BITNG PROJECT UPDATE

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Date 10/01/2020

Georgia Tech

CREATING THE NEXT

Outline

- Progress to date

- Shriner's project

- Schedule
   - Gantt Chart update

- Path forward

PROGRESS TO DATE

Progress from last week

- Firmware
  - DAQ Slave driver [IN PROGRESS]

- Hardware
  - Inductive charging [IN PROGRESS]
    - Trying to optimize coil size
    - Waiting for coils
  - RF wireless power harvesting [IN PROGRESS]
    - Waiting for ICs

- Pediatric wearable
  - Literature review [IN PROGRESS]
  - Block diagram [FINISHED]
  - Schematic [FINISHED]
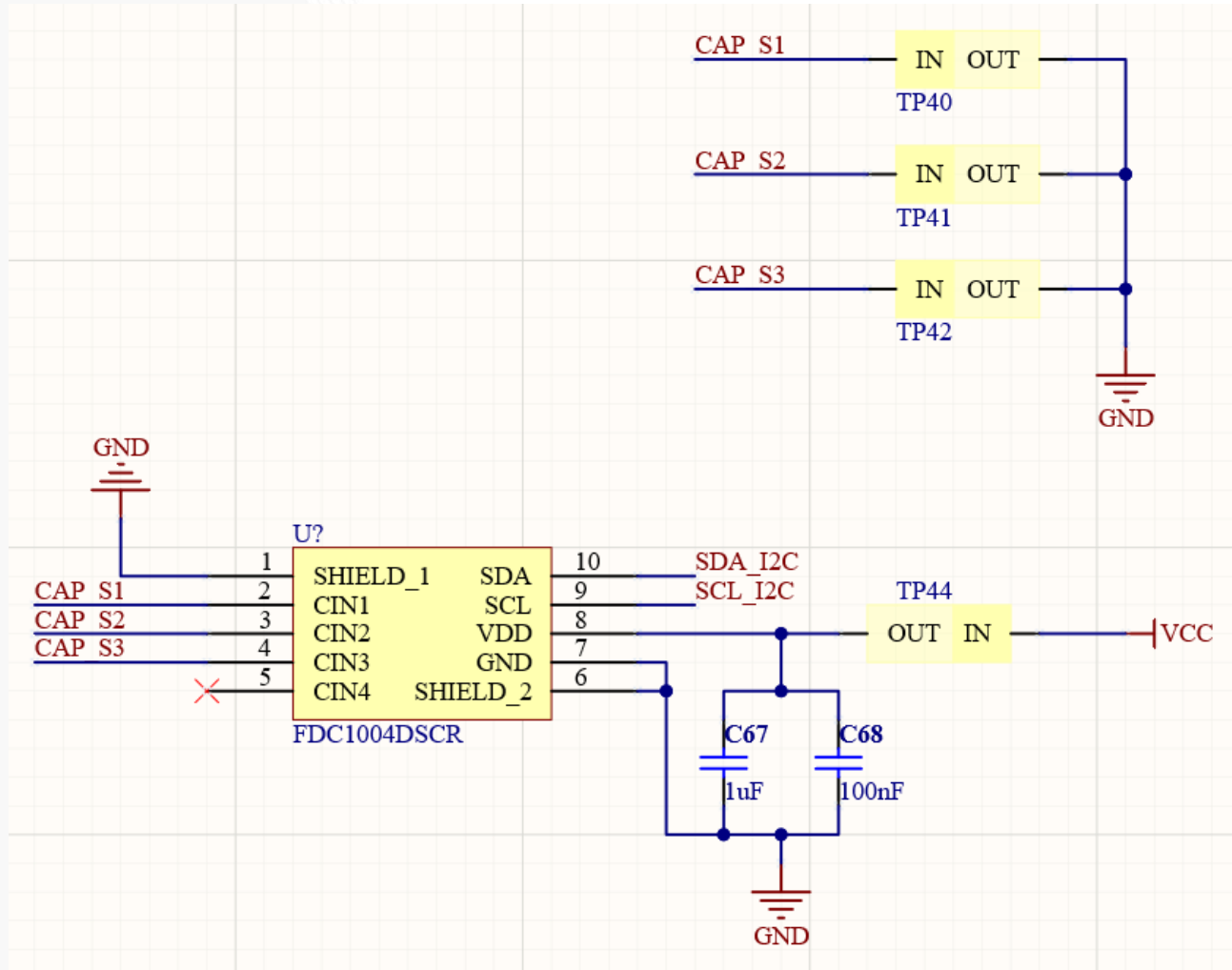 - PCB design [FINISHED]
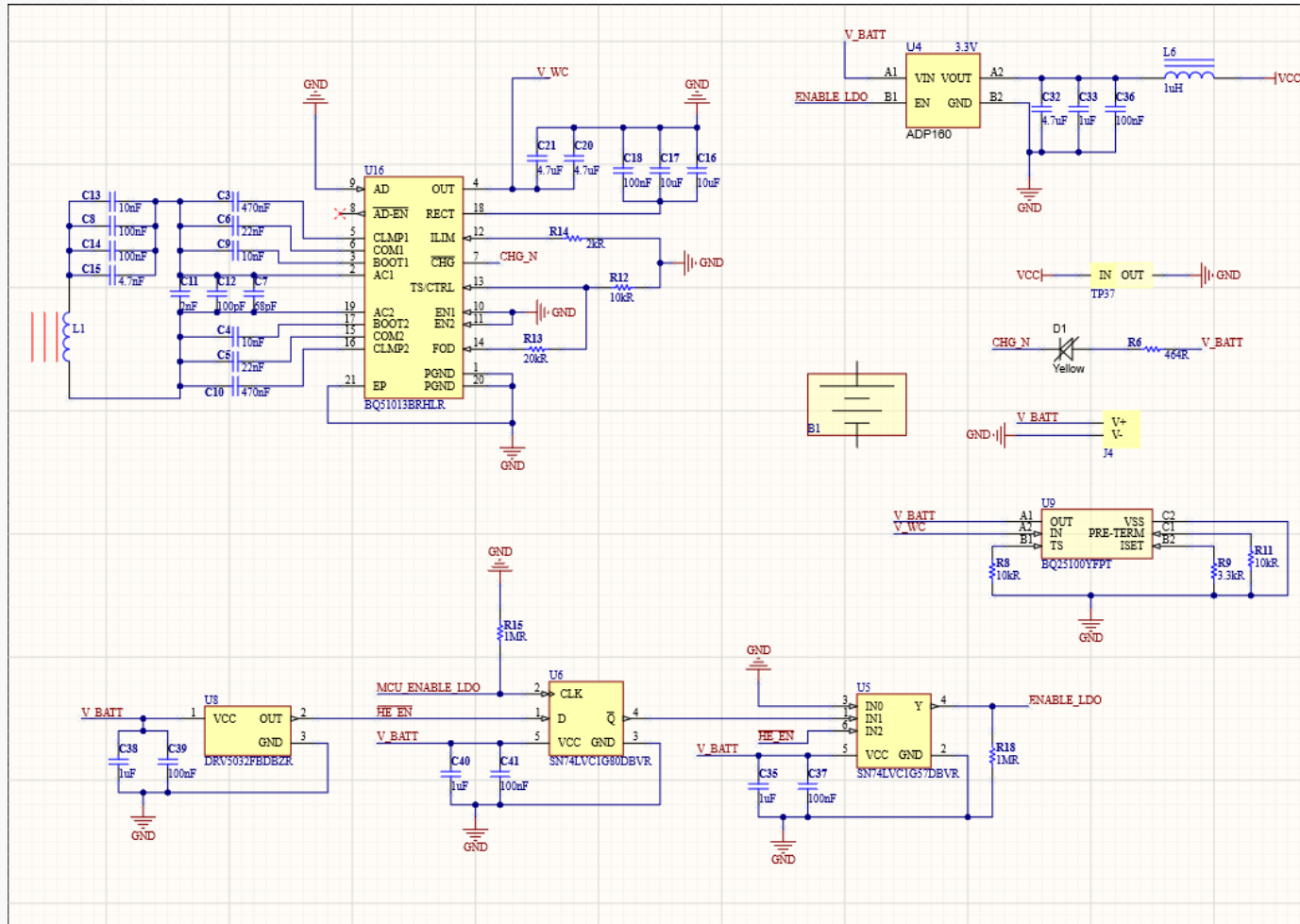
SHRINER'S PROJECT

