

Parts Needed:

- INA116
- LTC6078
- LMP7702
- LT6010
- AD7691
- ADS1299
- PCB (talk to Karen at lab meeting)

Optional Materials

- PIC24 Microprocessor
- F2M03ALA Bluetooth Module

Summary of starting paper - David

Show schematic and PCB - Jocelyn

Parts Required - Jocelyn

Suggestions and Ideas - Both

Summary:

This paper describes a hardware setup implemented as a wireless EEG/ECG system. Our project for the summer is to build the system designed in this paper in hopes of creating a successful, low-density, non-contact electrode EEG.

- Capacitive electrodes: skin and copper fill are the plates
- Noisy signals: skin contact, current leakage, common-mode
- Noise pickup of 3.8 μV RMS
- Gain of 46 dB.
- Alpha wave graphs

Benefits include:

- Non-contact electrodes
- Simple, easy setup
- Pretty efficient at capturing signals of interest

Create a cart of parts, send the order info to Prof. Kelly & Prof. Pulkit

Get several of the same components

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