

Virtuoso Spectre RF Tools



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Title: Virtuoso Spectre RF Tools - v6.1	Type: Instructor Led Course
Product Number: 84085	Price: \$ 2,800.00 Refund Policy
Length: 4 Day(s)	
Category: Analog Design Design Framework Simulation Options Evaluating Simulation Results Hierarchical Design Schematic Entry Front End	
Description:	In this course, you learn to use the Virtuoso® Spectre® RF Simulation Option for Virtuoso® Spectre® Circuit Simulator 6.1. You set up, simulate, and analyze RF applications more quickly and more efficiently, running periodic steady state (PSS) analysis, small-signal analysis, and quasi-periodic steady state (QPSS) analysis.
Learning Objectives:	In this course, you will <ul style="list-style-type: none">• Understand the basic theory of how the Virtuoso Spectre RF Simulator Option works• Set up simulations to achieve a Periodic Steady State Solution (PSS) and Quasi-Periodic steady State Solution (QPSS) by using the Shooting Newton method• Use and apply PAC, PXF, PSP, and Pnoise simulations• Calculate a 1 dB gain compression point, IP3, and voltage conversion gain• Use QPSS analysis to simulate designs with multiple large signals• Run QPAC, QPXF, QPSP, and quasi-periodic noise (QPnoise) simulations in conjunction with QPSS• Effectively use oscillator and phase noise analysis• Calculate phase noise, total output noise, and noise figure for a circuit• Set up and run an envelope analysis• Use the waveform viewing tool, WaveScan, to analyze simulation results
Software:	Virtuoso® Spectre® RF Simulation Option Cadence® Design Framework II Virtuoso® Schematic Editor Virtuoso® Spectre® Circuit Simulator Virtuoso® Analog Design Environment
Agenda:	Day 1 <ul style="list-style-type: none">• Introduction to the Virtuoso Spectre RF Simulator Option• PSS and swept PSS analysis• PAC analysis Day 2 <ul style="list-style-type: none">• PXF analysis• Pnoise analysis• Periodic S-Parameter analysis Day 3 <ul style="list-style-type: none">• Quasi-periodic steady state analysis• Quasi-periodic AC (QPAC) analysis• Quasi-periodic transfer function (QPXF)• Quasi-periodic noise analysis (QPnoise) Day 4 <ul style="list-style-type: none">• QPSP analysis• Envelope analysis
Audience:	Analog IC Designers Technical Professionals RF Designers Analog Designers Microwave Designers Electrical Engineers Design Engineers Cadence Application Engineers Analog/Mixed-Signal IC Designers
Special Notes:	
Prerequisites:	<ul style="list-style-type: none">• Working knowledge of RF design• Fundamental knowledge of the Virtuoso Analog Design Environment

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