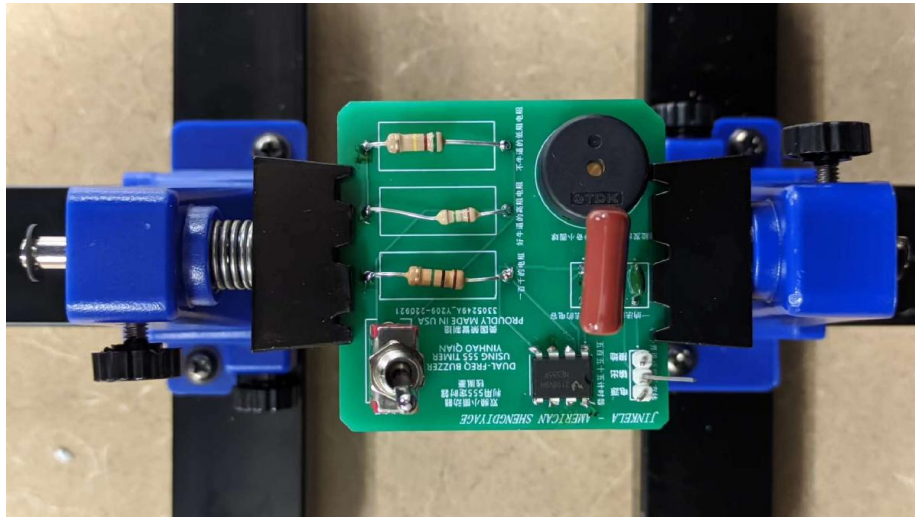


ECE1895 ASSIGNMENT10 REPORT

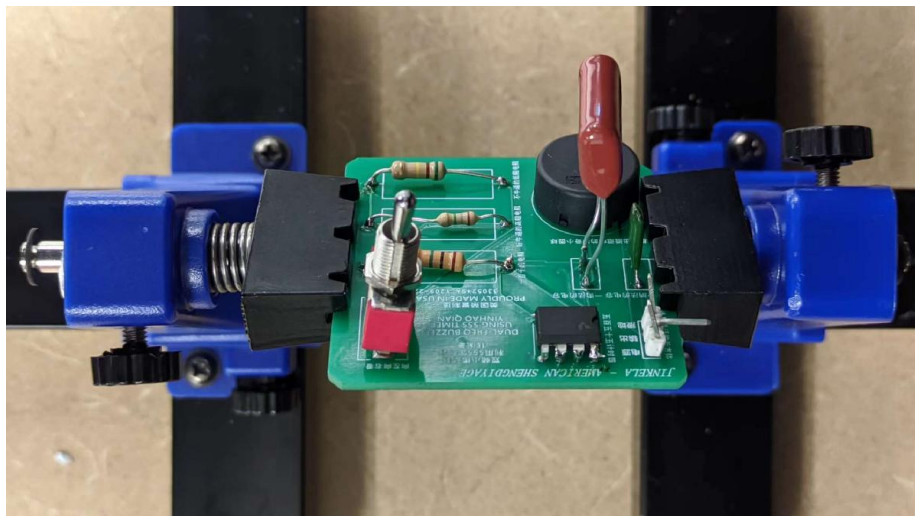
YINHAO | FALL2022 | ECE1895 | ASSIGNMENT10

