

### Features

- Range: 0-4V
- Applied DC-Potential Resolution: 0.06mV
- DAC Resolution: 16-Bits
- Ramp Rate: 1V/sec at 62.5µV step  
64V/sec at 4mV step
- Update Rate: 16kHz
- Waveforms: Cyclic Voltammetry  
DC Voltammetry  
Normal Pulse Voltammetry  
Differential Pulse Voltammetry  
Square Wave Voltammetry
- PCB Dimensions: 25.4(1) x 16.8(0.66) mm(in)

### Applications

- Electrochemical Sensing
- DNA/Protein Sensing
- Assay Automation
- Environmental Monitoring

### Description

The eWAVE-I provides the reference and counter electrodes of a 3-electrode electrochemical cell, and the reference electrode of a 2-electrode electrochemical cell. This module works in conjunction with either the ePOT-I or the eAMP-I module to complete the electrochemical cell regulation loop. A variety of standard waveform functions can be generated through the module such as cyclic voltammetry, DC voltammetry, normal pulse voltammetry, differential pulse voltammetry and square wave voltammetry.

### Block Diagram

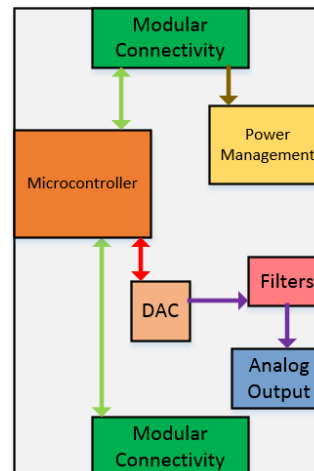


Fig. 1, Top level system diagram



Fig. 2, eWAVE-I PCB board (top view)