Resistive sensing circuit
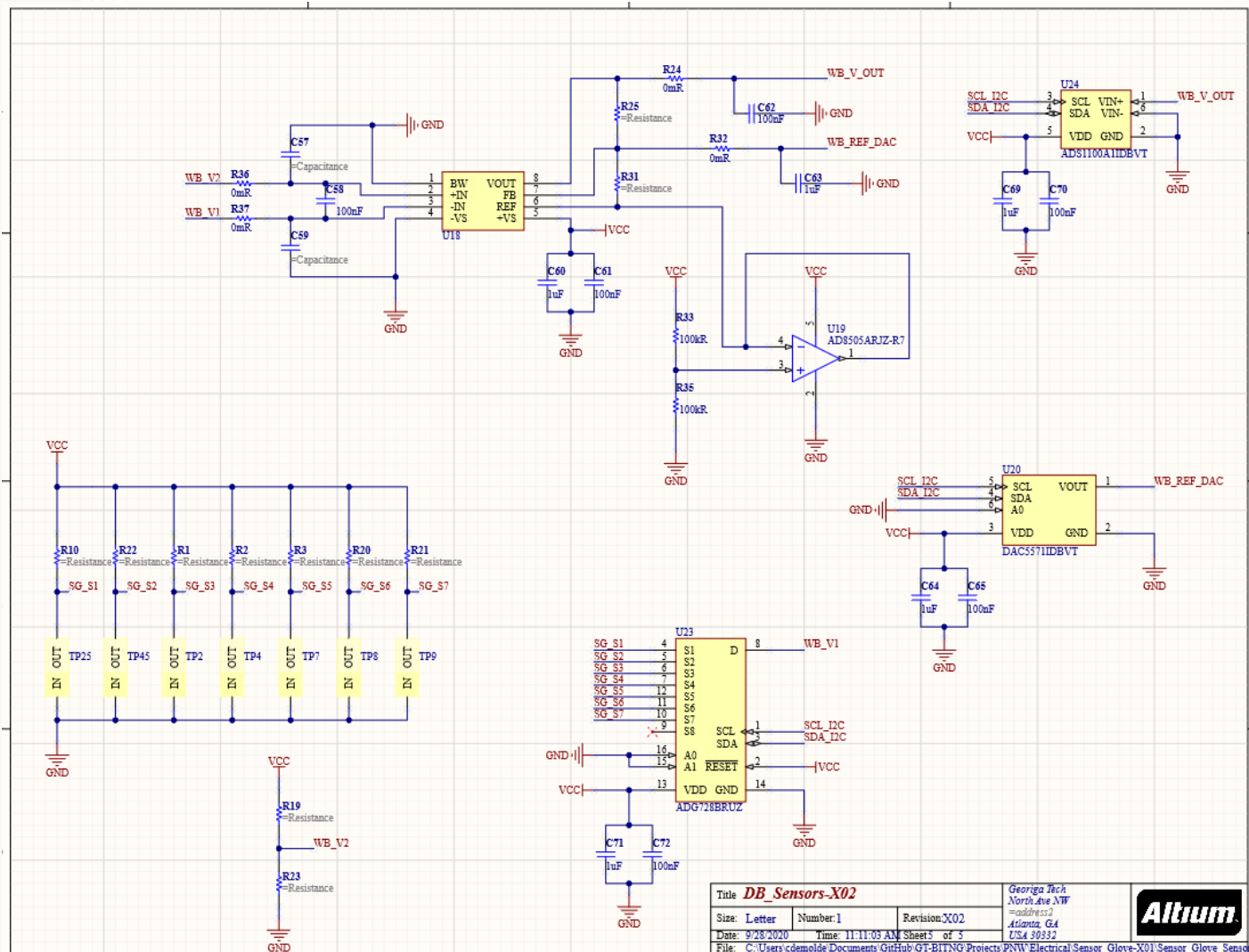
Up to 8 resistance