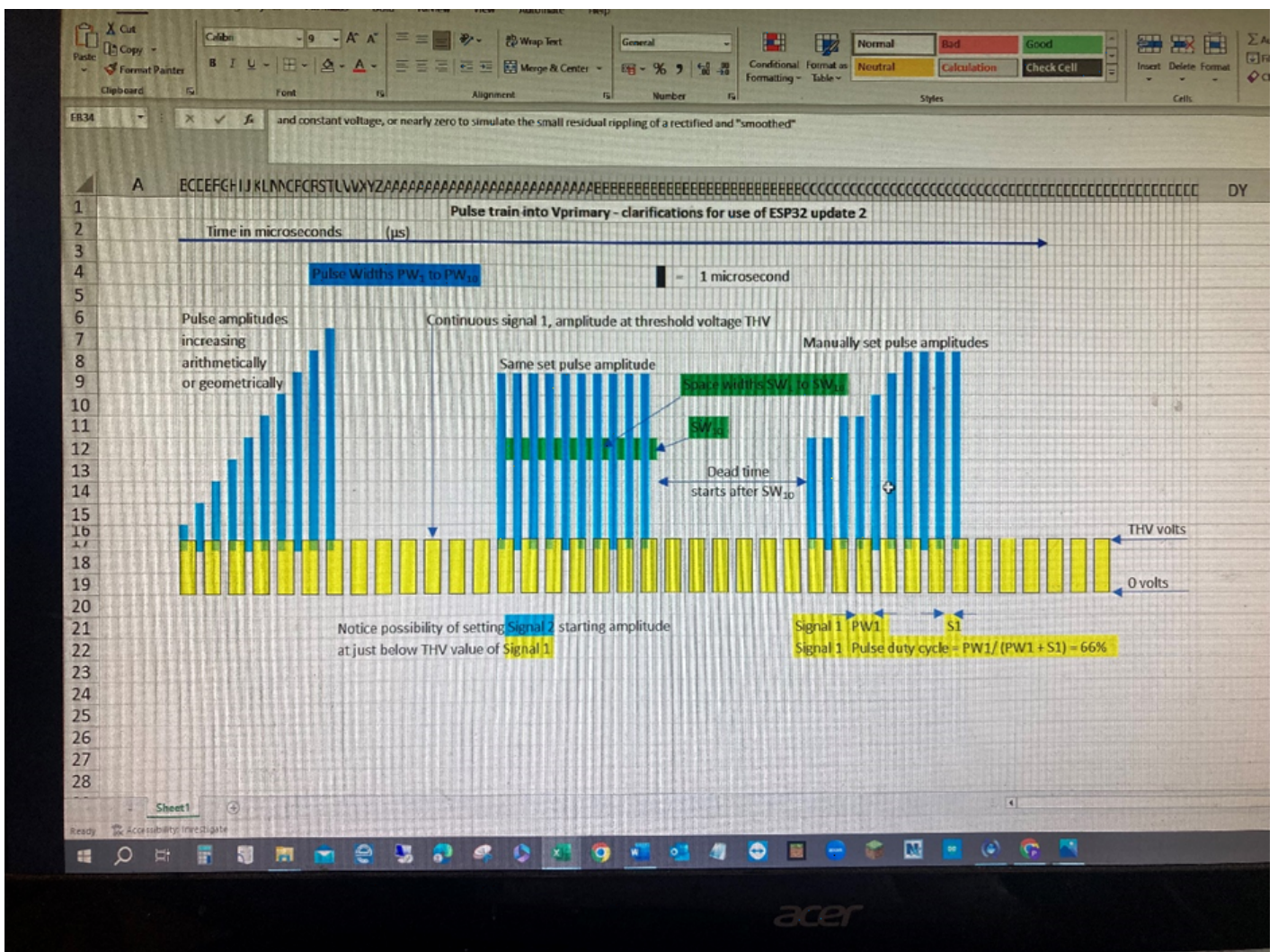


ESP32 microcontroller programming principles for pulse train to VIC



The introduction of a variable resistor between the cell's cathode and the common ground will bias the cathode above common ground					
Vprimary to Vsecondary step up ratio to be 1:3 ??					
Two methods to drive the cell.					
Method 1 uses two separate fully rectified AC variable voltage sources (generated by two separate but commonly grounded variacs) feeding separate optocoupler pairs. One of each optocoupler pair modifies the frequency of the fully rectified AC (slightly rippling constant voltage) input, the other its pulse width (for Meyer this means duration of the pulses between dead time)					
It is suspected that one variac is set at the minimum threshold voltage of about 2.5 volts the other at a higher settable voltage					
It is also suspected that a slightly rippling threshold voltage of about 2.5 volts is desirable (see patent extract from Chris)					
The opto coupler outputs are mixed and fed to Vprimary					
Method 2 would use two variable DC power supplies instead of variacs					
The optocouplers set up would be the same as in Method 1					
Minimum threshold voltage would have no ripple, but could perhaps be imitated by using a space width of nearly zero?					

Revision #3

Created 14 June 2023 07:30:01 by Paul Butcher

Updated 14 June 2023 07:34:09 by Paul Butcher