

Deliverable #4: Project Layout

1 Objectives

For this deliverable, you will layout the schematic you designed for deliverable three, in EAGLE.

2 Document Details

To get full credit, you must create a clean, well organized, and complete layout of your proposed system, that passes the design rules created by OSH Park, and satisfies the conditions in the rubric listed below. The design rules file can be found at <https://oshpark.com/LaenPCBOrder.dru>.

3 Collaboration

The class project is **not** a group project, students will be graded individually based on what they submit, build, test, and finally, demo. All projects must meet the individual requirements listed. However, if you are interested in collaborating with others on a project together, that is fine. Just remember you are responsible for your own grade, so organize appropriately. Make sure your hardware / software / firmware does not depend on someone else's. If you choose to collaborate with others on a larger project, your part must still be able to independently demo a working system that is microcontroller driven, with your own custom software and custom PCB, that includes a radio component, an analog component, and a visual component.

4 Submission Instructions

This deliverable is due by 12:01 AM on October 7th. Absolutely no late assignments will be accepted.

Submit your document via **handin.cs.clemson.edu**. Do not email me your document.

Submit both your schematic, and the layout file that accompanies it. The submission should include two EAGLE documents, a schematic (.sch) and a board (.brd). No other format will be accepted. Make sure to submit both documents using **handin**.

5 Grading

This deliverable is worth 12% of your final class grade. Table 1 shows the rubric that you will be graded against.

Table 1: Grading Rubric for Project Layout

Item	Description	Pts
<i>Silk Screen</i>	Your name, project title, and revision label on silk screen	10
<i>Consistency</i>	Board and schematic consistent	10
<i>Air Wires</i>	No air wires	10
<i>Right Angles</i>	No right angled traces	10
<i>Power Supply</i>	Bypass capacitors are close (within 1.5cm) to VCC pins	10
<i>Copper Pours</i>	Copper plane (GND, VCC, or combination) surrounds whole board	10
<i>Design Rules Check</i>	Passes OSH park DRU	40

If the document is not turned in on time, you will get a 0%.