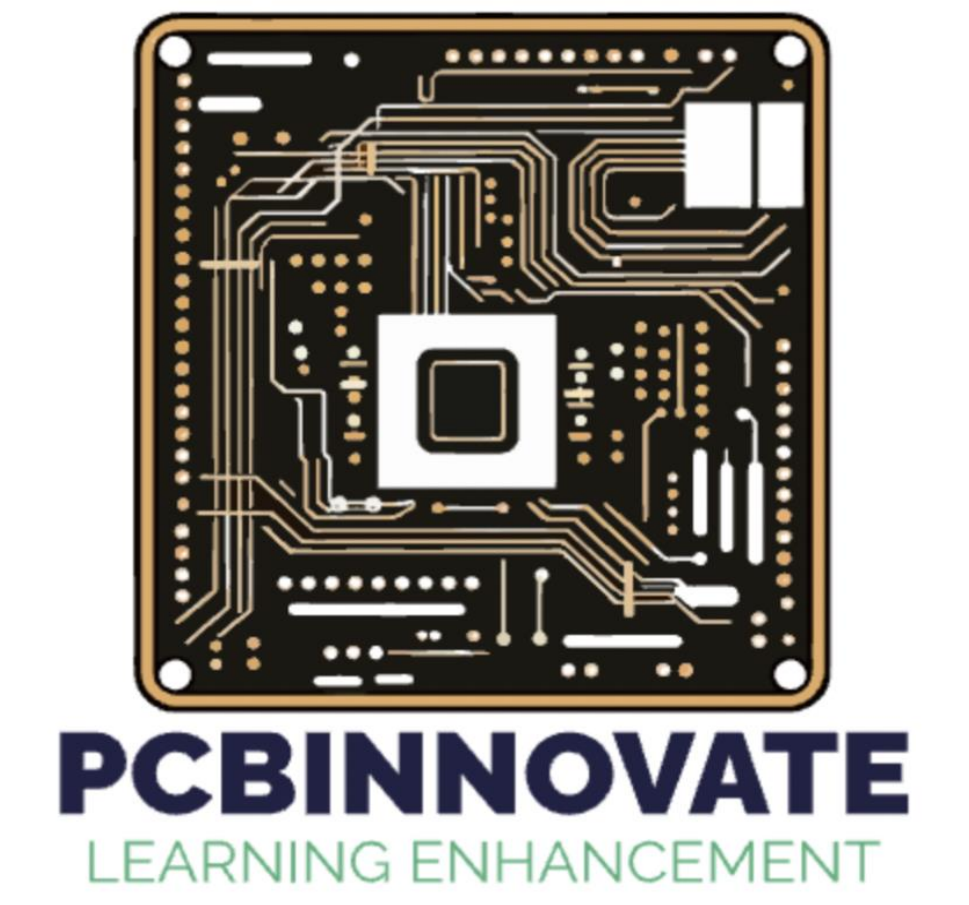


E1.03 - PCBInnovate

Deslynn Vasquez, Juan Castillo, Tanner Ivey, Kennedy Namis, Josh Reyes
 Advisor: Jeff Stevens



Project Overview

Our project is a package of 10 custom printed circuit assemblies (PCAs) with accompanying lab manuals and solutions. This lab package is designed to streamline Texas State University's Electronics I (E1) and Electronics II (E2) lab courses.

- 5 custom Electronics I (E1) PCAs
- 5 custom Electronics II (E2) PCAs
- 12 updated lab manuals
- Lab solutions and results

