



## Silicon Valley Technical Institute

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# RELIABILITY AND FAILURE ANALYSIS OF ADVANCED SEMICONDUCTOR DEVICES & PRODUCTS

May 21, 2008  
9am-4pm

This one day Seminar is intended for engineering professionals who like to expand their expertise in the field of Reliability and Failure Analysis (FA) to meet the challenges of VLSI/SoC era, where the success of the Products depends on 1st time silicon success. The Seminar highlights the principles behinds the device reliability and explores the Reliability and FA of Semiconductor devices in depth. Seminar further explores the use of modern CAD tools for modeling and analysis of the reliability and failure mechanisms of semiconductor device and circuits.

The following topics will be covered in the seminar:

- **Introduction and Basic Terminology used in Reliability**
- **Current status of Technology and Reliability**
- **Reliability concepts**
- **FIT, EFR/IFR**
- **IEEE standards and JEDEC procedures**
- **Fundamentals of Statistics**
- **Statistics applied to Reliability**
- **Data distribution Types**
- **Wafer Level Reliability (WLR)**
- **EM(AI/Cu), HCI, TDBD (low k, high k), GOI(gate stack)**
- **Reliability Evaluation of Products**
- **Burn-in Qual Test plan**
- **HTOL**
- **Stress**
- **Storage**
- **Temp Cycles**
- **Latch up**
- **ESD**
- **Introduction and role of FA in Supply Chain**
- **Failure Mechanisms due to Voltage, Temp, environment**
- **FA techniques**

### Schedule

Check-in: 8:30 am –9:00 am

Lecture: 9:00 am - 4.00 pm

Lunch: noon-1:00 pm

### Tuition

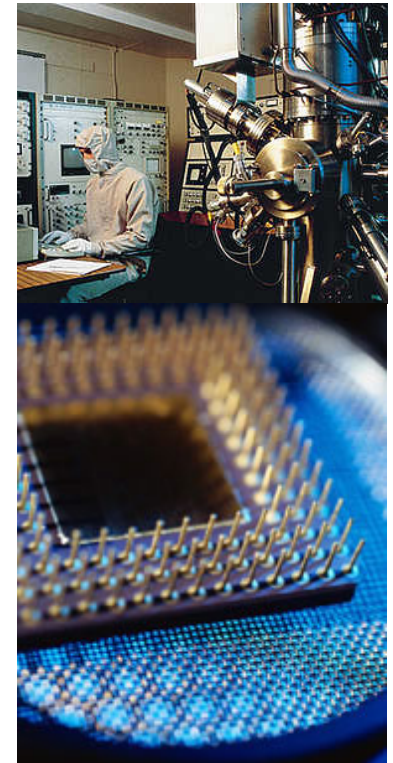
Fee for the seminar is **\$370**. Call SVTI for group discounts and to request on-site training at your facility. The registration fee includes:

- One day of instruction
- Seminar notes
- Certificate

**(Lunch and refreshments are provided at no extra cost)**

### Location

1762 Technology Drive, STE 227 San Jose, CA



### About the Instructor:

**Dr. Kris Verma** has received Ph.D. and MBA from the university of Utah and university of Portland respectively. He is a Semiconductor industry veteran and IEEE millennium medal winner. Dr. Verma has extensive experience in semiconductor technology development and has been involved with high tech companies such as HP, Seagate, and National Semiconductor.

Seating is limited.  
Please register in advance.  
Register on line at  
<http://www.svtii.com> or  
Call: 408-573-0100