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ESD: Theory, Principles, Industrial Trends and Best Practice Factory Control Guidelines

Course Overview

Despite the fact that Electrostatic Discharge (ESD) damage to Integrated Circuits has been around since the invention of the transistor itself, it continues to pose a serious challenge to the top industry metrics of Cost, Quality, and Reliability. The purpose of this course is twofold: firstly, to give a sound review of ESD theory (sources, models, measurement and protection schemes) and ESD effects (Failure Signatures, Mechanisms and Root-Cause Analysis Techniques). Secondly, to discuss the trends in test methods, circuit design, detection and prevention that have taken place in the last decade.

Topics Covered

The ESD Problem; ESD or EOS??; ESD Models and Test Methods (HBM, CDM, MM); The Physics of ESD Failure; ESD Protection Schemes; Design & Layout Considerations; Fab Process Considerations; Failure Mechanisms & Case Studies; The ESD Design vs. Product Performance Battle; Industrial Trends.

Who Should Attend

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

Course Duration

1-2 days (tailored to suit)