



BITNG PROJECT UPDATE

Carl Demolder

Date 11/05/2020

Outline

- Progress to date
- Shriner's project
- Schedule
 - Gantt Chart update
- Path forward

PROGRESS TO DATE

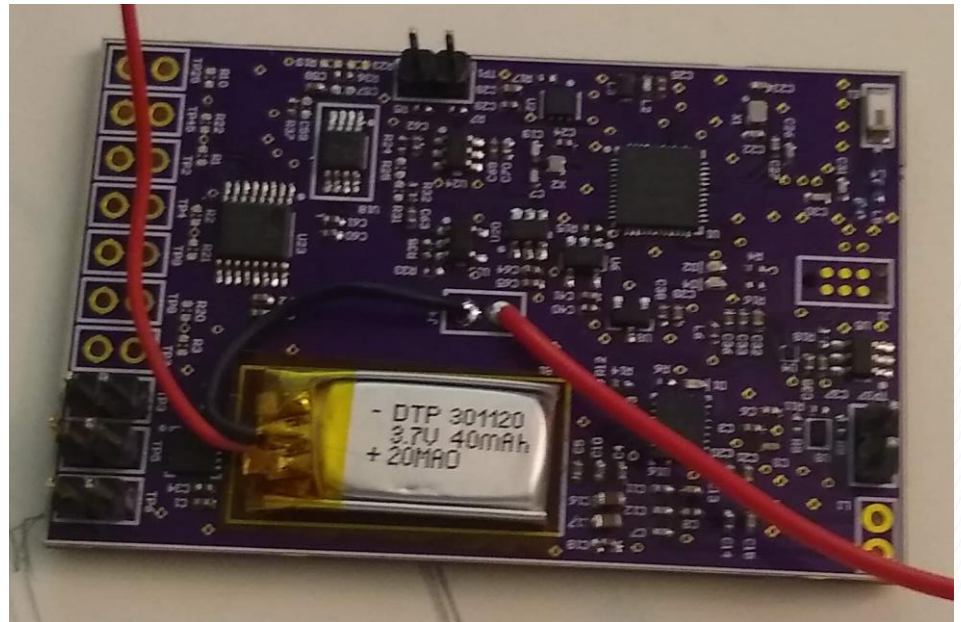
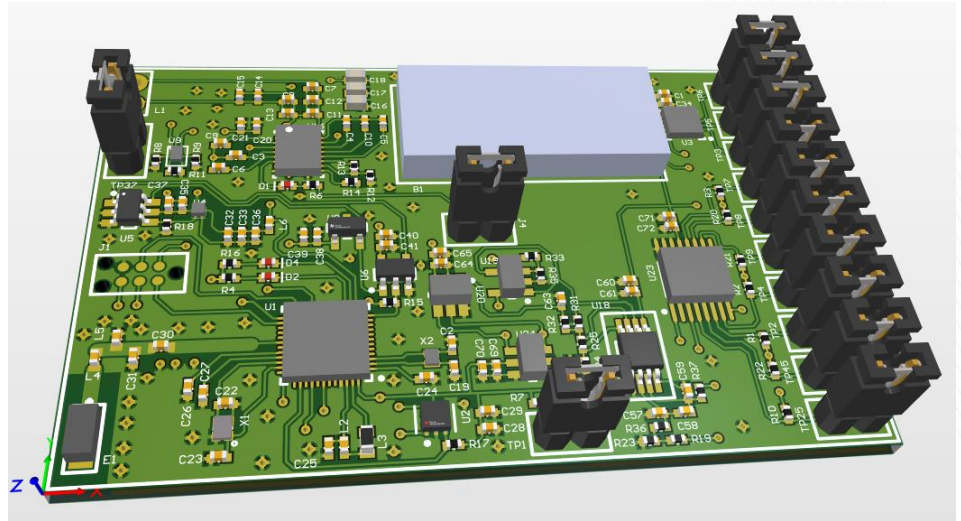
Progress from last week

