

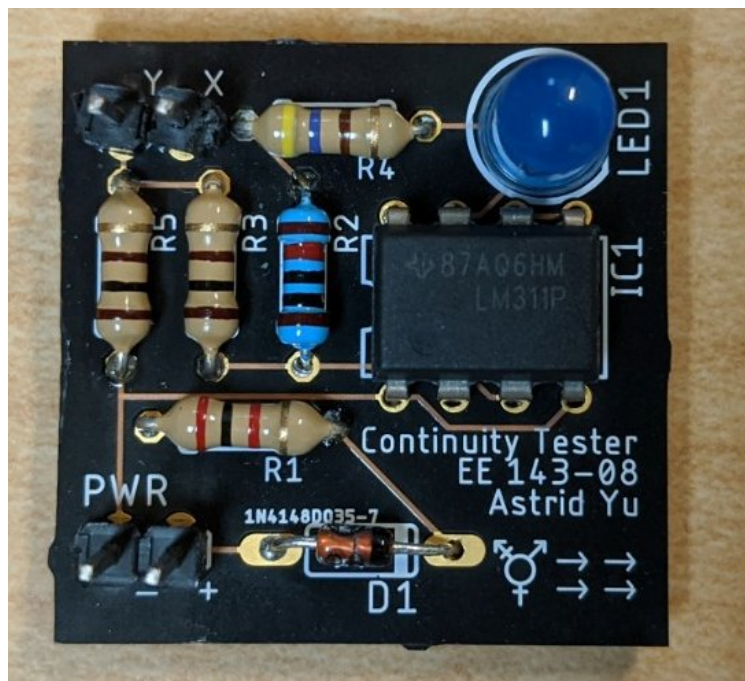
Instructor: Aiku Shintani

EE 143 Section 08

T 6:10-9PM

Experiment 6

Arduino Ohmmeter



Written by Astrid Yu
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Introduction

In this experiment, the PCB designed in Lab 4 will be assembled. The device will be tested after assembly, and if necessary, its function will be troubleshooted.

Analysis

The PCB was received back from OSHPark and assembled.

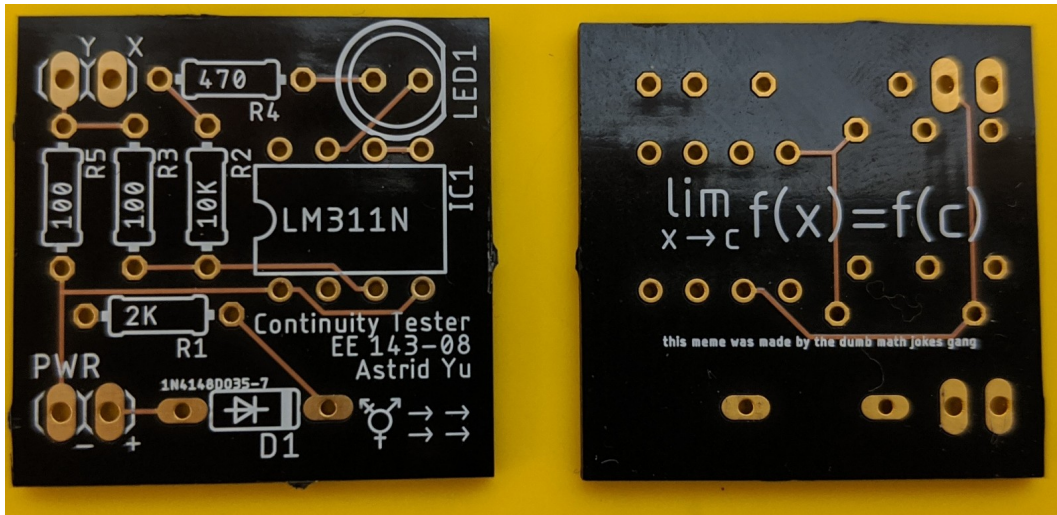


Figure 1: Received PCBs.

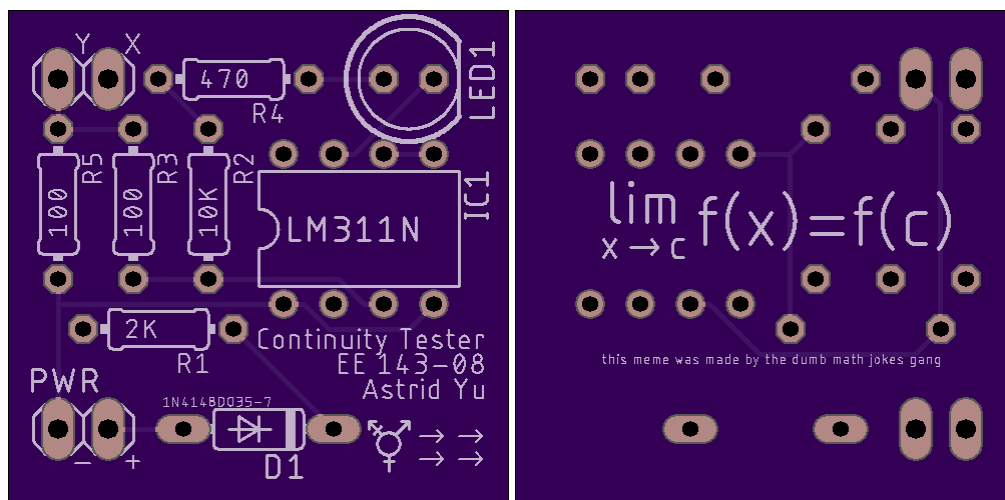


Figure 2: The previews that OSHPark generated.

