

## **Meeting Minutes: Vibrator**

- Vibrator ordered!

## **Bootloader**

- Need development board- part of programming process
- Connect sparkfun to development board and pass bootloader through
- Connect pins to board (SERIAL), probably takes hex file
- What are the other things you have to do to put it in bootload mode?
- Schematic for dev board? Online
- USB connection to computer programming
- USB to serial converter, baud rate
- Reset when GPIO is low (put it in program mode and feed it serial stuff)
- How to program a hex file?
- When programming with typical hex file, beginning memory address and then bytes that go in there, change what youre writing in memory
- Bootloader running a program that grabs bytes coming in from serial and puts in to memory
- Nordic programs those directly
- Dev board (Nordic) chip on it, like sparkfun but programmed from their SDK?
- Look at their stuff and see how we tell this thing how its being programmed
- Use Dev board on our own board
- Have a power sub circuit, got battery, battery charging, DC-DC converter, etc.
- Sandwich boards: Power control (charge battery and produce 3.3 V) board, board with connections to display, vibrator, and NRF
- Nordic Board + Power Board

## **Board Design**

- Trying to fit everything in small space
- Nordic, battery charging circuit, DC-DC conv.
- Won't be very good antenna (too far away from the Nordic)
- Balan on Nordic? Yes
- Should be close to nordic with short traces
- Rather than use PCB antenna (low impedance)
- Use chip antennas! (2 GHz Range)
- Easier to put that closer to the actual device, dont worry about matching impedance
- Ribbon cable things can be top or bottom
- Raspberry pi can, plugs into socket
- Cheaper since you don't need to buy connector
- Connector that has connections on it, can go on top or bottom of the physical connector
- Don't want to pay for one so one can solder

- How to solder? Look it up!
- All displays SPI?
- Could get some where some are connectors and some are solder
- Trope = meaningless cliché (common or overused)

## **Bluetooth**

- Connection made with pairing- possible solution?
- Exchange request, must be some sort of data transfer
- Should get done in next week
- BLE has low power mode to wake up from- data exchange in that process?
- Wake up command carry data...
- Got to be a command that says wake up bluetooth device from raspberry pi