

## Q3 MATLAB and Simulink Basics

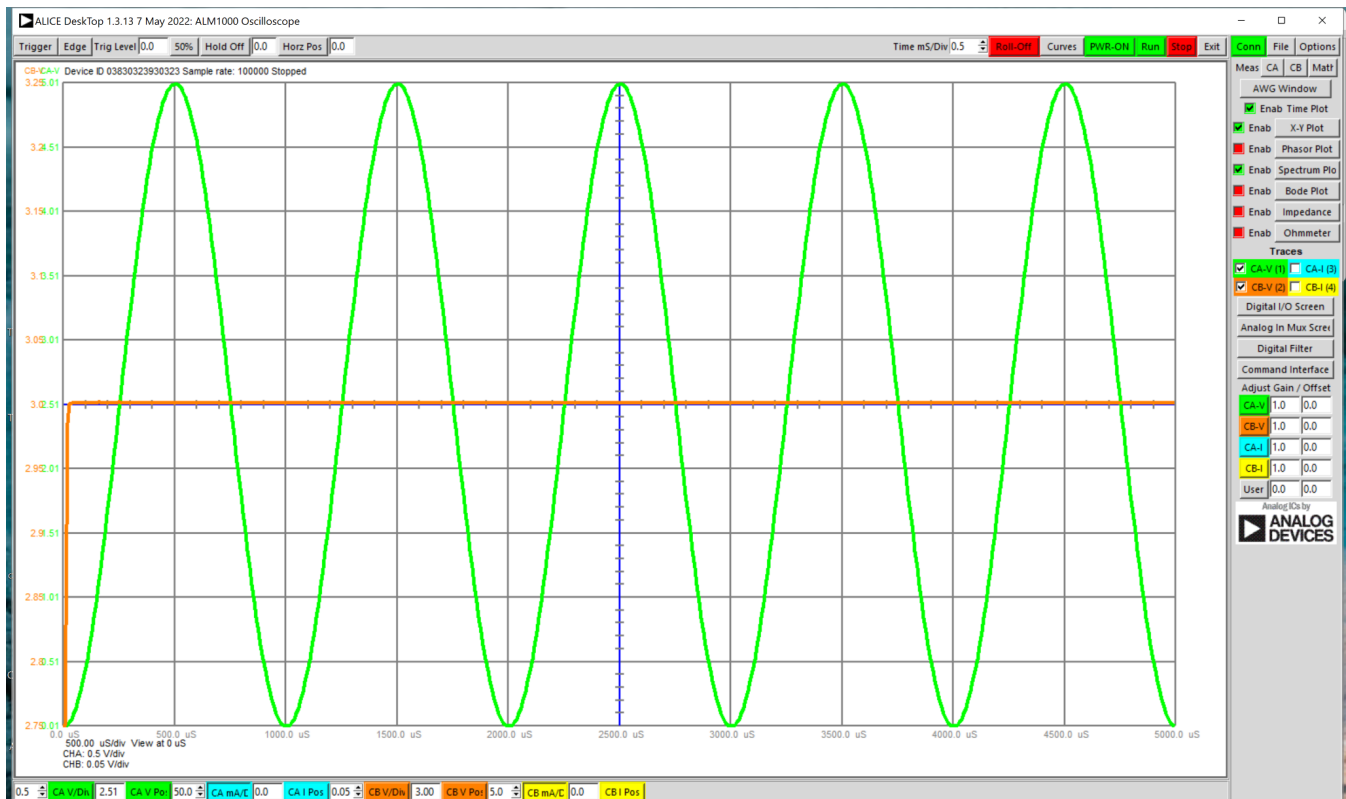
Prove your skill set in using tools for analytical calculations.

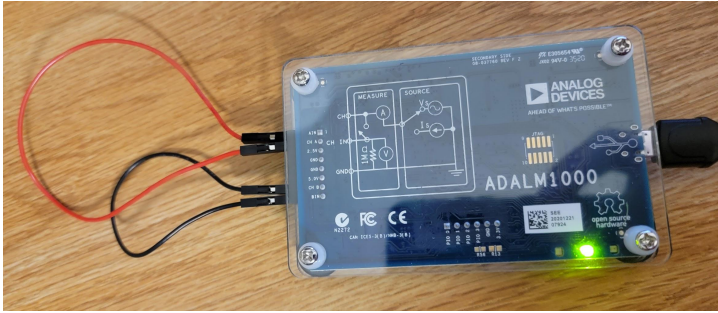
### Q3.7 Importing experimental data to MATLAB

I can import experimental data (from ALICE or Waveforms) to MATLAB and plot the function

I first opened up the ALICE Desktop software and used the same circuit from Q2.1 of Experimental Measurements and Personal Instrumentation, where Channel A and AIN were connected and Chanel B and BIN were connected on the ADALM1000 board (Schematic and image of ALICE graph shown below from Q2.1 (A0)). After running this in the ALICE software I exported it as a CSV file, which I then uploaded to MATLAB using its import data function and changed the output type from table to column vector. Using the plot() function I then plotted the graph of the voltage created by Channel A and AIN versus time in blue. In order to display a second graph on the same chart I used the Hold On function and then the plot() function to create the graph of the voltage from Channel B and BIN versus time.

A0:





A1:  
(line thickness was increase for better visibility)