Design 1 (D1) Requirements

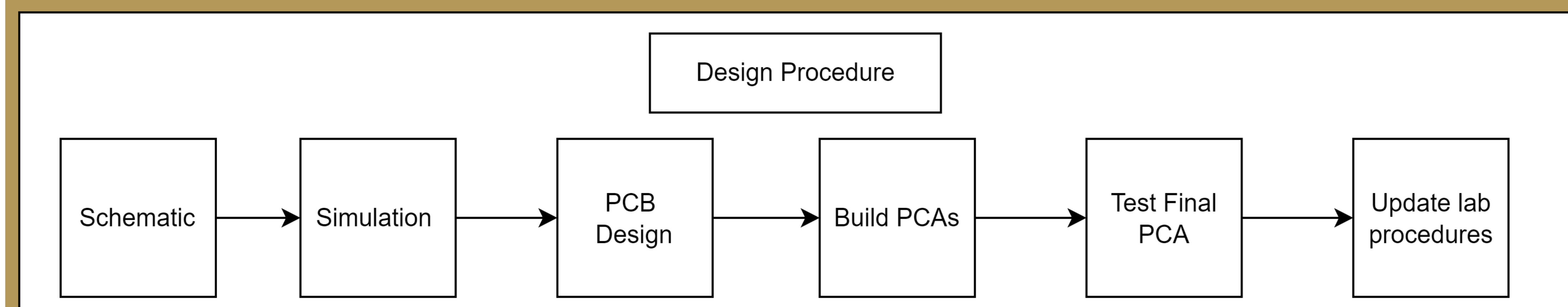
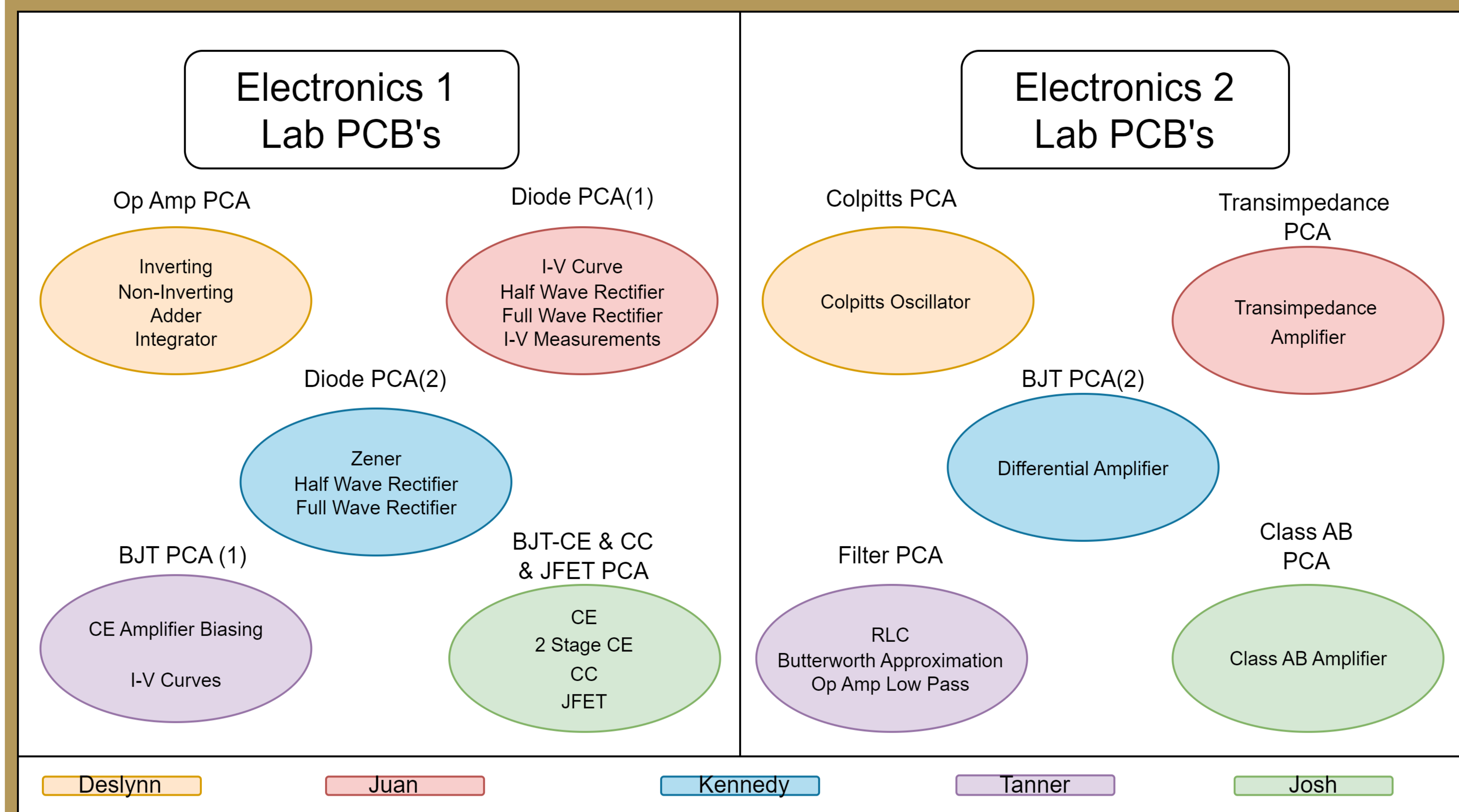
- Validated circuit simulator schematics
- Printed circuit board (PCB) layout schematics
- Updated lab manuals
- Inclusion of additional E1 labs
- Breadboarded example lab
- Example PCA

