

Assignment 6

Motor Driver PCB Layout and Fabrication

Schoelen EET122, Spring 2020 Remote

revA: 05/18/2020

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Week: Start 05/21/20 - End 06/04/20

Objectives:

1. Complete a Printed Circuit Board (PCB) design from start to finish in KiCad.

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|--|-------------|
| a) Enter schematic into KiCad | Week1 |
| b) Assign footprints to symbols | Week1 |
| c) Export design to KiCad's PCB tool | Week1 |
| d) Place Components | Week1 |
| e) Route the PCB traces | Week1 and 2 |
| f) Export completed files and upload to Osh Park for fabrication | Week2 |

Read / Watch:

KiCad Videos for review if necessary: <https://www.youtube.com/watch?v=vaCVh2SAZY4>

Do:

Use the Lab6 Discussion board if you need help.

1. Read the following PCC lab exercise: <http://spot.pcc.edu/~dgoldman/labs/eetdig-2-4.pdf>
2. Watch Joe's KiCad videos posted on D2L
3. Deliverables are to be uploaded to D2L for grading.

For the deliverable use this naming convention please: LastNameFirstName_L6

***** This is a two week Lab *****

Procedures

The videos uploaded to D2L walk you through this design. Do not procrastinate on this lab.

1. Watch each video and complete the PCB design. Use the symbols and footprints that I recommend in the videos.

Deliverables to be uploaded to D2L for grading

Due 05/28/2020

- Upload into Week1 D2L the KiCad files: SCH, PRO, and PCB
 - Your schematic should be complete with footprints assigned, annotated and DRC ran
 - Your PCB board outline should be in place, your components places, and some routing done.

Due 06/04/2020

- Upload your exported files to Osh Park for fabrication, order the boards
- Upload into Week2 D2L the KiCad completed final files: SCH, PRO, and PCB
 - Your PCB should be completely routed and DRC run.
- Upload into Week2 D2L a screen shot of the rendered board files from the Osh Park website. SEE PIC BELOW

