PWM Drawer

Graduation Project

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Function

- Measure the frequency of the input signal
- Measure the duty cycle of the signal
- View the data on a graphical display

Process

- The programs start by initiating the screen
- Then the front end of the application is displayed on the screen
- In the main loop the program count the clock cycles
- Count the amount of time the signal is positive
- Count the amount of time the signal is down
- Count if a flip occurs
- Increment the clock counter by the 320
- Update the screen after 1 second
- Delete the old data and rewrite the new data

Remarks

- The program takes a sample every 20 us
- Giving it a theoretical bandwidth of 5 kHz signal with 10 sample per signal
- The program has a 1 Hz resolution

Thank you