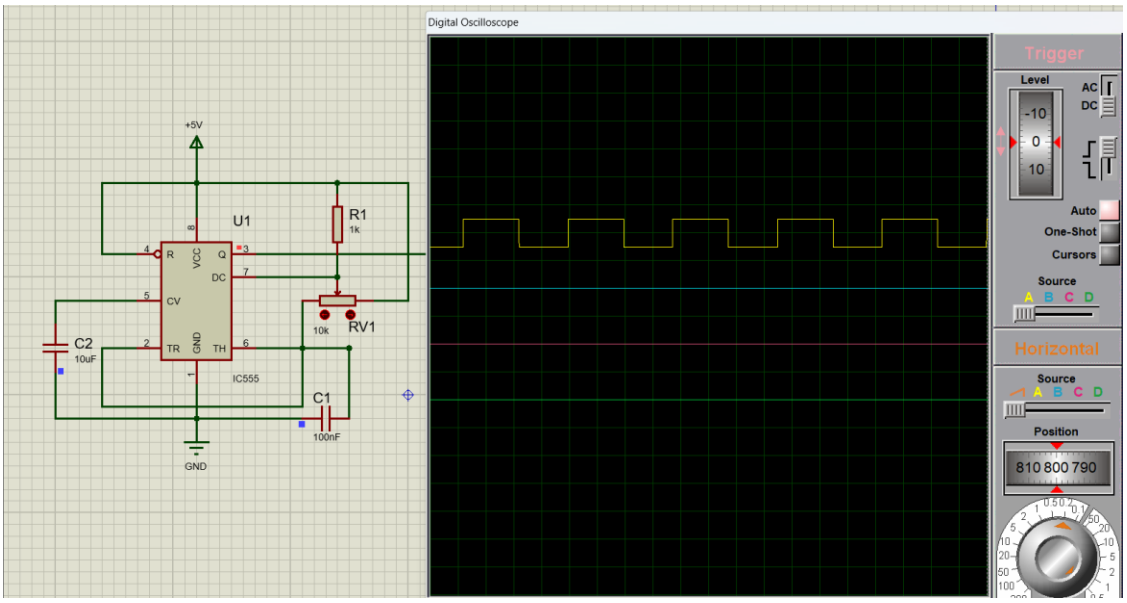
NAME: Archit Khobragade **DATE:** 25/03/2024

WORK REPORT

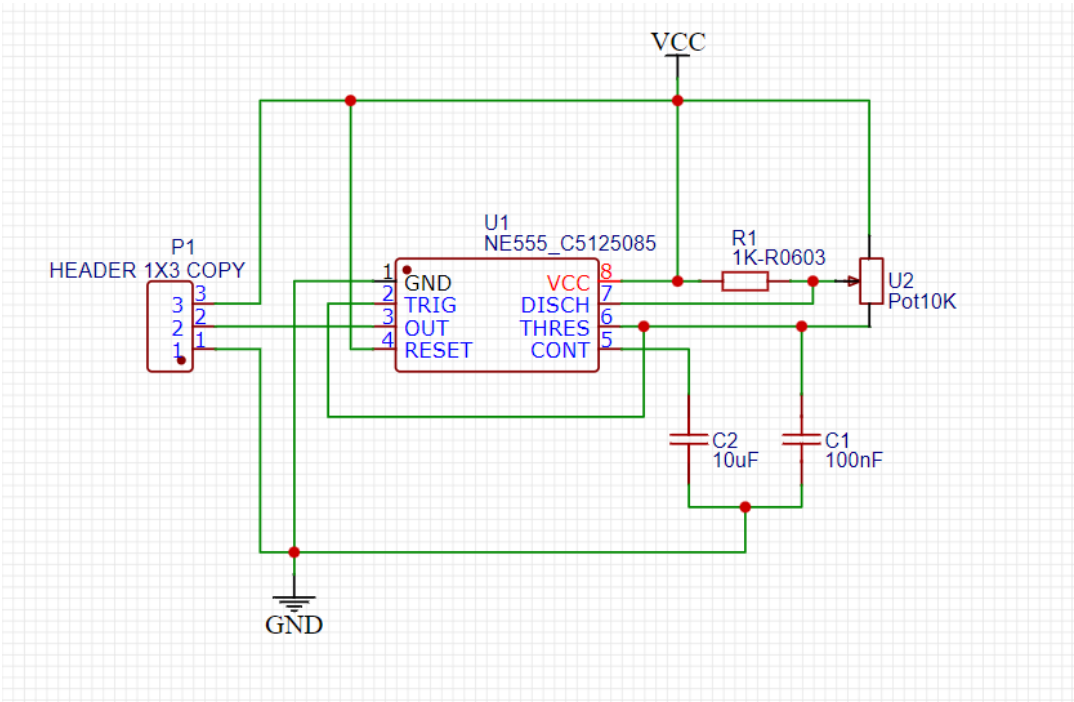
NE555-Duty Cycle variation using potentiometer

