



email: [info@firstsilicon.com](mailto:info@firstsilicon.com), tel: +353 (0)1 254 4244: +353 (0)87 915 4878

## **IC Failure Analysis: Techniques, Failure Mechanisms & Best Practice Laboratory Mgt**

### **Course Overview**

This course is a practical introduction to the techniques and equipment used in today's microelectronics industry for root cause physical failure analysis. It covers the tools used, their key concepts and the mindset of the highly effective FA Engineer. A broad review of failure modes and mechanisms is given for both classic and emerging issues in advanced technologies, both at the silicon and the package level. The role of the Failure Analyst in problem-solving as well as Lab metrics and their value to the organization are also discussed.

### **Topics Covered**

The Role of FA; "Data-To-Information-To-Action" Approach; "Cradle-to-Grave" known FA mechanisms (Design-related through to Field Returns); Electrical Fault Isolation; Physical FA Techniques; The Role of Metrics and How to Build a Valued Lab Organisation (aka transition from gate-keeper to problem-solver).

### **Who Should Attend**

FA Engineers & Technicians  
Product Engineers & Technicians  
Quality & Reliability Engineers  
Design Engineers  
Engineering Managers

### **Course Duration**

1-2 days (tailored to suit)