Panel Session 1

Volume Manufacturing — ICs and Boards: DFT to the rescue?

Moderator: E. McCluskey, Stanford University
Coordinators: J.P. Hayes, University of Michigan
R. Chandramouli, LogicVision

Panelists:
R. Aitken, Hewlett-Packard
J. Hutcheson, VLSI Research, Inc.
N. Murthy, Chromatic
P. Nigh, IBM
N. Sporck, LSI Logic

Abstract:

With demands in electronic products — from high-end workstations to hand-held video games — soaring, time-to-volume is becoming a critical factor in the product cycle. Most products enter through various phases of the design and fabrication process before arriving at the manufacturing stage and the ability to manufacture a large volume of products in a cost-effective manner is critical to the economic success of the product. There are various factors such as diagnosability, test time, complex test programs and ability to get high yields, that affect the time-to-volume process.

DFT techniques can enhance many of the factors stated above such as diagnosability, quality enhancement, and reduced test time. At the same time, there are also interesting questions raised regarding the impact of DFT on performance, area overhead, and silicon cost as well as ATE cost. These and other controversial issues related to the impact of DFT on volume manufacturing will be debated by a group of panelists from various facets of the electronics industry.