

- Agenda:
  - Updates
    - Ordered items
    - Drawings for design
    - Cons
      - Changing microcontroller for the amount of pins on c3
        - ESP32-WROOM-32E
        - Has enough pins, SPI, Bluetooth, WiFi, anything else we need to check for
        - Microcontroller w/ DAC (in stock) - how otherwise approach with speaker connection
      - Needing to change regulators
        - Struggling to find current ratings for some components i.e. display
    - Website Domain - Authentication failing
    - Platform IO - ESP32 Devkit

#### Minutes

- Ordered the stuff and it arrived
- Microcontroller switch
  - Enough pins
  - Spi
  - bluetooth/wifi
  - Does it work for platform IO?
    - Kit boards all do platform IO
    - Dev module of the board type
    - Change size of memory in board description, json file
    - Still use with pcb
  - Regulators
    - Struggling to find the current rating of components
      - Lcd screen, guess that it's low, test current draw of example one, backlight is biggest requirement, probably 10mA
      - One of the sensors
      - Might want separate power supply for motors
      - Snubber, helps with motor inductance
  - Does esp32 have digital to analog pins
    - Uncommon
    - Need for speaker
    - I2s, 3w amplifier, digital protocol for sound
    - False density modulation, digital through low pass filter
    - Analog output uncommon
- Website login problems
  - Authentication failed at login
  - Exhausted authentication methods

- Lowercase fixed it
- ESP now
  - How were the devices set up
  - Joe has one in 3d printer room, receiver in office and it works, typical house would probably be fine
- Esp spi pins
  - 2 available spi, work the same
- Solidworks
  - Computer in the room too slow
  - Ask joe at eih
  - Fusion online
- I2s amp will be put in our bench