

OrCAD PSpice is **Self Learning** easy to understand series. This comes with **LAB Files** for almost all lessons, **Software to Practice**.

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## **Lesson 1: Building a Design for Simulation**

Learning Objectives

Creating a New Project

Project Templates

The PSpice Project

Available Libraries

What Is a "Part" in EDA?

Placing a Part

Placing Multiple Instances of Parts

Rotating and Mirroring Parts

Connecting Parts Electrically

Valid Connections

Placing Wires

Rubberbanding

Placing Symbols

Editing Properties

Creating Custom Filters

Assigning a Net Alias

Creating a RC Circuit

Lab Objectives

Creating a New PSpice Project

Placing the Voltage Source

Placing the Resistors

Placing the Capacitor

Connecting the Components

Placing the Analog Ground Symbol

Assigning the Capacitor Reference Designator

Labeling Nets

Assigning a DC Value of 10V to the Voltage Source

Saving the File

Property Spreadsheet Editor

Lab Objectives

Editing Properties for Multiple Parts

Additional Lab: Creating a Custom Filter

## **Lesson 2: DC Bias Point Analysis**

Lesson Objectives

Setting Up a Simulation Profile

The Simulation Settings Dialog Box

Running a Bias Point Simulation

Examine the Output File and Bias Display

Value Multipliers

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Calculating Output and Input Noise  
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Noise Analysis  
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