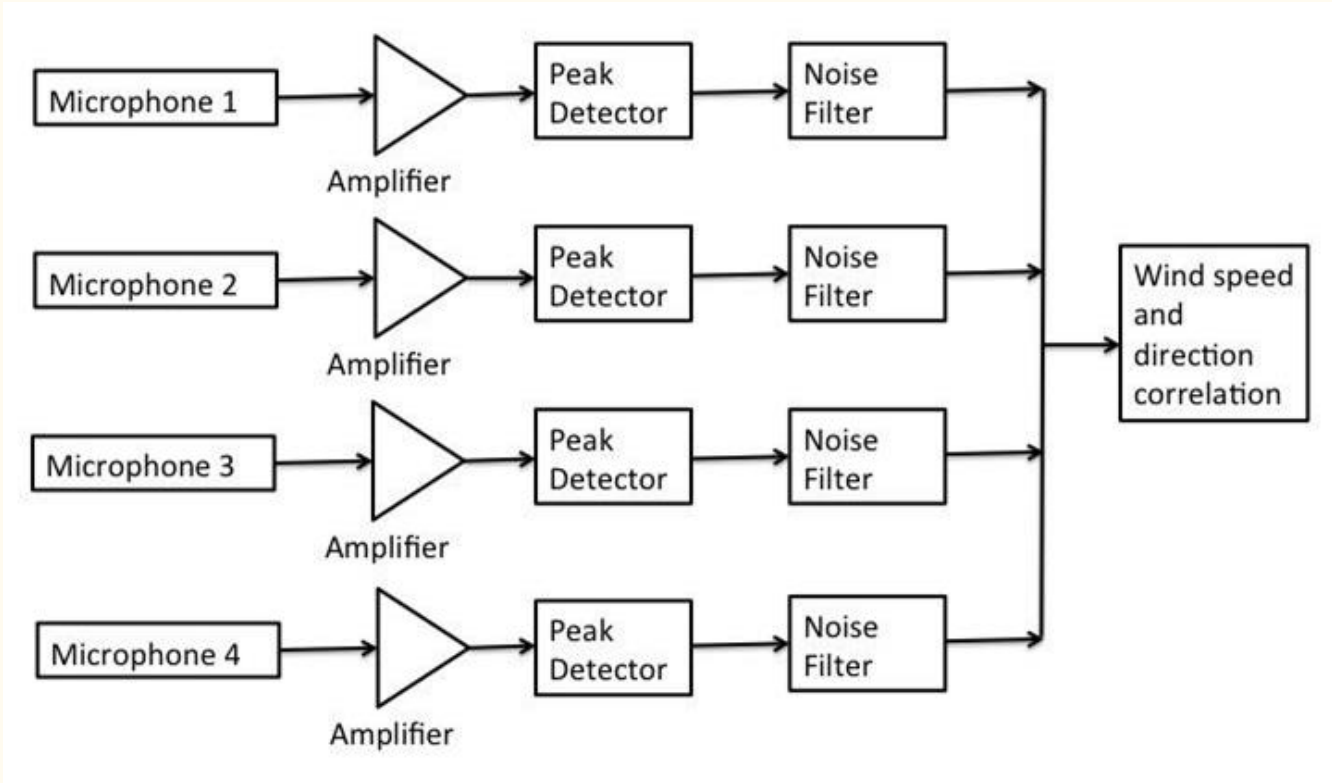# Wind Sensor
Critical Design Review
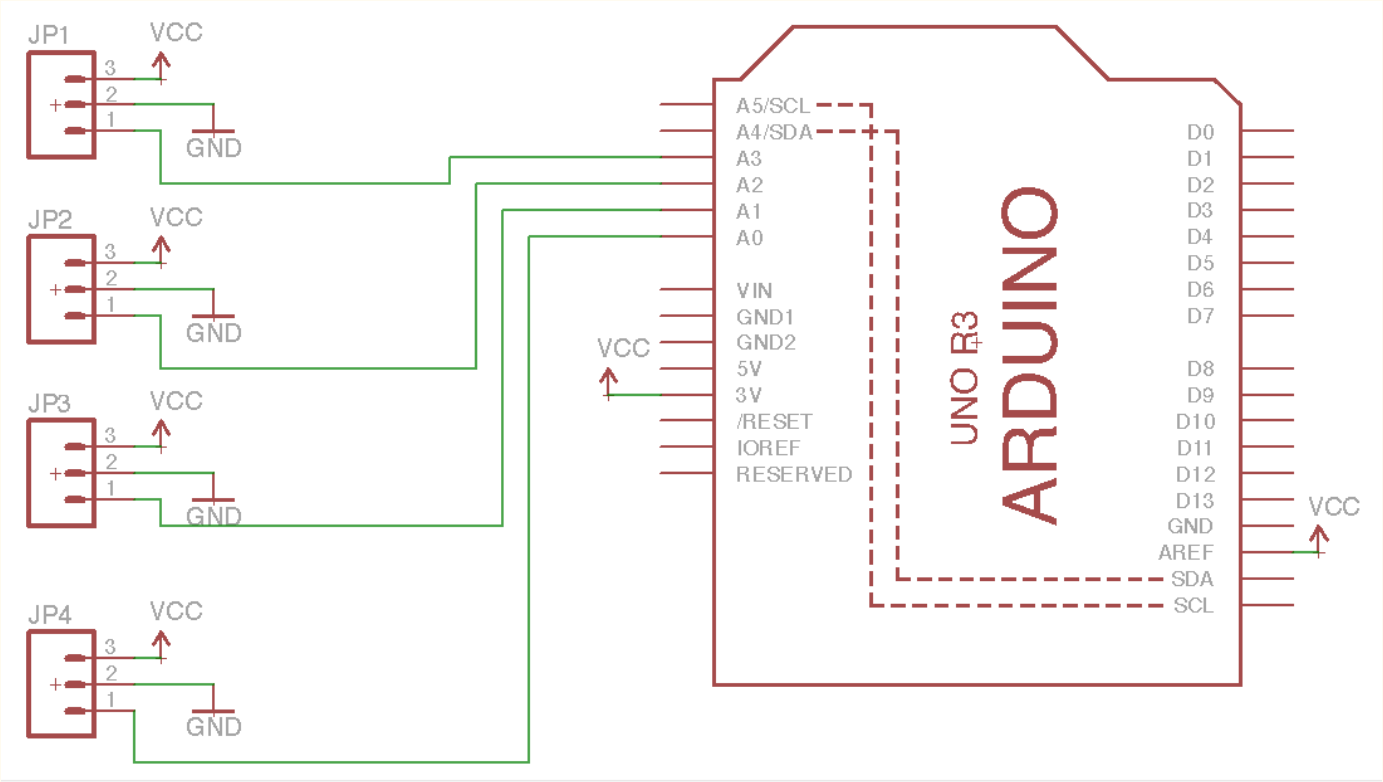
—

