

Team Leader: Sara Taylor

Secretary: Mark Wurzelbacher

Unresolved Items from Previous Meeting:

- Clock: Need to verify that we can get clock out
- Battery: Need to determine if charging circuit can work with battery - NO
  - Find alternative - Mark
- Microphones: For eventual product, want to rearrange signals (ground to middle) and cut down size of board
  - Considerations: soldering process and heating 4x4; want to size holes to meet gain of wires
- Headphones: Impedance matching
- Continue with AD
- Caps on microphone board; redesign microphone board
- Microphone board - Michael

Current Items:

1. Battery/Charging circuitry
  - a. Battery - looked into the LiFePO4. It can work but we need to talk about how to charge 2 in series at the same time.
  - b. MCP73123(3.6V)/223(7.2V) can charge single cell LiFePO4
    - i. <http://ww1.microchip.com/downloads/en/DeviceDoc/22191D.pdf>
  - c. MCP73781 can charge single cells (LiPoly) from 4.1-4.4 V
    - i. <http://ww1.microchip.com/downloads/en/DeviceDoc/22090b.pdf>
2. ADC
  - a. Michael and Tom can discuss our troubleshooting efforts. We should talk about whether it makes sense to order an eval board so we can get started on the DSP programming.