sensors
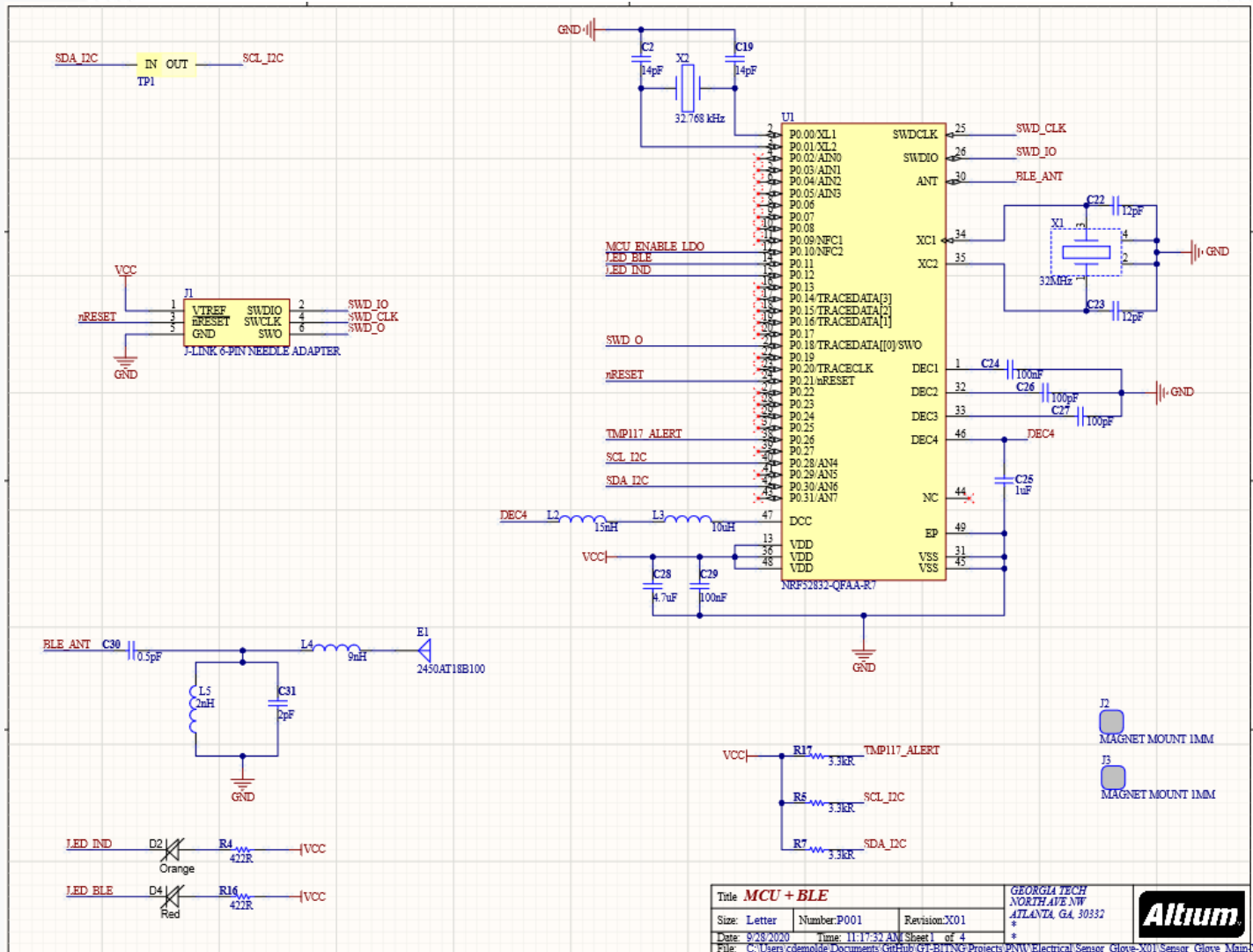
Capacitive sensing circuit

