SIEMENS

Course Description

Solido Solutions
Solido Characterization Suite

Course Code	306730-US
Software	Solido Solutions 2026.2
User Level	All
PricingID	Contact Us
Live Online Duration	6 hours for each day for 3 days

Course Abstract

This course will introduce students to the Solido™ Characterization Suite, an AI-powered library characterization and verification solution that enables faster, more accurate creation, validation, analysis, and comparison of Liberty .lib models for standard cells, IOs, memories, and custom cells.

This course will help students master Solido Characterization Suite's fast and accurate library characterization tools for a complete characterization workflow. Starting with the basics of library characterization, students will delve into powerful tools such as Solido Characterizer, Solido Generator, Solido Analytics tools including Validate, Compare, Custom Plot, Plotting tools, Transformer tools, and Parser Wizard. They will also learn to use SolidoChar API tools for customized use cases.

Course Details

Learn how to leverage Solido™ Characterization Suite, which enables faster and more accurate library characterization and verification, resulting in better quality libraries for improved power, performance, and area. Hands-on lab exercises will reinforce lecture and discussion topics under the guidance of our industry expert instructors.

PREREQUISITES	PRIMARY COURSE TOPICS

What You'll Learn

- Learn the basics of the digital characterization flow, the need and challenges of library characterization, Liberty files, and LVF variation modeling.
- Explore the features of Solido Characterization Suite.
- Learn how to set up and run Solido Characterizer and follow a reference characterization workflow.
- Walk through the Characterizer Monitor with a detailed understanding of the GUI features.
- Understand Solido Generator's workflow and key capabilities, including Anchor Optimizer, Shell Corners, Generate-LVF, and Generate-Memory workflows.
- Explore the comprehensive collection of tools within Solido Analytics.
- Learn to use the Analytics GUI, Solido Validate and Solido Compare, for .lib validation, outlier detection, rule-based checks, and library comparison.
- Learn to create custom plots and analyze the results in SolidoChar's powerful visualization tools.
- Learn how Solido Library Profiler supports library

alignment, interpolation, plotting, weighting, reporting, and PPA-based library analysis.
- Use “Copy” and “Margin” tools to replicate library data and apply controlled adjustments in the .lib workflows.
- Use “Merge” and “Resize” tools to combine library data and modify table dimensions for the .lib generation.
- Use “Trim” and “Transform” tools to refine, filter, and restructure library data for efficient .lib workflows.
- Explore the SolidoChar Parser Wizard GUI and generate, save, view, and edit the parsers.
- Learn about SolidoChar API tools and explore the SolidoChar API Sandbox editor.

Throughout this course, extensive hands-on lab exercises provide you with practical experience using Solido Characterization. Hands-on lab topics include:

- Exploring the Liberty and SolidoChar RC file structure.
- Investigating SolidoChar help resources.
- Running a characterizer task in the Solido Characterizer reference workflow.
- Exploring the Characterizer Monitor GUI and running a characterization task from its terminal.
- Running the Solido Generator and reviewing its output.
- Running the Solido Generator with Shells and reviewing its output.
- Exploring various panes in the Solido Analytics GUI.
- Configuring and launching Solido Validate and visualizing Results.
- Using the Custom Plot tool and creating custom plots.
- Configuring and launching Solido Compare and analyzing reports.
- Using Trends, View at Corner, and A vs B plotting tools to visualize results.
- Running the Library Profiler and generating a summary report.
- Using the Transformer tools such as the Copy, Margin, Merge, Resize, Trim, and Transform tools.
- Working with parsers in the SolidoChar Parser Wizard.
- Using the SolidoChar API tools.