



**COLLEGE OF ENGINEERING AND MINES**  
**DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING**

<b>COURSE CODE</b>	EE F102 F01 (CRN: 32862)
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<b>COURSE NAME</b>	INTRODUCTION TO ELECTRICAL AND COMPUTER ENGINEERING
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<b>SEMESTER</b>	SPRING	<b>YEAR</b>	2023
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<b>LABORATORY LOCATION</b>	JUB 331 (ELECTRONICS LAB)
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<b>LAB SESSION DATE AND TIME</b>	MONDAY 20 FEB 2023
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<b>TYPE OF SUBMISSION</b>	LABORATORY REPORT	<b>NUMBER</b>	5
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<b>TITLE OF SUBMISSION</b>	BOARD LAYOUT
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<b>METHOD OF SUBMISSION</b>	ONLINE VIA CANVAS
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<b>DUE DATE OF SUBMISSION</b>	MONDAY 06 MAR 2023	<b>DUE TIME OF SUBMISSION</b>	23:59
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<b>STUDENT NAME</b>	
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MAKE THIS FORM A "COVER PAGE" FOR YOUR REPORT SUBMISSION.

**FOR THE TA USE ONLY**

**REMARKS:**

## BOARD LAYOUT

### Objective

In this lab we will gain experience creating a circuit board layout. We will investigate footprints and other physical constraints of a board layout. This lab will create a voltage regulator board to use with your Arduino when it is not connected to the computer. J1 will connect to a battery connector, and J2 and J3 will connect to a 4-pin SIP that can be plugged directly into your protoboard.

