

# D3T-2008 : IEEE INTERNATIONAL WORKSHOP on DEFECT & DATA-DRIVEN TESTING

Will be held in conjunction with ITC 2008, Oct. 30-31, San Clara, CA

# DDDT

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## CALL FOR PAPERS AND PARTICIPATION

### Theme: Data-Driven Testing (DDT)

Technology scaling is introducing yield as main issue to design and test engineers. Various types of defects are presenting unique challenges to the yield enhancement community. New test data based methodologies are required to detect, monitor, and comprehend the various defect mechanisms at sub-50nm technology nodes and their impact on yield. Data-driven testing (DDT) has been in practice for a number of years and often used for yield learning and analysis. It is now gaining attention more than ever in adaptive test. DDT uses data to reduce defect levels, increase reliability, and to diagnose and solve yield problems. DDT can provide feedbacks on which tests to add/remove, or test subsets (e.g. reduced MINVDD test sets). It can also be utilized for improving quality of logic test patterns (e.g. small delay defect, defect-based) vs. outlier analysis tests (e.g. MINVDD, IDDQ). However, test data has not been easily accessible by smaller companies and researchers in academia. These issues will be discussed in this year's D3T workshop.

The IEEE International Workshop on Defect and Data-Driven Testing (D3T 2008) is aimed at addressing these issues and others related to this year's theme "Data-Driven Testing (DDT)". Paper presentations on topics related to the workshop's theme and to those given below are expected to generate active discussion on the challenges that must be met to ensure high IC quality through the end of the decade.

Outlier Identification

Data-Driven Testing (DDT)

Test Data Analysis

Yield Learning and Analysis Using DDT

Adaptive Test

Data-Mining Methods for Test Data Processing

Low Voltage Testing

Elevated Voltage Testing and Stress Testing

Reliability and Yield

Nanometer Test Challenges

Defect Coverage & Metrics

Mixed Current/Voltage Testing

Economics of Defect Based Testing

Fault Localization & Diagnosis

Noise and Crosstalk Testing

Transition and Delay Fault Testing

To present at the workshop, submit a postscript or Acrobat (PDF) version of an extended abstract of at least 1000 words via E-mail to the Program Chair by Aug. 26, 2008. Each submission should include full name and address of each author, affiliation, telephone number, FAX and Email address. The presenter should also be identified. Camera-ready papers for inclusion in the digest of papers will be due on Sep. 26, 2008. Presentations on cutting edge test technology, innovative test ideas, and industrial practices and experience are welcome. Proposals for Embedded Tutorials, Debates, Panel Discussions or "Spot-Light" presentations describing industrial experiences are also invited.

### AUTHOR'S SCHEDULE:

**Submission of Extended Abstract:**

**August 26, 2008**

**Notification of Acceptance:**

**September 19, 2008**

**Camera Ready Paper:**

**September 26, 2008**

### Technical Program Submissions:

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