

**THURSDAY  
JANUARY 24, 2008**

**Scaife Hall Auditorium  
Room 125**

**4:30 p.m.**  
Refreshments—4:00 p.m.

## **A Reconfigurable Infrastructure Platform for SoCs and Its Many Applications**

**DR. MIRON ABRAMOVICI**

DAFCA



Co-founder and CTO of DAFCA. Prior he was a Distinguished Member of Technical Staff at Bell Labs in Murray Hill, NJ. He co-authored "Digital Systems Testing & Testable Design", adopted world-wide as standard textbook in this field. He has 28 issued patents and over 100 publications. He was member of the editorial board of IEEE Design & Test of Computers and of Journal of Electronic Testing, and an Adjunct Professor of Computer Engineering at the Illinois Institute of Technology, Chicago, IL. He is a Fellow of IEEE.

This talk will present a reconfigurable infrastructure platform for SoCs. This platform supports a set of tools for in-system, at-speed validation and debug of a new SoC, which is the most difficult phase in its development process. The validation and debug applications include on-chip logic analysis, non-intrusive performance monitoring, assertions in silicon, on-chip functional block test, in-system scan dumps, fault and error injection, error fixing in silicon, and what-if experiments. Additional applications such as on-line testing and security monitoring are also possible. We will describe the experience with several chips using this approach and we will discuss future research directions.

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