Up to 4 Capacitance sensors**

Power circuit

MCU circuit
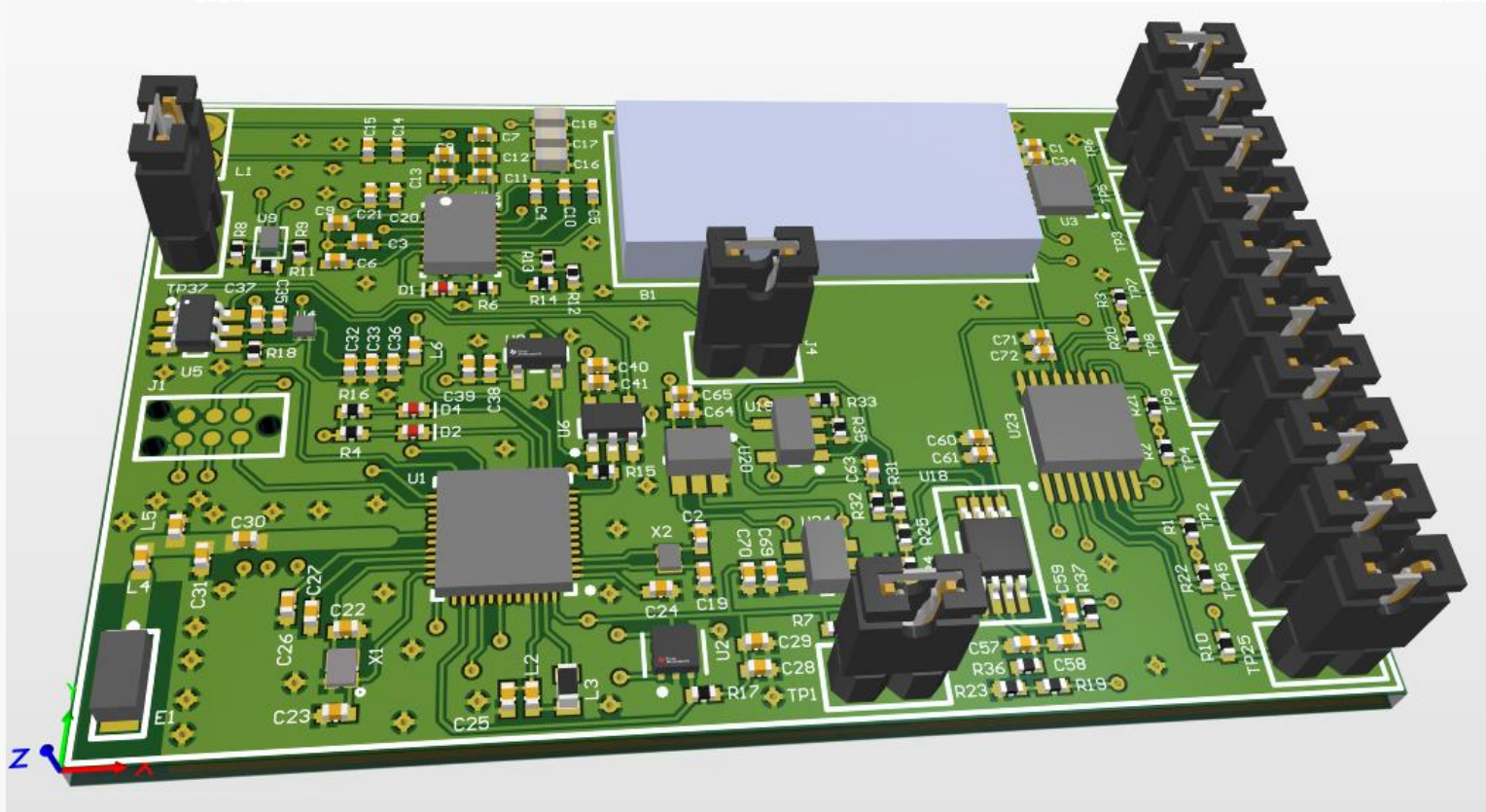
PCB design

~60mm x ~40mm

PCB design

SCHEDULE

Schedule Gantt chart

Task	9/20-9/27	9/27-10/4	10/4-10/11	10/11-10/18	10/18-10/25	10/25-11/01	11/01-11/01
DEVELOPMENT BOARD	✖						
-HARDWARE DEBUGGING	✖	●					
-FIRMWARE DEBUGGING	✖	●					
NEUROMOTOR PEDIATRIC WEARABLE							
-LITERATURE REVIEW	✖	●	●				
-SCHEMATIC	✖						
-PCB DESIGN REV #1	✖	✖					
YEO GENERAL LAB							
- PRESSURE SENSOR PROPOSAL	✖	●	●	●			
-LOW POWER ECG	✖	●	●	●	●	●	●

LEGEND

✖ FINSHED

● TO-DO

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PATH FORWARD

Path forward (9/28/20 – 10/05/20)

- Hardware:
  - ~~Sensor glove~~
    - ~~Overall schematic design~~
    - ~~Finalize PCB layout~~

- Pediatrics Wearable:
  - Literature review
    - Existing landscape matrix
    - Overview presentation

- IRB testing
  - IRB Proposal

APPENDIX