- Shriner's project
 - IRB proposal [revision]
 - PCB assembly
 - Bi-Weekly meeting
- LP ECG
 - PCB assembly

SHRINER'S PROJECT

PCB design

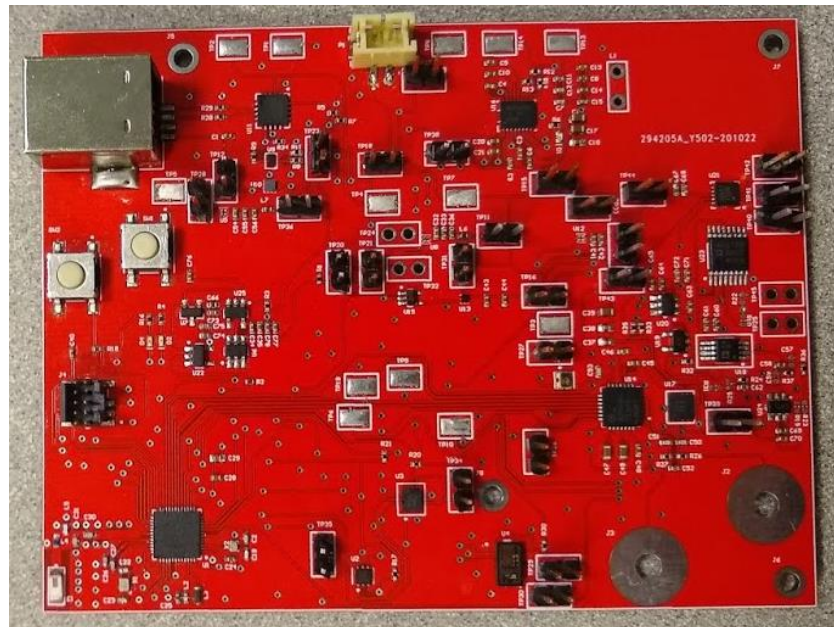
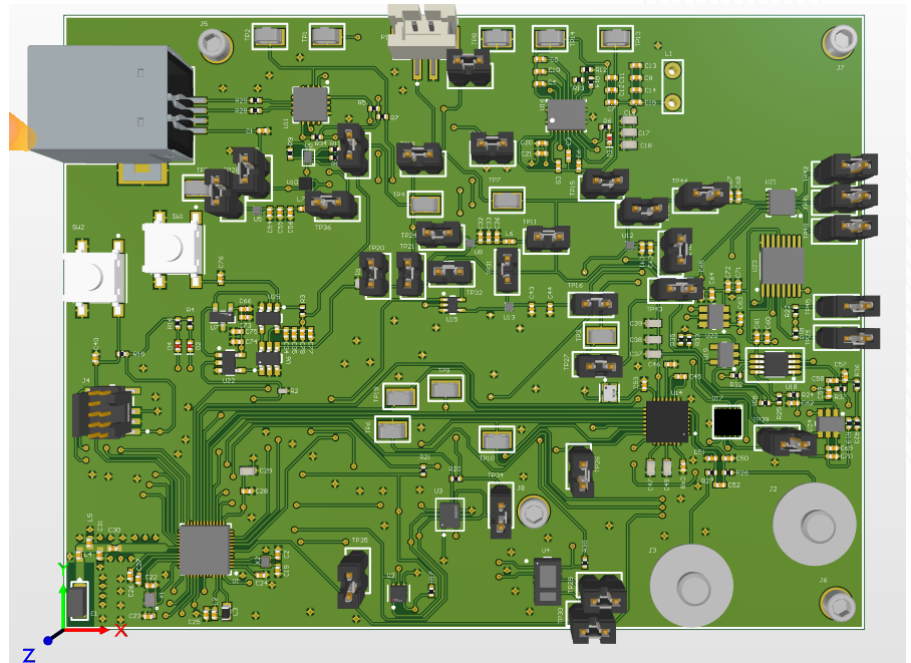
- PCB: Arrived
- Stencil: Arrived
- Digikey: Arrived
- Assembly: Complete
- Hardware Debug: TO DO
- Programming Check: TO DO



