

Set up your board, potentiometer, and connections as shown in slides 2-5 of

[M10-V2,3 ADC Example](#)

Be sure you watch the M10V3 video, which describes the Assignment.

Download the Assignment code:

[sketch_ADC_UART_243301.ino](#)

and place in an Energia sketch.

Compile and download sketch.

1. Turn the potentiometer and confirm that the RED LED lights at the midpoint of the potentiometer rotation.
2. Open the Serial Monitor on the Energia IDE to list the values while changing the potentiometer setting.
3. Close the Serial Monitor and open the Serial Plotter and observe the changes with rotating the potentiometer shaft Tools → Serial Plotter

Video:

- A. Show the Serial Monitor values changing with the potentiometer setting by turning the shaft on the potentiometer.
- B. Open the Serial Plotter and show the changes that happen the potentiometer shaft is rotated
- C. Include your Name and Date the recording was made

Questions:

1. What is the value that the potentiometer prints when the RED LED goes on/off?
2. What are the minimum and maximum values that are printed with the lowest and highest potentiometer setting?
3. What voltages are being shown with the lowest and highest potentiometer settings? Based on V_{ref}

4. If the potentiometer does not move what does the Serial Plotter do?
5. When the potentiometer moves, what range does the Serial Plotter show?