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KUALA LUMPUR

SAB35403

PCB DESIGN

LAB 2

Making and Editing Capture Part

LECTURER: DR REZAL BIN MOHAMED

NO	STUDENT NAME	STUDENT ID
1	KHAIRUL ANWAR BIN KHAIRUL SALLEH	54215121186

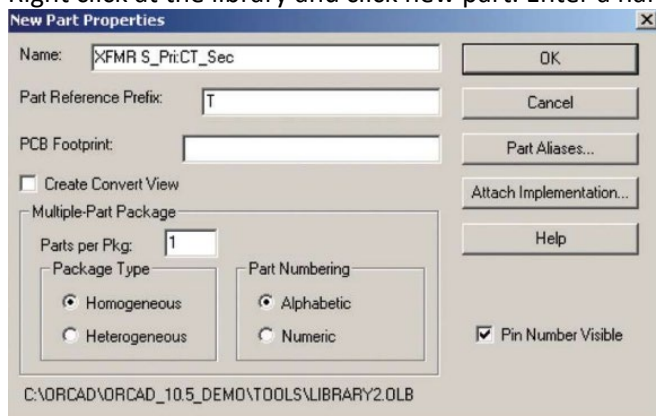
Objectives:

- Understand the fundamentals of OrCAD Capture for schematic design.
- Create new capture parts within the OrCAD environment.
- Edit existing capture parts to meet specific design requirements.
- Utilize OrCAD Capture tools for efficient part creation and modification.
- Ensure accuracy and adherence to design standards while making and editing capture parts.
- Incorporate best practices for organizing and managing capture parts in OrCAD.
- Gain proficiency in the OrCAD Capture interface for a streamlined part creation process.

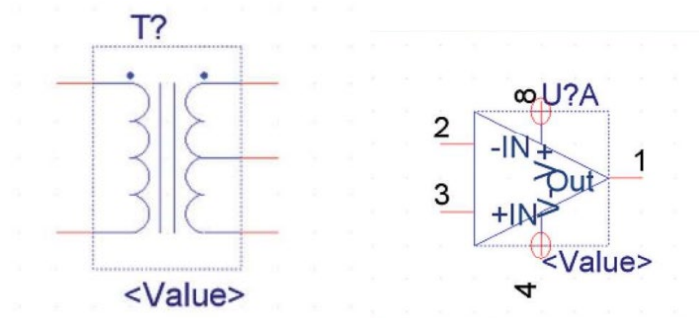
Procedure:

By following the instructions in the lab procedure given at the VLE:

1. Start Capture and create a new library for the part that will be created.
2. Right click at the library and click new part. Enter a name for the part, click ok.



3. Design the circuit using OrCAD Capture.



4. Enter the the pin name and pin number of the part.

Browse Spreadsheet

	Location	Order	Number	Name	Type	Clock	Dot	Pin Length
1	B2	4	4	V-	Power	<input type="checkbox"/>	<input type="checkbox"/>	Zero Len
2	L1	1	6	-IN	Input	<input type="checkbox"/>	<input type="checkbox"/>	Short
3	L3	2	5	+IN	Input	<input type="checkbox"/>	<input type="checkbox"/>	Short
4	R2	0	7	Out	Output	<input type="checkbox"/>	<input type="checkbox"/>	Short
5	T2	3	8	V+	Power	<input type="checkbox"/>	<input type="checkbox"/>	Zero Len

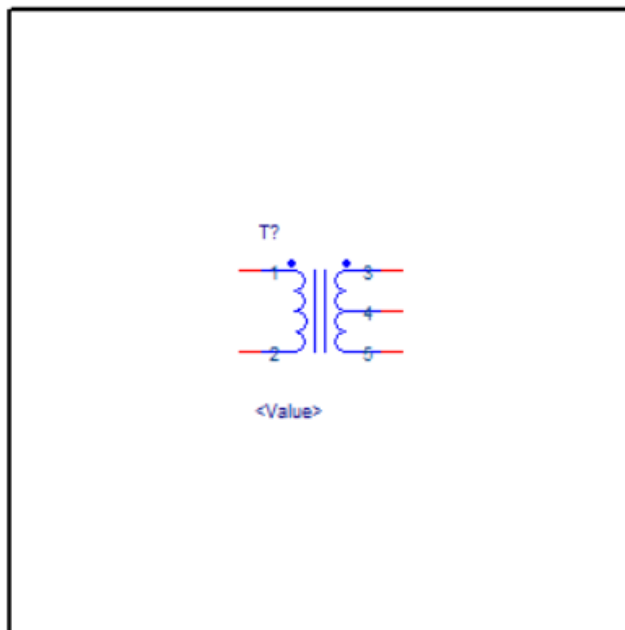
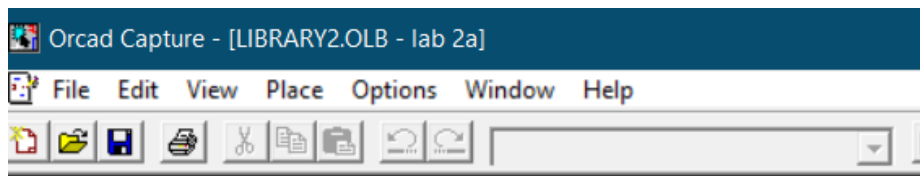
OK Cancel New... Copy Remove Paste Help

5. Save the part.

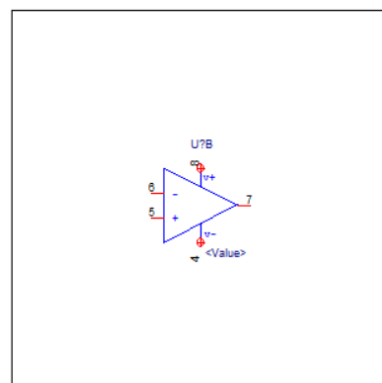
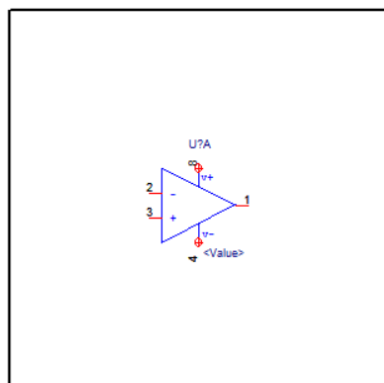
Simulation results:

Select view and click package:

1. Design of a transformer



2. Design of a dual amplifier



Conclusion:

In summary, mastering the skills of creating and editing capture parts using OrCAD Capture is essential for electronics designers. This process involves understanding the software's fundamentals, leveraging its tools efficiently, and creating accurate and customized capture parts for cohesive schematic designs. Adhering to best practices ensures consistency and reliability in projects, while collaborative tools facilitate effective teamwork and communication.

Continuous learning and staying updated on OrCAD Capture's latest features contribute to ongoing professional development. As we conclude our exploration, it becomes evident that mastery of OrCAD Capture empowers designers to tackle the dynamic challenges of the electronics design landscape with confidence and proficiency, fostering innovation and robust designs.