



BITNG LAB UPDATE

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Date 4/19/2021

Progress from last week

- Shriner's project
 - Firmware
 - Literature review
 - Strain sensor
- Low Power ECG
 - Wireless charging

SHRINER'S PROJECT

Literature review

- Editing literature review
 - Overview Figure
 - references

LOW POWER ECG

Low Power ECG

Debugging Problems:

~~1. Random Disconnection~~

- ~~1. Fixed – Logging was stalling processor~~

2. Wireless Charging Coil

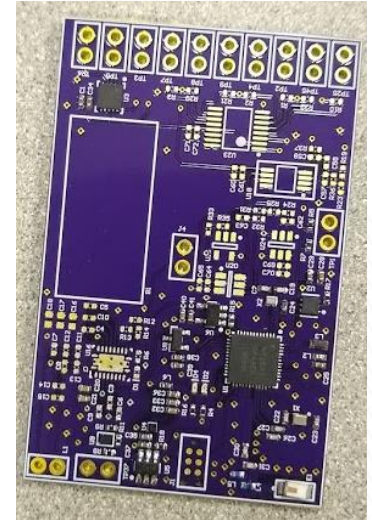
- 1. In Progress – Implemented smaller antenna to operate at higher frequency

~~3. ECG Noise~~

- ~~1. Fixed – Calibration setting was enabled~~

4. BLE Antenna RSSI

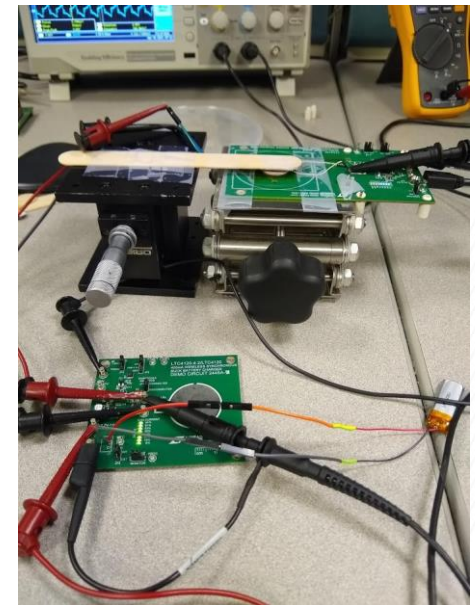
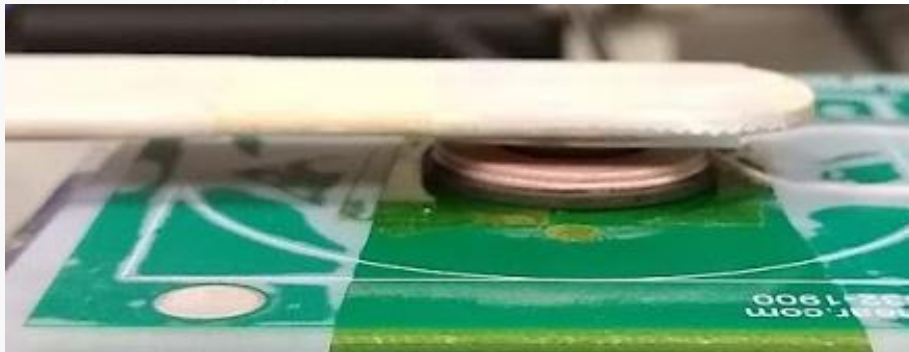
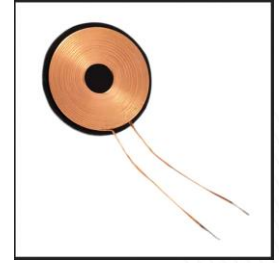
- 1. Lowest priority



Wireless Charging

Higher frequency coil

- Successful charging on development board
- $D = 15\text{ mm}$ receiver coil
- Need to get system working on our board
- Still in progress



PATH FORWARD

Path forward (4/19/21 – 4/26/21)

- Shriner's Project:
 - Strain gauge, round #10
 - Firmware development
 - Literature review update
- LP-ECG:
 - Support for Shinjae/Bu

APPENDIX