LP ECG PROJECT

PCB design

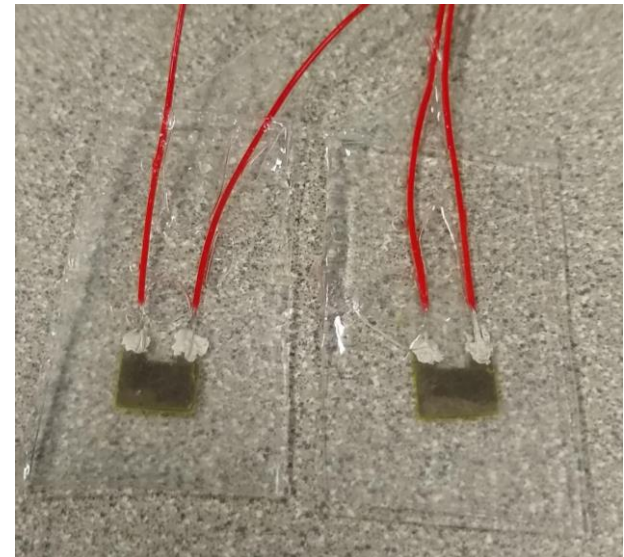
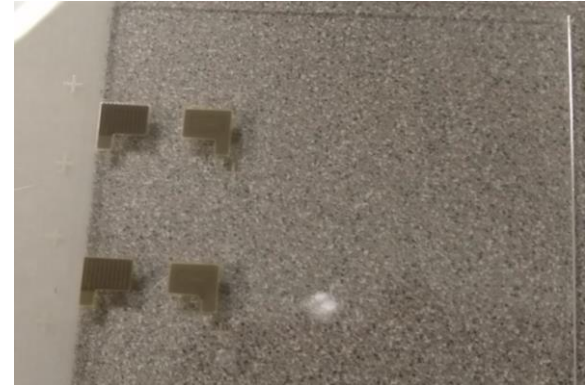
- PCB: Arrived
- Stencil: Arrived
- Digikey: Arrived
- Assembly: 75% Complete
- Hardware Debug: TO DO
- Programming Check: TO DO



CAPACITANCE SENSOR

Capacitance sensor

- PDMA: Finished
- PI: Finished
- AG: Finished
- PDMS: Finished
- ASSEMBLY: Finished
- ENCAPSULATION: Finished
- Characterization: TO-DO



Capacitance/Force characterization

- Mark-10 Force Gauge
 - Automated testing characterization



IRB PROPOSAL

IRB proposal

- Initial Draft X01:
 - Draft sent to IRB Review Board on 10/13
- Revision X02:
 - Draft sent to IRB Review Board on 10/26
- Revision X03:
 - Draft sent to IRB Review Board on 10/29
- Revision X04:
 - Draft sent to IRB Review Board on 11/2

PATH FORWARD

Path forward (11/02/20 – 11/11/20)

- Shriner's Project:
 - Literature review
 - Add more sources to tables
 - Sensor Manufacturing:
 - Capacitance sensors (2X)
 - Force/Capacitance characterization
 - Strain sensors (2X)
 - Begin manufacturing
- LP ECG:
 - Firmware development

SCHEDULE

Schedule Gantt chart

Task	10/25-11/01	11/01-11/08	11/08-11/15	11/08-11/15	11/16-11/23	11/23-11/30	11/30-12/07
LOW POWER ECG							
-PCB ASSEMBLY	✕						
-HARDWARE DEBUGGING		●					
-FIRMWARE DEVELOPMENT		●					
NEUROMOTOR PEDIATRIC WEARABLE							
-LITERATURE REVIEW	✕	●					
-PCB ASSEMBLY							
-HARDWARE DEBUGGING		●					
-FIRMWARE DEVELOPMENT							
-PRESSURE SENSOR MANUFACTURING	✕	●					
-IRB PROPOSAL	✕	●					

LEGEND

- ✕ FINISHED
- TO-DO

APPENDIX