Test Plans

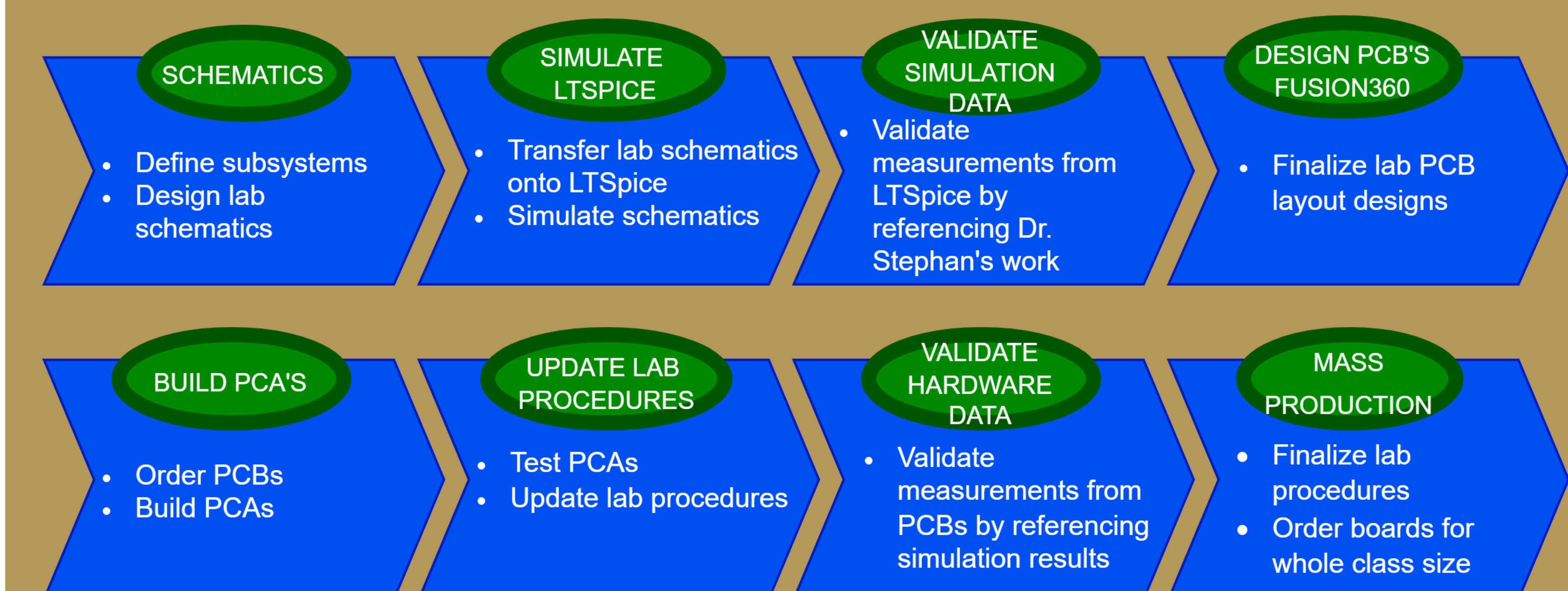
The test plans will be the updated lab procedures

