

# ADVANCED PCB EDITOR TRAINING SYLLABUS



## SYLLABUS DETAILS (2-DAY):

### Day One

#### **LESSON 1: Customizing the OrCAD PCB Editor**

In this lesson, the user will learn how to use Write Locks, identify which files are generated when starting PCB Editor and how to customize the PCB Editor environment through the use of Variables, Function Keys and Aliases.

#### **LESSON 2: Cross Section Editor Options**

In this lesson, the user will learn how to implement features related to Rigid-Flex designs, such as how to create multiple stackups; how to add, edit and manage Physical Zones; how to add non-conductor layers to the cross section.

#### **LESSON 3: Electrical Constraints:**

In this lesson, the user will learn key features of High-Speed Constraint management and explore the design flow using Constraint Manager.

#### **LESSON 4: Differential Pairs**

In this lesson, the user will learn how to define Differential Pairs, create the required constraints in both the Electrical and Physical domains, how to interactively route Differential Pairs and analyze the results in Constraint Manager.

#### **LESSON 5: Region Constraints**

In this lesson, the user will learn the various steps required to set different Physical and Spacing Constraints in different regions of the board.

#### **LESSON 6: Inter Layer Checks (ILC) for Rigid Flex**

In this lesson, the user will learn the typical uses for the Inter Layer DRC checks and how to manage them in Constraint Manager.

### Day One (con't)

#### **LESSON 7: Design For Manufacturing (DFM) Constraints**

In this lesson, the user will learn how to create and enable Design for Fabrication (DFF) Constraints. The user will then learn how to apply those DFF Constraints to elements in the design and review the errors.

#### **Lesson 8: Placement Replication**

In this lesson, the user will learn how to create Placement Replication Modules and how to place those Modules in a design.

#### **Lesson 9: Routing and Glossing**

In this lesson, the user will learn advanced routing techniques, such as Group Routing, using Working Layer mode and Layer Select mode. The user will also learn how to use the Glossing routines included in the Autorouter.

#### **Lesson 10: Test Point Generation**

In this lesson, the user will learn how to set the parameters needed to run the Test Point program (Testprep) on a design using in-circuit testing.