1 Board Photos

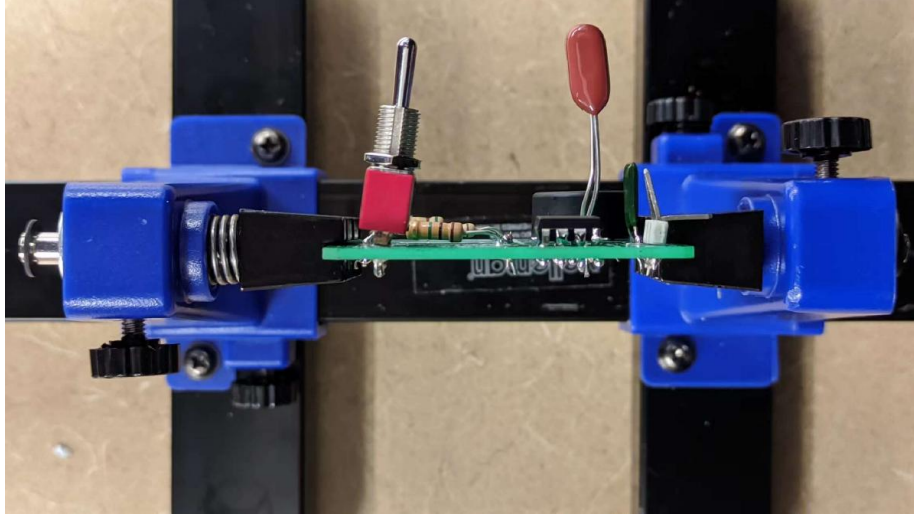
1.1 View from 0 Deg



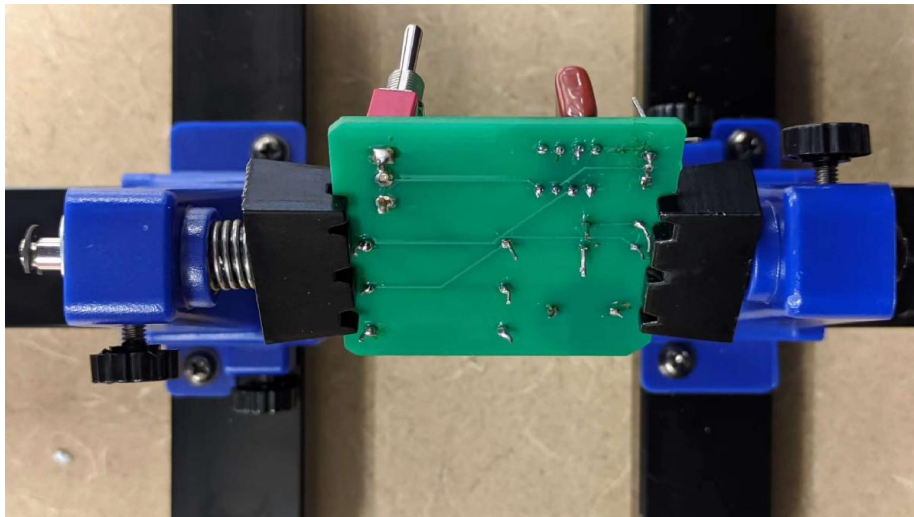
1.2 View from 45 Deg



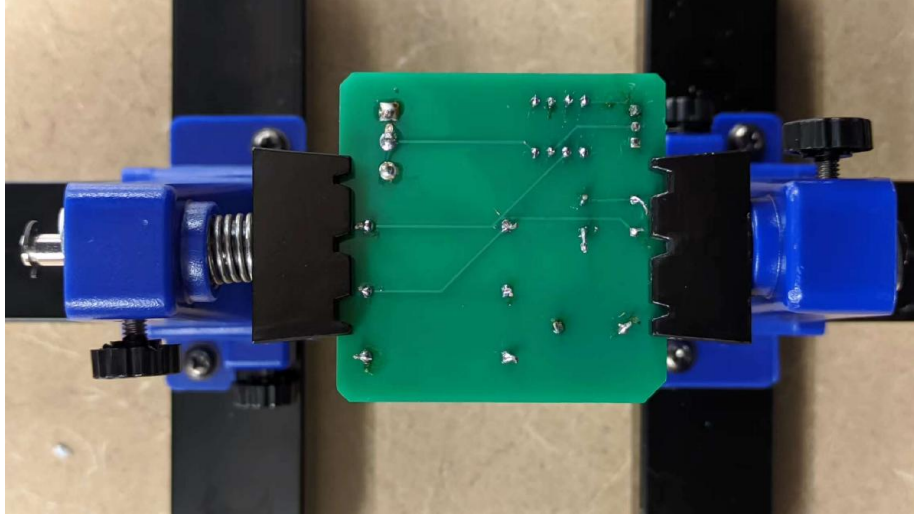
1.3 View from 90 Deg



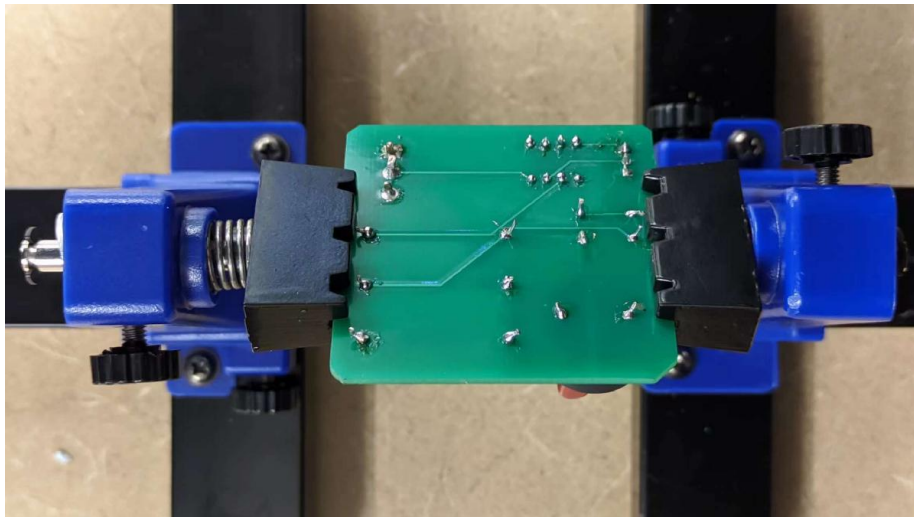
1.4 View from 135 Deg



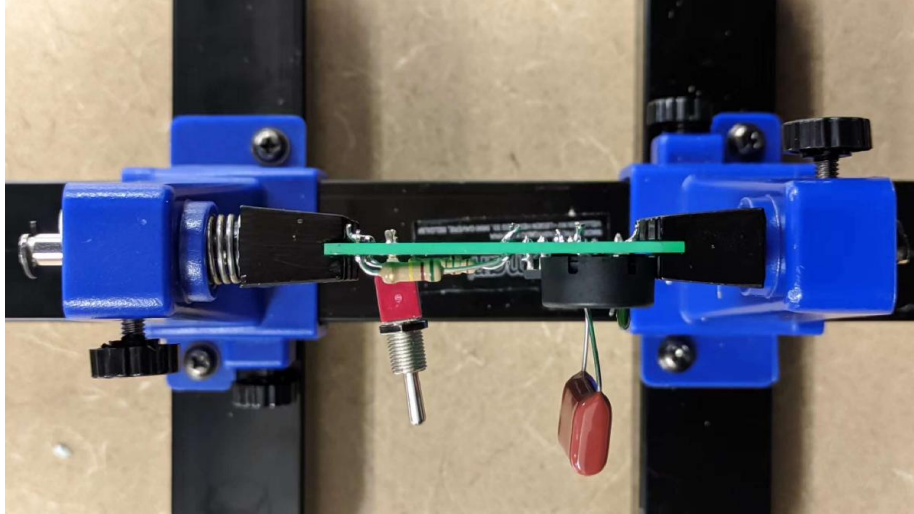
1.5 View from 180 Deg



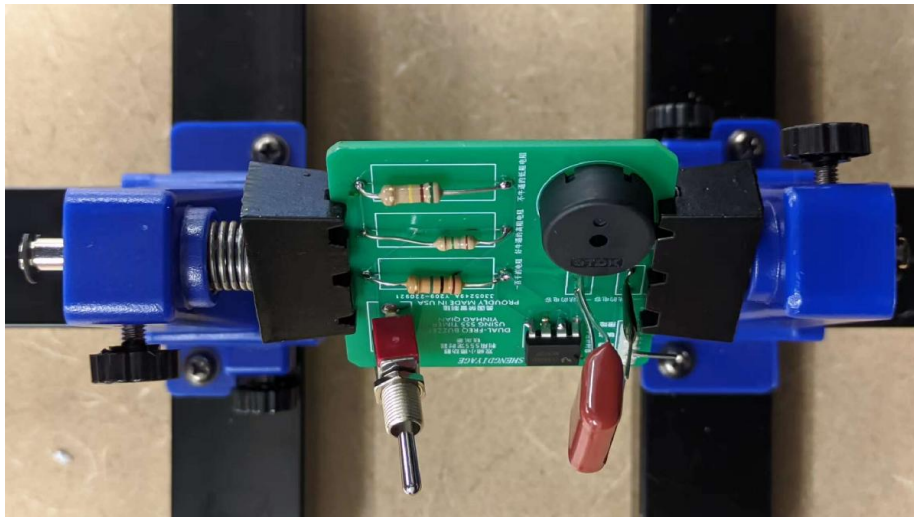
1.6 View from 225 Deg



1.7 View from 270 Deg



1.8 View from 315 Deg



2 Filling Vias

Prior to filling the vias with solder, I have attempted to test the PCB board with all components placed, yet the PCB is not functional. This is because the connections cannot be guaranteed when the vias are not filled with conductive solder. The holes are actually a lot bigger than component pins, and angular rings would sometimes lose touch with the pins. Finally, I have used the lead-free solder that came with the practice board to fill in all the vias, making

sure the solder is passed through both on the top and bottom layer. After applying the solder, the PCB is always functional.

3 Evaluation Ranking

I personally would say I have followed almost guidelines mentioned in class. The most important one would be reducing the board size to a square and making the components as compact as possible. Indeed, I am very satisfied with the board sizes when I first received the board. I would say one thing I can't do that is suggested during class is making the entire bottom layer as ground, since my circuit schematic requires two layers so that no crossins would exist. Overall I would say I would evaluate my board in a good rank.