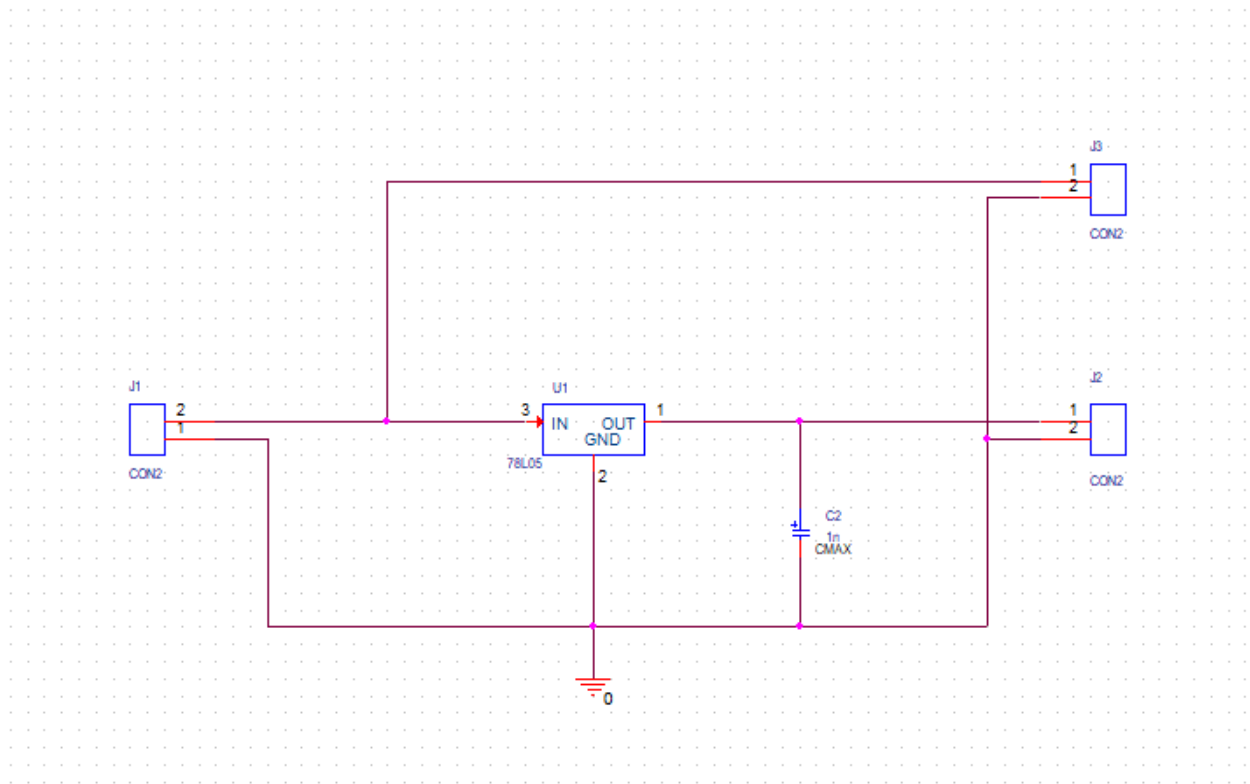


Fig I: Complete Schematic for voltage regulator board

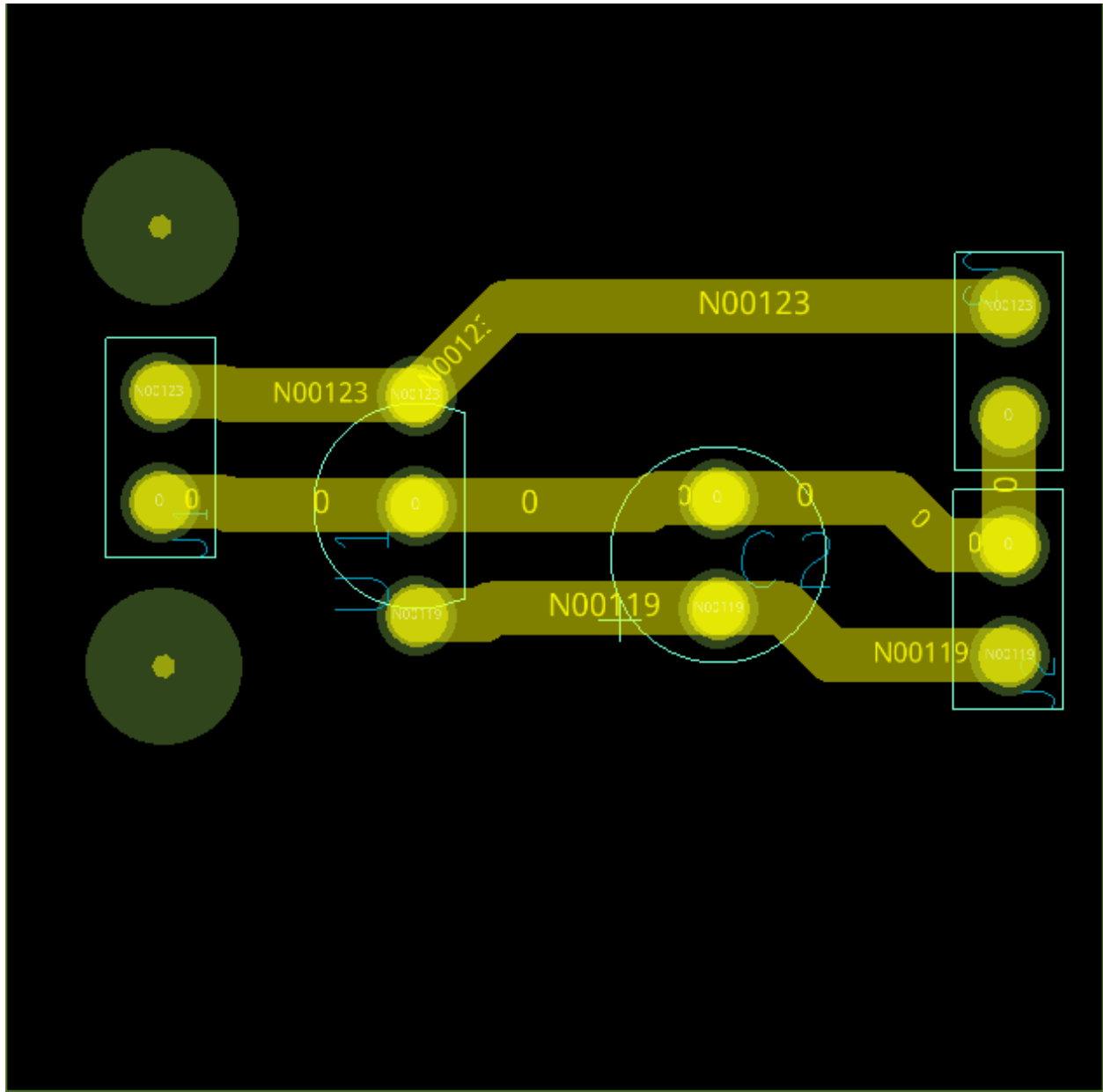


Fig 2. Final Layout

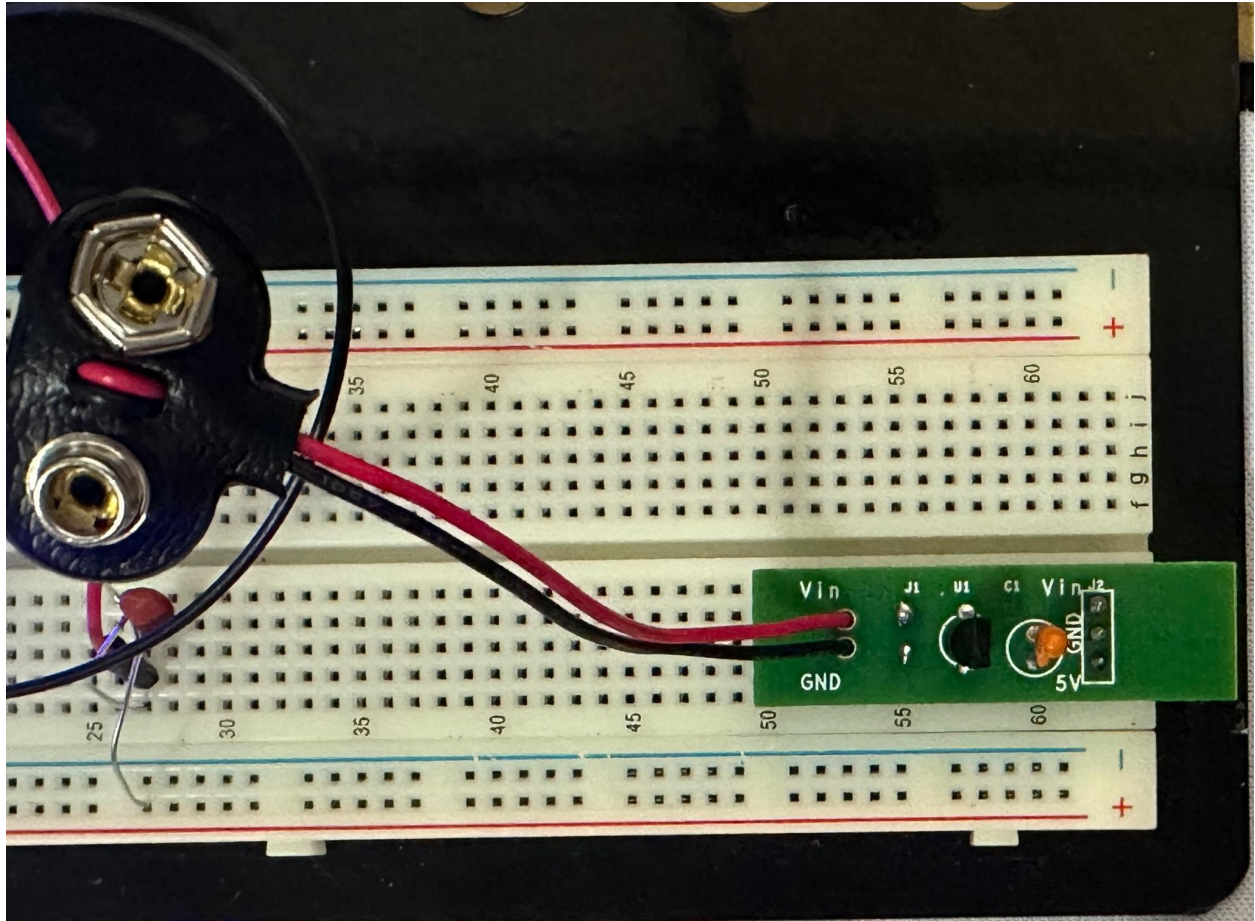