A. Proteus Simulation:

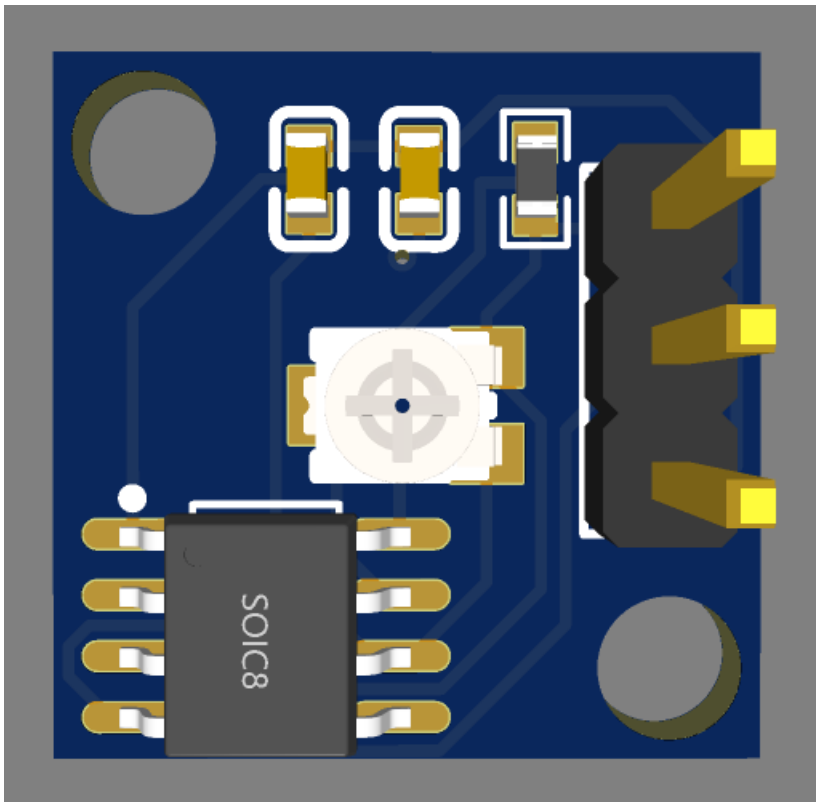


B. EasyEDA:

1. Schematic:



2. **3D View:**



Challenges and Difficulties: Designing a PCB with a potentiometer changing the NE555's duty cycle is tricky. Choosing the right potentiometer, figuring out the correct resistance values, and putting it all together without messing up the signals is tough. Making sure the circuit works well under different conditions needs lots of testing and fixing mistakes. It takes knowing a lot about circuits, picking the right parts, and testing things out to make it work smoothly.

Conclusion: In conclusion, creating a PCB schematic with a potentiometer adjusting the NE555's duty cycle requires careful component selection, precise integration, and thorough testing for optimal functionality. Expertise in circuit design and testing procedures are essential for successful implementation.