- Add LTSpice instructions for performing simulations
- Indicate labeled test points for circuit board measurements
- Compare simulation to PCA measurements

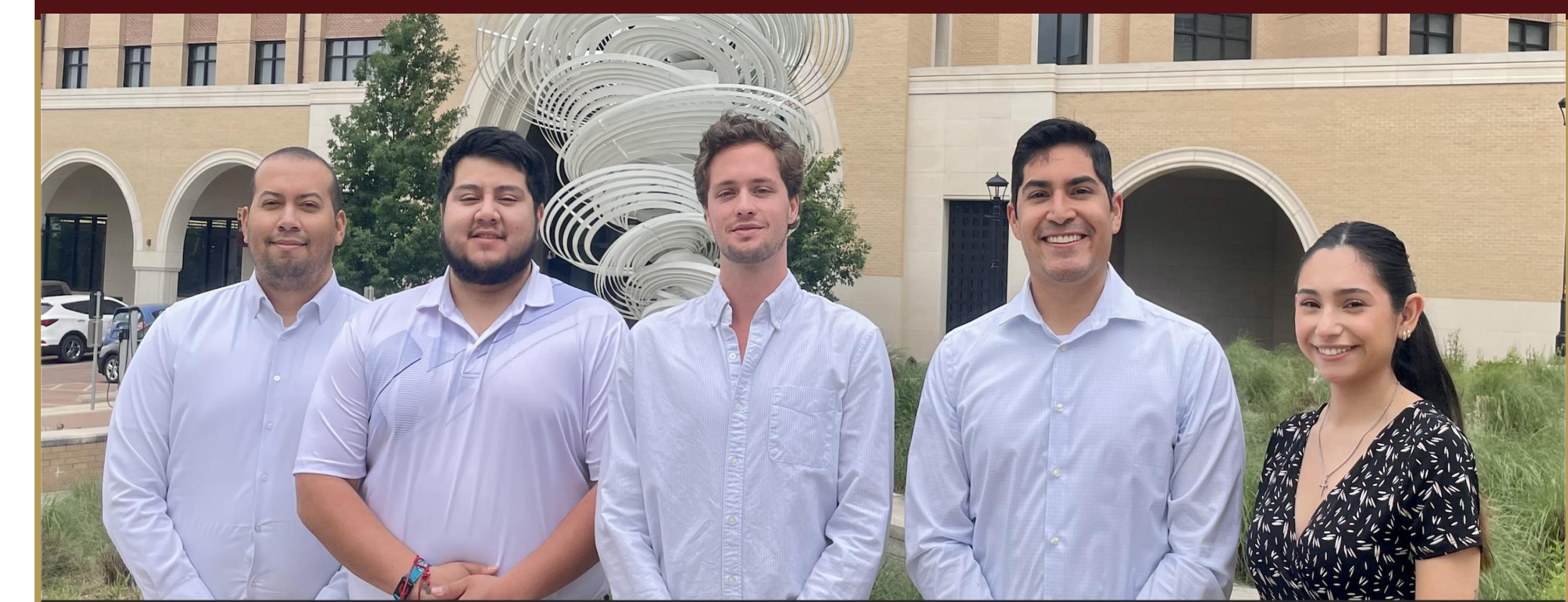
Partitioning of Lab Activities



