



EMC Analysis

Course Overview

Agenda

1) Introduction to EMI/EMC

- a. EMI/EMC issues category
- b. Fundamental of Maxwell Equation
- c. EMI/EMC issues and solution
- d. Why EMC-Analysis?

2. Methodology and Techniques of EMC analysis

3. EMI/EMC analysis- Area of interest

- a. Clock
- b. Power Section
- c. High Speed Signals
- d. PCB Basics for EMC compliances

4. EMC Analysis Vs EMC Test

5. EMC standards

6. EMC Analysis

- a. PCB EM Field:
Significance of Resonance analysis over RE test.
Debugging issue and solution techniques.
- b. **Power Section**
EMC issue in Power section.
Decoupling Analysis (Power Plane Impedance Analysis)
DC Drop/ Return Path Analysis
Ground Plane and via shielding effects
- c. **Clock and Signals**
EMC Issues in Clock and signals- Crosstalk, SSN

7. Tips and techniques for EMC analysis on various Tools.

