SESSION 21
TUTORIAL/PANEL
COMPETITIVE DESIGN METHODOLOGIES FOR ASICs

Chair: Jonathan Allen - MIT, Cambridge, MA
Organizer: K. Keutzer

This large market for application-specific integrated circuits (ASIC's) creates a need for IC design methods that are capable of producing ICs quickly and with relatively low non-recurring engineering costs. A number of radically different approaches, including silicon compilation, behavioral synthesis and logic synthesis, have been offered to address this problem. The purpose of the panel is to discuss the advantages and disadvantages of each of the competing methodologies, to characterize the class of IC architectures for which they have been found to be useful, and to attempt to characterize the relative frequency of use of different ASIC architectural classes. To give a common vocabulary to the discussion, the panel begins with a tutorial introduction to the different design methods.

21.1 TUTORIALS: INTRODUCTION

PANEL:

Panel Members:
Mike Bohm-Harris Corporation, Melbourne, FL
Joseph D’Ambrosio-Delco Electronics Corp., Warren, MI
Kurt Keutzer-AT&T Bell Laboratories, Murray Hill, NJ
Louise Trevilcyan-IBM T.J. Watson Res. Cntr., Yorktown Hgts., NY
Earl Reinkensmeyer-NCR Corporation, Fort Collins, CO