Process Diagram



Meet the Team

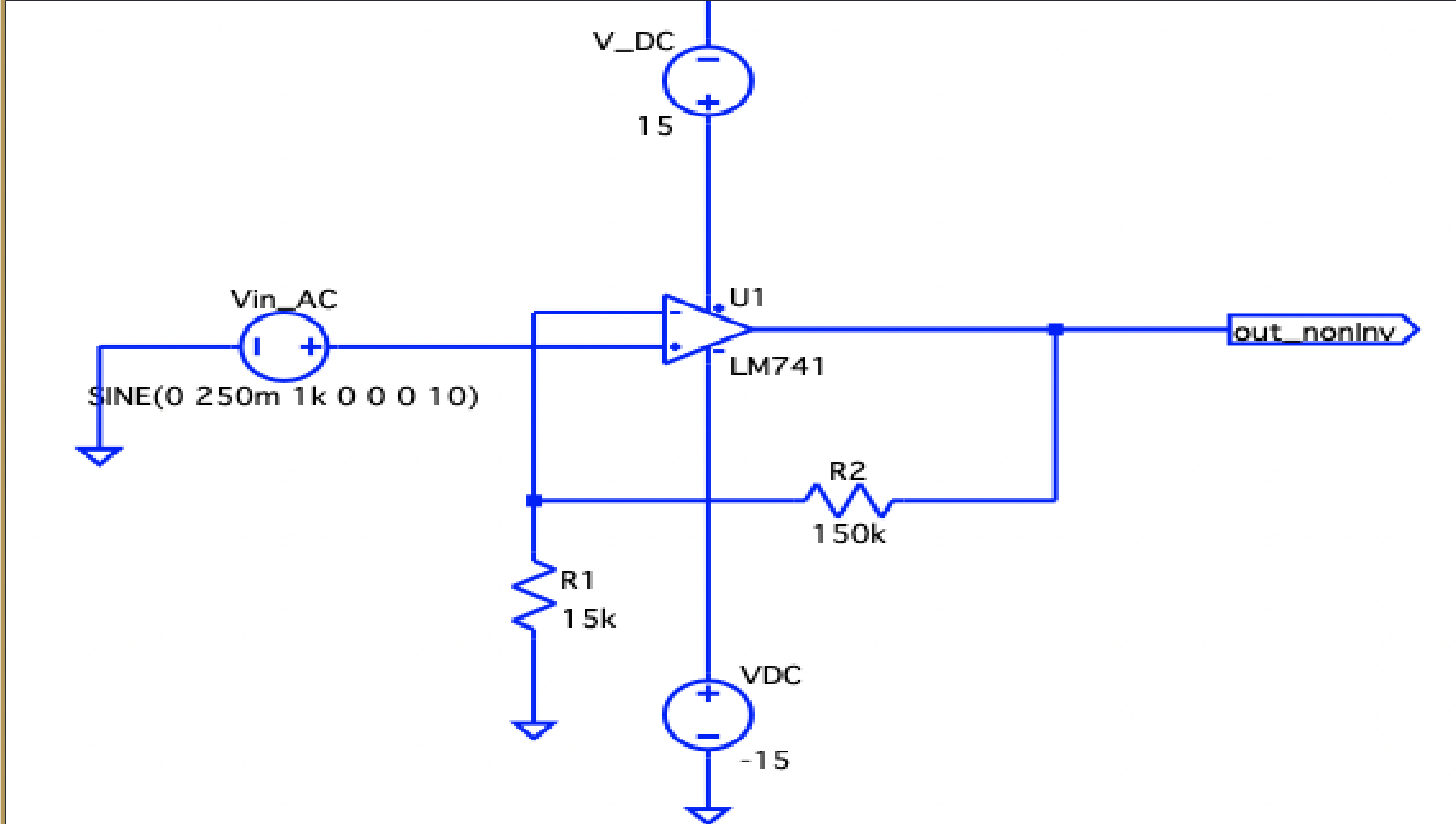


Kennedy Juan Tanner Joshua Deslynn

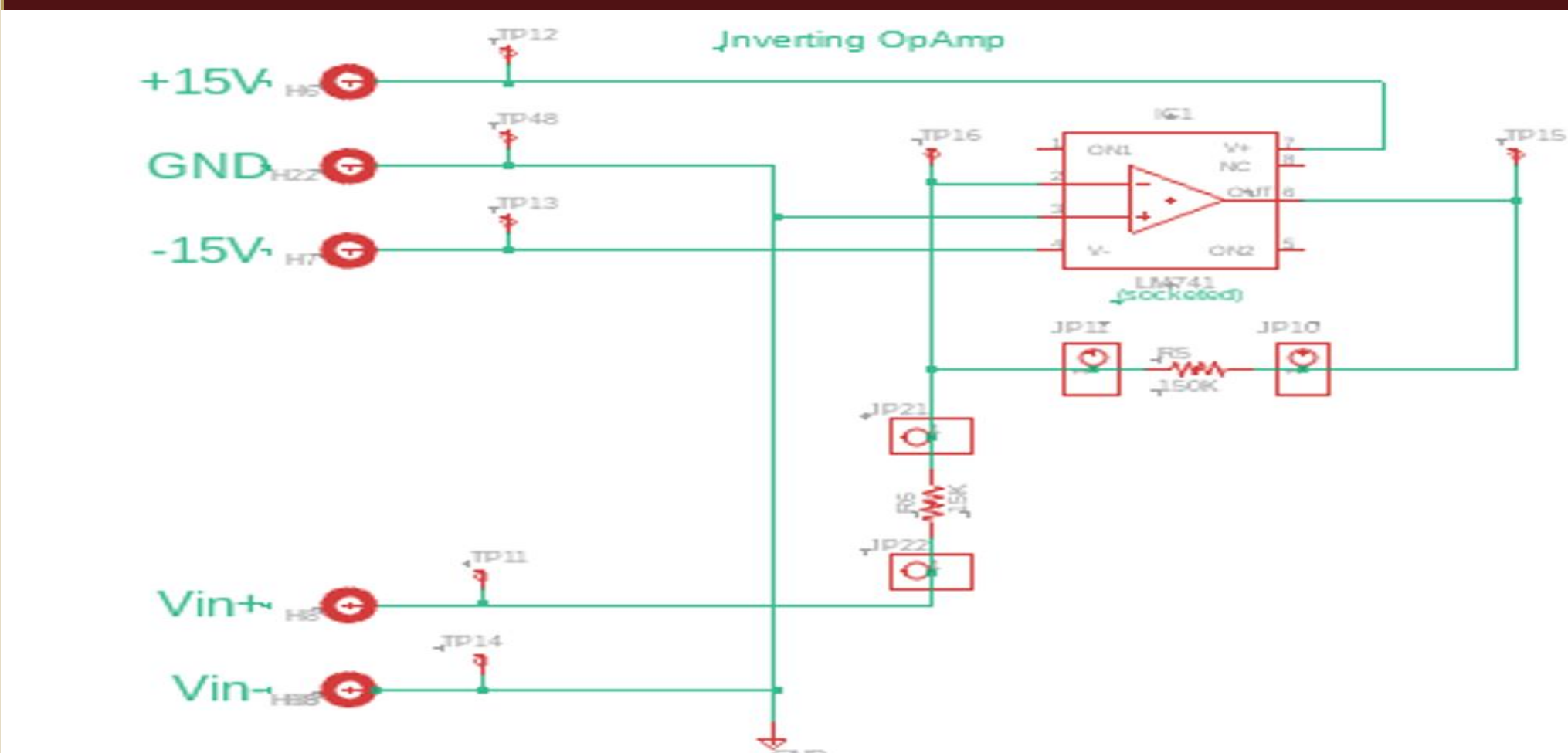
Design 2 (D2) Requirements

- Fully functional PCAs by D2 demo
- Test procedures and characterization results for each E1 and E2 labs by the final design review
- Documented procedures, results and setup for each lab

LT Spice Schematic



Fusion 360



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