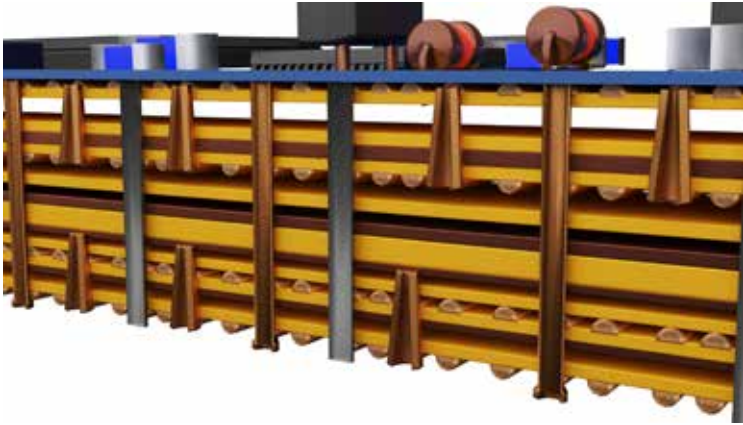


# PRINTED CIRCUIT BOARD (PCB) BASICS

*eLearning courses designed to increase productivity and profits*



## Learning made Simple, Visual, and Interactive

The THORS *Printed Circuit Board (PCB) Basics* course introduces the learner to the broad PCB terminologies and explains PCB technologies, such as board technology and mounting technology. The course also briefly covers the common component packages available in the industry. Presented in THORS' highly visual and interactive learning format, this course will equip the learner with a foundational knowledge of a PCB and its related technologies.

Credit Hours **2**

## Learning Objectives

- Define the common PCB terminology.
- Identify the different active and passive components.
- Explain the various raw materials used in making a single-sided PCB and a multilayer PCB.
- Understand the process of a PCB stackup and the need for a PCB stackup.
- Recall the different types of boards.
- Recognize and define the TMD and SMD component packages.

## Table of Contents

### I. PCB Terminology

- PCB Components
  - Bare PCB
  - Trace
  - PCB Pad
  - Barrel
  - Copper Pour
  - Holes
  - Solder Mask
  - Silkscreen
  - Reference Designator

### I. PCB Terminology (continued)

- Components Mounted on a PCB
  - Passive Components
  - Active Components
  - Integrated Circuits (ICs)

### II. PCB Technology

- Laminate Manufacturing
  - Raw Materials
  - Layers
  - PCB Stackup
- PCB Types
  - Board Technology
  - Mounting Technology
- Component Package
  - THD Package
  - SMD Package

