SIEMENS

Course Description

Calibre
Calibre xACT/xACT 3D

Course Code	278811
Software	Calibre 2026.2
User Level	All
PricingID	Contact Us
Live In-Person Duration	2 days

Course Overview

The CalibrexACT/xACT 3D parasitic extraction course will help you understand the basics of parasitic extraction and how to use the powerful Calibre xACT tool suite to extract parasitic information from your IC layouts.

Course Details

Accurate and fast IC layout parasitic extraction is more important than ever before. The Calibre xACT and Calibre xACT 3D tools offer an effective solution. Calibre® xACT™ delivers high-performance parasitic extraction for digital, custom, analog, and RF designs by employing an integrated fast 3D field solver. Calibre® xACT 3D features a 3D field solver modeling engine built on advanced software algorithms to accurately calculate parasitic effects at the transistor level. This training course will help you apply both of these powerful tools to your design analysis needs, guiding you through the use of both tools.

PREREQUISITES

Prerequisites

- Calibre nmDRC/nmLVS training
- Ability to read circuit schematics
- Knowledge of layout verification concepts and tools

PRIMARY COURSE TOPICS

You will Learn How To:

- Generate extracted netlists in multiple standard formats.
- Leverage design hierarchy to obtain accurate results while keeping netlists manageable.
- Run Calibre xACT/xACT 3D using the mode of your choice: GUI or batch.
- Review and interpret extraction results.
- Use advanced reduction techniques to minimize netlist size while maintaining a high level of accuracy
- Extract accurate parasitics in the presence of metal fill.
- Tailor your extraction runs to fit your design type and process.

Hands-On Labs

Throughout this course, extensive hands-on lab exercises provide you with practical experience using Calibre xACT/xACT 3D software. Hands-on lab topics include:

- Running Calibre xACT/xACT 3D in either Batch or GUI mode.
- Interpreting transcripts and reports.

- Cross-probing parasitics in an open layout.
- Exploring possible treatments for hierarchical designs, from flat to full hierarchical.
- Generating extracted netlists in a variety of formats.
- Applying several different extraction reduction options.