

*Title of Seminar: Paradigm Shift: Functional and Structural Built-in Test
for Analog and RF Circuits*



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Abstract:

Analog and RF test has been a niche domain where test patterns are developed based on experience of the test engineer and specifications of the product. This approach worked well particularly when analog and RF circuits have been implemented by mature processes where defect rates were better controlled. Even then, this ad-hoc testing process leaves the IC vendors with no quantitative metric of defect coverage and no recourse if testability becomes a major bottleneck for time-to-market. Seemingly endless integration of system components, including RF devices on a single die or package requires a paradigm shift for testing analog and RF devices. This presentation provides an overview of Built-in Self Test (BIST) efforts for RF and analog circuits and covers both functional and structural BIST methods.

Bio:

Sule Ozev obtained her B.S. degree in Electrical Engineering from Bogazici University, Turkey in 1995, and her Ph.D. in Computer Science and Engineering from UC San Diego, USA in 2002. She has been a faculty member, first at Duke University and then at Arizona State University since 2002. Her research interests include test methods, statistical test metrics, and built-in test and calibration for analog/RF and mm-wave circuits as well as MEMS devices. She has published over 200 papers in this domain and has won 11 best paper awards at various IEEE conferences. Dr. Ozev holds 6 US patents.

Host:

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