Keoni
Scott
Alex
Bin

Overview

- Block Diagram

- Schematic

- Code

- Progress Since PDR

- What We Still Need to Finish

Block Diagram

Schematic

Code

```
/* Here is the routine that is run when the timer interrupt goes off */
//void interrupt_loop(){
    int sensorValue = analogRead(A1);

    // Print out every second
    if(counter >= freq){
        previous_output = output;
        if(output < 13)
            output = output*0.454 + 0.54;
            else
                output = output*0.057 + 7.2167;
        // output = 2.753;
        Serial.println(output);
        counter = 0;
    }
    // Sample continiously
    else{
        output = 0.0001*abs(sensorValue - 512) + 0.9999*(previous_output);
        previous_output = output;
        counter++;
    }
}
```

Progress since PDR

- Finished single and four microphone setup on Teensy

- Gathered test data

- Researched RMS to DC chip and how to test it (Bin)

- Researched new anemometer ~~with...~~
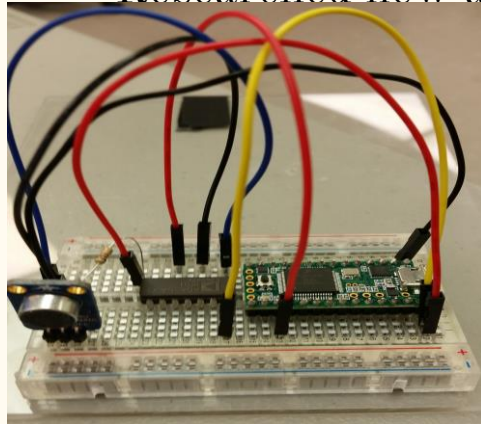
~~Wind Sens~~
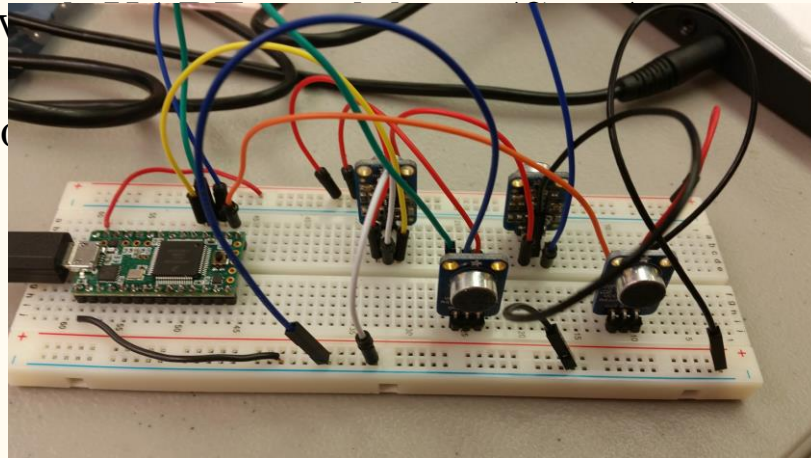
What We Still Need to Finish

- Design and fabricate a PCB for four microphone setup with Cortex M4 chip

- Purchase new anemometer

- Test four microphone setup

- Finish testing RMS chip

- Rewrite Report

- Design Housing

- Order Parts

Questions?