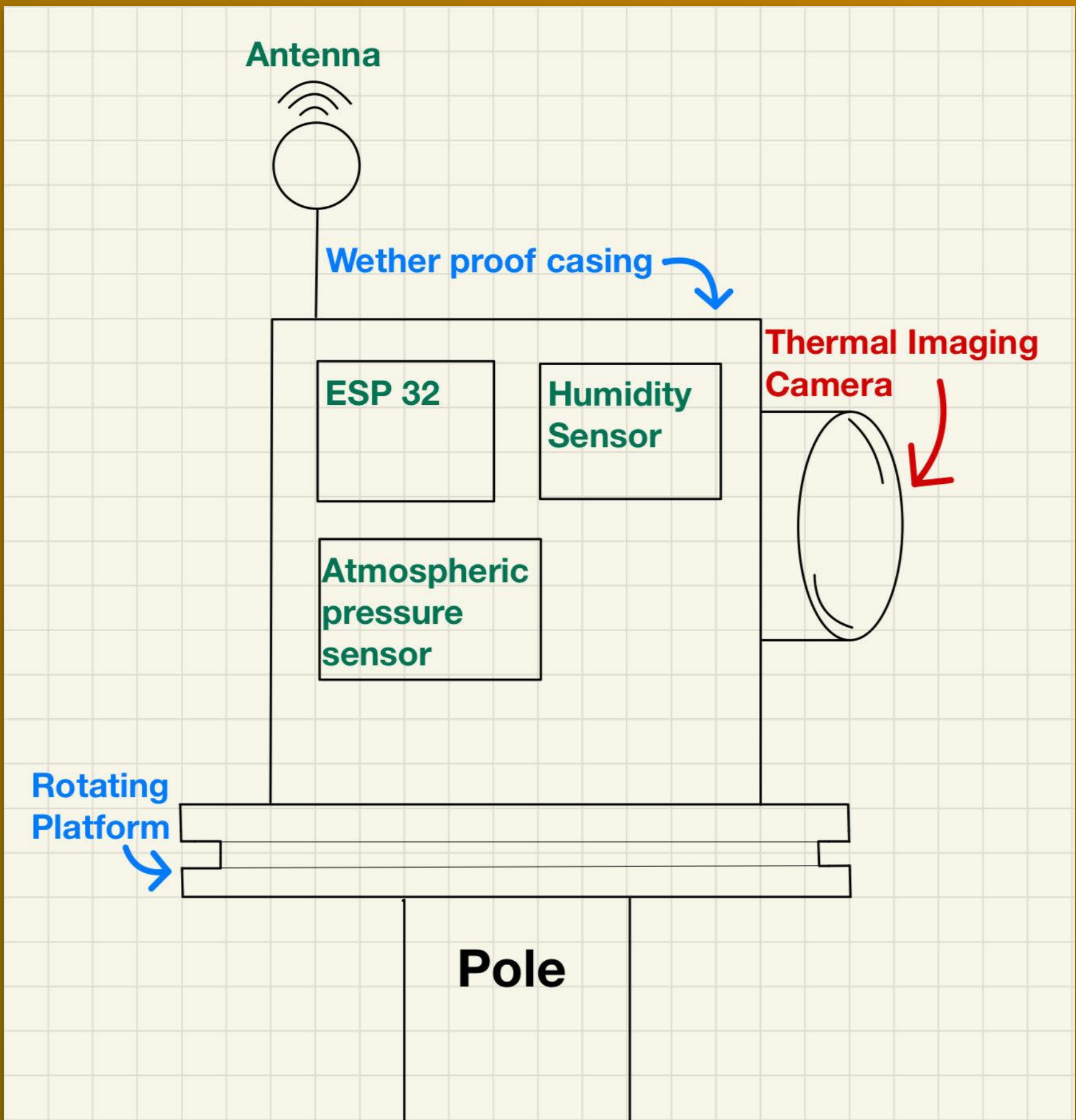


Block Diagram



- Data collected from our sensors via I2C using an ESP32
- Sensors can be positioned using a DRV8825 motor driver and a NEMA 17 stepper motor
- Powered with a 12V external battery

Concept Sketch and Communication Sequence



ESP
MESH

Station with
screen showing
Thermal imaging

