

EE1910 Lab 6: Analog Inputs

Objectives

- Use the `adc0_setup` and `adc0_convert` functions to measure analog signals
- Understand potentiometers and photo sensors

Prelab

- Review the Analog Read notes
- Review the Potentiometer Basics notes
- Review the PhotoCell spec

**student
check off**

-
-
-

Assignment

Part1: Create an MSP432 program that reads the output of the 1K Ω potentiometer. Print the results out to the console (in ohms). Only print the value and the word Ohms to speed up the display.

Part 2: Create an MSP432 program that reads the output from the PhotoCell. Print the relative light intensity (% of max) to the console. Note: you must first characterize the range of light available to properly calculate the %. Your program must use a function to calculate the %.

Check Off

- Demo and document your potentiometer program 50%
- Demo and document your PhotoCell program 50%

Checkoff due by 4:00 pm Friday of the lab week (in-person or via Teams chat)

Submit (in the box): flow diagram(2), schematic(2), and code(2) - due 4:00 pm, Friday of the lab week.