

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

## Allegro Package SI

### Overview

#### Description

This course was formerly called Cadence Advanced Package Engineer.

The Allegro Package SI course covers the use of the Allegro Package SI product. In this course you will use the Allegro Package SI 620 tool to analyze the high-speed nets in a multi-chip module. You will also use the Topology Editor to extract topologies from the design for analysis, as well as create your own topologies to explore design technology tradeoffs.

#### In this course you will learn to:

- Understand Solution Space Analysis
- Create, extract, and explore topologies
- Create an Electrical Constraint Set
- Use constraints to drive IO assignments and routing
- Run post-route signal integrity analysis
- Create a DesignLink and use it to run multi-design simulation
- Use the 3D-field solver to create models and run post-route analysis.

#### Audience

- Electrical Engineers
- MCM Physical Designers

This course is for electrical engineers whose design responsibilities include MCM signal analysis and designers who are concerned with the problems associated with high-speed designs.

#### Software

- Allegro Package SI 620 product - version 15.2

#### Prerequisites

- A basic understanding of the UNIX and Windows operating systems and commands
- Familiarity with digital/analog circuit design methodologies
- A working knowledge of MCM design and signal analysis (some SPICE simulation processes or transmission line theory)

#### Related Courses

- [Advanced SPECCTRAQuest™ Techniques](#)
- [Cadence® Advanced Package Designer](#)

**Course Agenda**

- Introduction
- Design Setup Requirements
- Database Setup Advisor
- The Signal Analysis Library Browser
- Displaying Waveforms
- Unrouted Topology Extraction and Simulation
- Delay Measurements
- Solution Space Analysis
- Parametric Sweeps
- Assigning Constraints in a Topology Template
- Coupled Trace Models
- Crosstalk Simulations
- Constraint Management
- Physical and Electrical Constraints
- Constraint-Driven Routing
- Signal Analysis
- The SigNoise Report Generator
- Performing Post-Route Simulations
- Displaying Waveforms
- System-Level Analysis
- Comparing Design Technologies
- Generating Parasitic Reports
- Generating 3D models