Section 2 – Electrical Test

The circuit's functionality was confirmed.

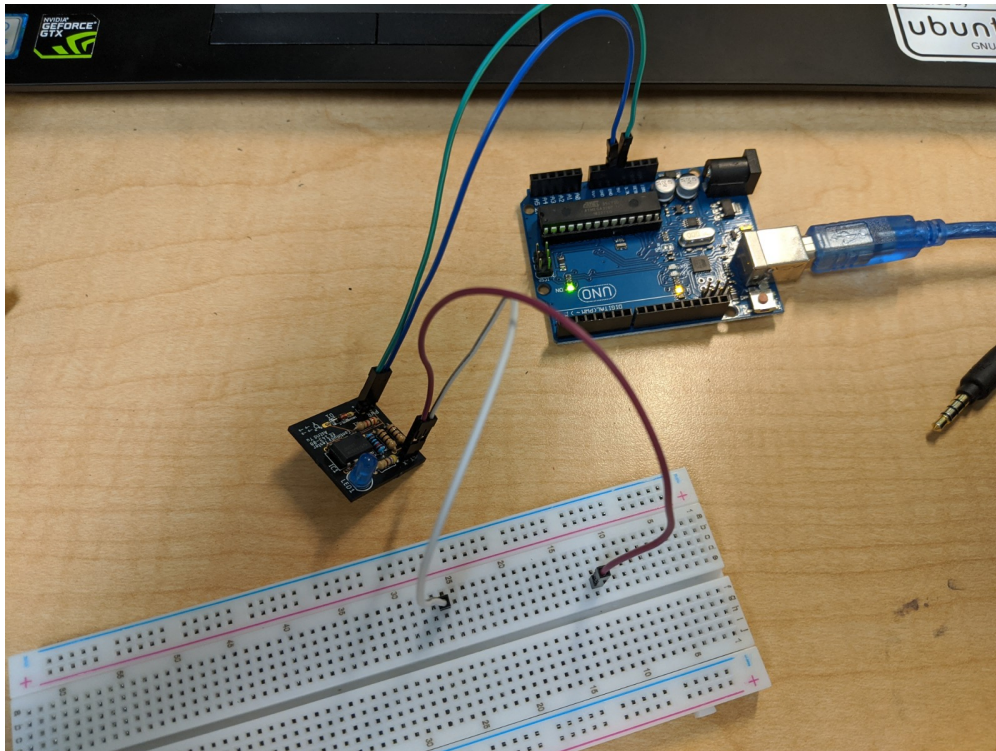


Figure 3: The LED is off when there is an open.

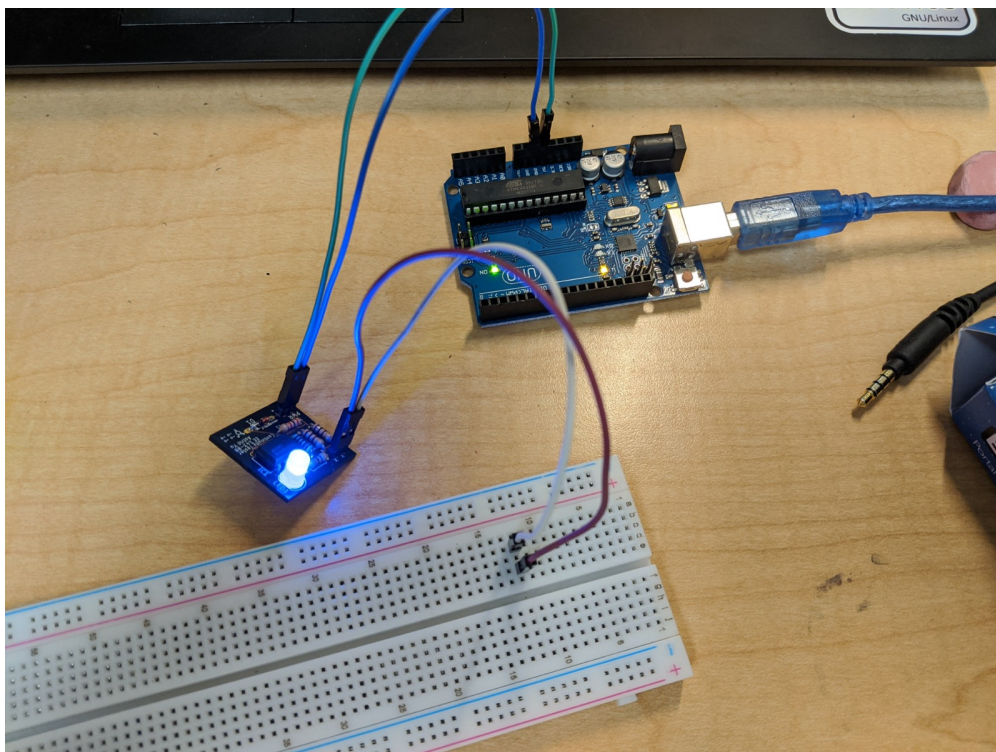


Figure 4: The LED is on when there is a short.

Section 3 – Troubleshooting

Because the circuit was confirmed to work, no troubleshooting was necessary.

Discussion Questions

Section 2



Figure 5: The top and bottom of the soldered board.

Section 3

N/A – No troubleshooting was necessary.

Conclusion

The circuit was successfully assembled by soldering. It was confirmed to work through functional testing. Troubleshooting was not necessary because the circuit functioned flawlessly.