



PWM Drawer

Group: D35 Online

Team members:

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What we will take about ?

- Introduction
- Component
- Simulation circuit
- Code

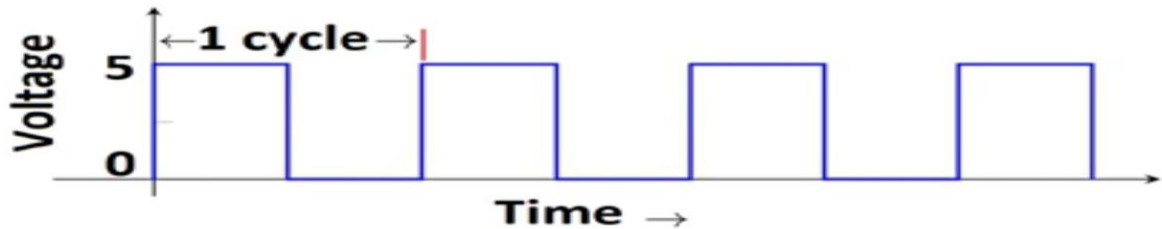


Introduction

- PWM drawer works as a mini oscilloscope that is responsible for printing the frequency and the waveform of the generated PWM signal.
- (PWM) is a modulation technique that generates variable-width pulses to represent the amplitude of an analog input signal. The output switching transistor is on more of the time for a high-amplitude signal and off more of the time for a low-amplitude signal.

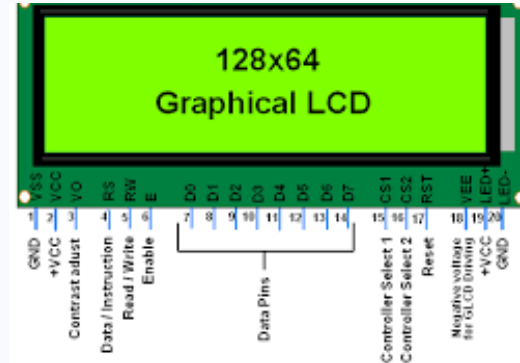
Introduction

- Frequency signals, or other waves, expresses the number of cycles of the repetitive waveform per second.
- Duty Cycle (In %) = $T_{on} / \text{total period} * 100$
- period of a pulse consists of an ON cycle (5V) and an OFF cycle (0V).
The fraction for which the signal is ON over a period is known as the duty cycle.

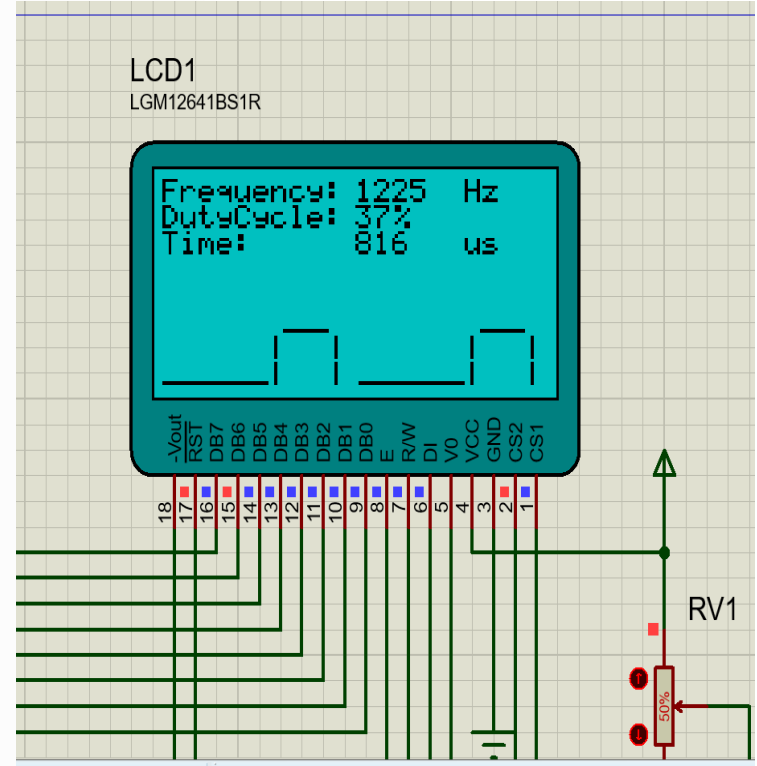
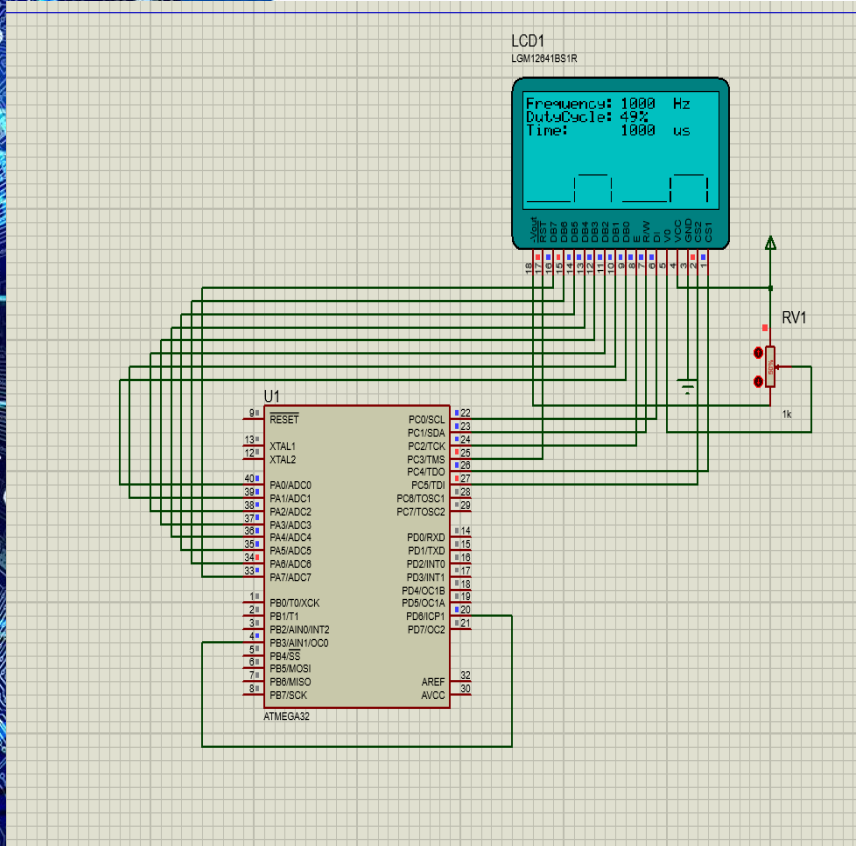


Component

- ATmega32 MCU
- GLCD
- wires



Simulation circuit





Code

- Main File
- GLCD Files
- TIMER Files

<https://github.com/ShAwKy10/PWM-Drawer>



Thank You!