

## ISTFATM 2004: proceedings of the 30th International Symposium for Testing and Failure Analysis, November 14-18, 2004, Worcester's Centrum Centre, Worcester (Boston), Massachusetts

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20442635&lokasi=lokal>

---

### Abstrak

#### Contents :

- Microscopy at the Nanoscale
- Polarization Difference Probing: A New Phase Detection Scheme for Laser Voltage Probing
- Spray Cooling for Time Resolved Emission Measurements of ICs
- A Novel Technique for Detecting High Resistance Fault Using Electroplating
- Magnetic Current Imaging Techniques: Comparative Case Studies
- Electrical Characterization of sub-30nm Gate length SoI Mosfets
- Combination of SCM/SSRM Analysis and Nanoprobing Technique for Soft Single Bit Failure Analysis
- Current Image Atomic Force Microscopy (CI-AFM) Combined with Atomic Force Probing (AFP) for Location and Characterization of Advanced Technology Node.
- Towards High Accuracy Fault Diagnosis of Digital Circuits
- Broken Scan Chain Diagnostics based on Time-Integrated and Time-Dependent Emission Measurements
- Hardware Results Demonstrating Defect Localization Using Power Supply Signal Measurements
- Scanning SQUID Microscopy for New Package Technologies
- Failure Analysis of Short Faults on Advanced Wire-bond and Flip-chip Packages with Scanning SQUID Microscopy
- A Novel Approach to Identifying and Validating Electrical Leakage in Printed Circuit Boards through Magnetic Current Imaging
- Extracting Acoustic signatures of Solder Bump Defects using Wavelet Power Spectra and their Classification using Normalized Cross- Correlation.
- A Novel X-ray Microtomography System with High Resolution and Throughput For Non-Destructive 3D Imaging of Advanced Packages
- Fault Isolation of Large Nets Using Bridging Fault Analysis
- Cavity Up and Stack Die Backside Failure Analysis for Thin Die and High Pin Count Devices
- Investigation of Substrate Dislocation Induced Bit Line Soft Failure
- Overcoming Environmentally Induced Probe Drift for Sub-300nm Fault Isolation
- Dislocation Induced Leakage of p+-Implanted ESD Test Macros in 90nm Technology
- A Purpose-Driven Decision-Based Methodology for Debug and Failure Analysis

- Improved Electrical Failure Analysis / Fault Isolation Tool Development on Server Motherboard Platforms based on Historic Failure Modes
- Intel® Component Diagnostic Technology: Tools and Education for Intel Component Defect Reduction
- Capacity Management Solutions
- A Novel Approach for Enhancing Critical FIB Imaging for Failure Analysis and Circuit Edit Applications
- Contacting Silicon with FIB for Backside Circuit Edit
- IC Specification Improvement Through Direct Passive Component Modification in the FIB
- FIB Chip Repair: Improving Success by Controlling Beam-Induced Damage and Thermal / Mechanical Stress
- Precise Fail site Isolation using a combination of Global, Software and Tester based Isolation Techniques
- Optimised Probing Flow for High Speed Fault Localization
- Diagnostic Fault Simulation for the Failure Analyst
- Diagnosing DACS (Defects That Affect Scan Chain and System Logic)
- Timing Analysis of a Microprocessor PLL using High Quantum Efficiency Superconducting Single Photon Detector (SSPD)
- Analysis of 0.13 um CMOS Technology Using Time Resolved Light Emission
- Photon Emission Microscopy in 90 nm CMOS Technologies
- Quantifying the Work of Adhesion Between an AFM Cantilever Tip and MEMS Test Structures After Packaging
- Reliability of Polycrystalline MEMS : Prediction of the Debugging-time
- Failure Analysis of Electrothermal Actuators Subjected to Electrical Overstress (EOS) and Electrostatic Discharge (ESD)
- Detecting the 10 Angstroms that Changes MEMS Performance
- Scanning Electron Microscope Induced Electrical Breakdown of Tungsten Windows in Integrated Circuit Processing
- The Effect Temperature and Strain Rate on Selected Lead Free Solder Alloys
- Semiconductor Inter-Material Analysis using a FIB Sample Preparation Method and Auger Depth Profiling
- Identification and Characterization of Ultra-thin (<100 nm) Flakes Using a Combination of Face-lapping, High Energy (10 kV) SEM Imaging, and TEM
- Materials Characterization of Lead Free Compositions for Minimum Temperature SMT Processes at the SLI-Second Level Interconnect Solder Joint
- Measurement of Solder Joint Strength and its Dependence on Thermal Aging in Freestanding and Board-Mounted Packages Using a Laser Spallation Technique
- A Methodology for Characterizing System-Level ESD Sensitivity
- Design and Process Related Failure Detection with Reliability Testing Incorporating Varying Power Sequencing and Slew Rate
- A Study of Power Plane Shapes, Their Contribution to Inter-Planar Electric Field

Intensities, and Pre-Preg Breakdown

- Characterization of VCSEL-array Degradation Induced by Elevated Temperature and Humidity
- FiberQA-AVIT System