Institute *for* System Level Integration
Universities of Edinburgh, Glasgow, Heriot-Watt, and Strathclyde.

www.sli-institute.ac.uk

Call for Participation in a SYDIC-Training Course on

Digital Semiconductor Testing DT02

Course Contents

"Digital Semiconductor Testing" explains the major concepts and methodologies of testing digital devices using ATE equipment.

The course introduces the instrumentation of a Digital Test System, with emphasis on the NPI process. Specifications for digital devices are discussed and the method of verifying each individual parameter is explained in detail.

Many practical aspects of test program development and debug are also included, with examples drawn from the extensive experience of the course presenter.

Day 1:
New Product Introduction process
• how DfT and Test Development activities are integrated
Selection criteria for ATE
• comparison of currently available test systems, based on cost / speed / accuracy / flexibility etc.
Tour of Test Floor at Alba Centre, introduction to Teradyne Catalyst ATE

Day 2:
Digital Testing
• Device specifications
• Test Program development
• Digital Test Vector Generation
• IDDQ Testing
• Device Qualification

Objective

To present the latest test concepts and techniques relating to the new product introduction (NPI) process, specifically on digital semiconductor devices.

Participants will by the end of this course have knowledge of the individual components of a digital test system, the industry standard test techniques.

Target Audience

Design, Test and Product Engineers, as well as Managers, Technical Sales, Marketing and Field Service Engineers.

Duration

3 days
Can be combined with ET01

Dates

17-19 February 2003

Venue

Institute *for* System Level Integration, ISLI

Costs

SYDIC Training partners may be eligible for free places, please consult course organiser.

Day 3:
Student Assignment
Synthesis for Test
DfT
- Boundary Scan
- Scan
- BIST
- ATPG
- Test Standards
Summary of General Test Issues

Pre-Requisites

Participants should be able to understand a typical semiconductor device data sheet. A good electronics background, such as a Diploma or Bachelors EE qualification would be useful, although not essential.

Directions for travel to ISLI may be found at
http://www.sli-institute.ac.uk/img/nav_contacts_ovr.jpg