

## Meeting 3

1/31

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### ESP8285 Questions

- Contains PCB antenna and internal clock
  - No need for external circuitry
  - Antenna
    - There are UFL connectors that you can add on
    - If we need external antennas, we could use this
    - Internal PCB antenna will not be as good
- Not sure about temperature sensing capabilities of 8266 (8285)
  - Likely just use two external sensors
  - Look into the options
- One SPI bus is connected to memory
- SPI bus can connect to multiple devices. Use chip select line
- I2C can also use multiple devices
  - We would have to figure out a way to change the device address. This will be a pin

### Design Review 1

- Team website is not required
- Not necessary to construct a schematic if it straightforward
- We should figure out all restrictions for pins
- Make sure there is not overlap between pins that we may need
- There are Eagle libraries for the ESP chips. Professor Schafer has these
- SparkFun has libraries for the ESP chips

### Testing

- We may want to check the Wi-Fi connection capabilities of a test ESP8266 board within the climate control unit. This will allow us to check whether we need an external antenna

### Web-app hosting questions

- Hosting code: third party service or ND servers?
  - ESC has set up a web server for senior design class in the past
  - Could also grab a raspberry PI from the senior design closet and connect it to the router in here