

### **Moisture Probe MCU**

- The Raspberry Pi will trigger the Arduino nano through a GPIO pin
- The nano will extend the arm until the proximity sensor triggers
- The nano will extend the linear actuator
- Resistance measurements will be taken through ADC
  - R1 will be the first active voltage divider resistor
  - If the reading is too small R2 will be turned on instead
  - The process will continue through all 5 resistors
  - If an edge case is found it will be tested on both sides
- Linear actuator will be lowered
- Arm will be lowered
- Recorded data will be averaged and sent to Raspberry Pi through SPI

### **Humidity MCU**

- The Raspberry Pi will trigger the Arduino micro through a GPIO pin
- The Arduino will record sensor data through I2C for a second
- Recorded data will be averaged and sent to Raspberry Pi through SPI

### **Temperature MCU**

- The Raspberry Pi will trigger the Arduino micro through a GPIO pin
- The Arduino will record sensor data through I2C for a second
- Recorded data will be averaged and sent to Raspberry Pi through SPI