Fig 3. Final (Physical) Board Layout

## Conclusion

The layout for the board provides an understanding of how the schematic will work in the physical board and how each component is connected. The routing in Fig 2 and the schematic in Fig 1 provide an understanding of the final board layout that is shown in Fig 3.

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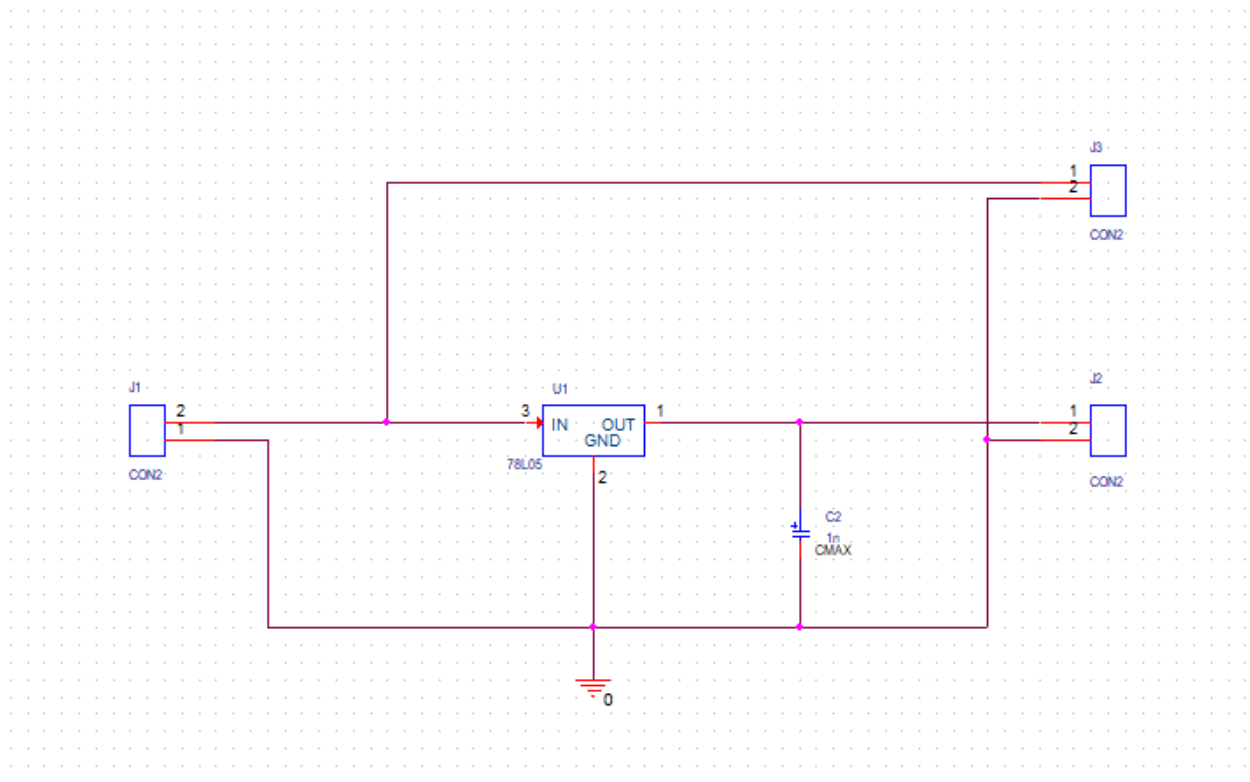


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