

CADENCE VIRTUOSO WITH MMSIM

COURSE FOR LOW POWER ANALOG AND DIGITAL CIRCUIT DESIGN

S No.	Module	Name of the Topic	Prerequisite/Others
1	Module 1	Introduction to circuit simulator	Mosfet Basics Strong knowledge of analog and digital circuit
2		Open source circuit Simulator LT Spice	
3		LT spice Schematic, Library	
4		Different type of circuit analysis	
5		PWL waveform creation	
6		Analog and Digital Circuit with simulator	
7		Limitation of LT spice	
8		Waveform Tools	
9		Full operation with netlist concept	
10		Model file & Analysis with Model file	
11	Module 2	Matlab Basics	Matlab required to provide strong calculation functions
12		Plot command in Matlab	
13		Lt spice Interfacing with Matlab	
		Assignment	
14	Module 3	Linux Platform basics	How to use the terminal to perform non gui operation?
		Assignment and Tutorials	
15	Module 4	Cadence virtuoso Basics,	Support spice, hspice, spectre, verilog, vhdl ,Matlab etc
16		Schematic operation	Shortcuts,Library browsing etc
17		ADE windows utility	Ac, transient,DC, noise etc
18		Different type of Basic analysis	
19		Parametric analysis	
20		Corner analysis	
21		Montecarlo analysis	
22		Basic use of calculator	
23		Matlab interface for plots	
24		Script based operation	
25	CDB to OA Conversion	Require for newer version of MMSIM	
Assignment (Analog and Digital circuit based)			
Books	Rabey	Digital integrated circuit	
	Jacob Baker	Cmos IC and layout design	
Design by Rajeev Pandey			