

## TRAINING

Bei dem hier beschriebenen Training handelt es sich um ein Cadence Standard Training. Sie erhalten eine Dokumentation in englischer Sprache. Die Trainingssprache ist deutsch, falls nicht anders angekündigt.

Unter <http://www.FlowCAD.de/TrainingKontakt.php> können Sie sich zum Training anmelden.

<b>Course Title</b>	<b>SIG1-Allegro Sigrity SI Foundations v2015</b>
<b>Course Category</b>	<b>System Interconnect Design – Allegro &amp; OrCAD</b>
<b>Duration</b>	<b>2 Days</b>

### Course Description

In this course, you use the Allegro® Sigrity™ SI software to develop design rules for high-speed designs. You add the resulting physical and electrical constraints to the design through topology templates. These constraints drive the routing of nets on the printed circuit board. You run preroute and postroute signal simulations to analyze the PCB for reflection, crosstalk, and other high-speed design factors.

### Learning Objectives

After completing this course, you will be able to:

- Create, extract, and explore topologies
- Run solution space analysis
- Create an electrical constraint set
- Apply constraints to drive placement and routing
- Run postroute DRC check
- Use template revision to update the ECSet applied to the nets
- Analyze nets on the routed board design for signal integrity
- Create a DesignLink between boards and use it to run multiboard simulation

### Software Used in This Course

- Allegro Sigrity SI Base

### Software Release(s)

- ASI16.64 SPB 16.6

### Course Agenda

#### Day 1

- Allegro PCB SI flow
- Board setup requirements
- Model Assignment
- Default and discrete models
- IBIS to DML translation
- Net extraction
- Sumulation with SigXplorer

**Day 2**

- Sweep simulations
- Trace models
- DRC routing
- Creating a DesignLink
- Postroute analysis
- Reflection simulation
- Differential pairs

**Audience**

- Electrical Engineers
- PCB Designers

**Prerequisites**

You must have a familiarity with digital and analog circuit design methodology  
And a working knowledge of PCB signal analysis and transmission line theory

**Related Courses**

- Allegro High-Speed Constraint Management v16.6QIR8
- Allegro PCB Editor Intermediate Techniques v16.6QIR8