We can use a shunt resistor to convert the variable current from the solar cell to a variable voltage. This will allow us to the ADC to measure the current.

We could alternatively use a current sensor.

First thing I need to do is sythnesize a version of vivado with the PWM Generator that he can play with.

I will then incorporate the ADCX usage.

I will then incorporate the encoder drivers with the new Encoder IP

I will then write control software in FreeRTOS

I need to debug the ADC and synthesize a version of