

3rd IEEE International Workshop on **Test and Validation of High Speed Analog Circuits** Disneyland Hotel, Anaheim, California, USA September 12-13, 2013

Held in conjunction with IEEE International Test Conference 2013

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Amit Majumdar Tel: +408-879-3097 Fax: +408-626-6499

E-mail: amit.majumdar@xilinx.com

For general information contact:

Call for Papers

Scope

Demand for higher bandwidths never lets up in the world of communication and networks. While we struggle today to make 40Gbps line-rates a reality, plans are already afoot for 400Gbps. Similarly in wireless communications, 60Ghz is coming on-line today, but designers are already planning the next few generations up to Thz. What is high-speed? It clearly depends: on the medium of transmission, on power constraints, on process technology, on link parallelism, on cost and quality requirements and on the electrical and thermal environment of operation. These constraints define a multi-dimensional box that designers are placed in and asked to provide the highest bandwidth they can, inside a room whose walls seem constantly to move inwards. A lot of the functionality is increasingly analog with strict standards regulating their design and use. And it is a race with no end in sight.

The IEEE Workshop on Test and Validation of High Speed Analog Circuits is designed to address a big aspect of this race: cost and quality. Increasing speed has given rise to a spike in complexity of analog circuits. This has been further stressed by the need for integrating with digital functionality in SOCs. Whether embedding in monolithic dice or integrating in a SiP, integration has thrown its share of problems. Defect coverage alone is no longer sufficient to qualify a die. We need parametric coverage, as early in the manufacturing flow, as possible. This workshop addresses defect and parametric coverage of all analog circuits involved in making high bandwidth communications a reality. The scope of the workshop includes:

- SERDES test and characterization
- * RF circuits test and characterization
- Self-healing, self-calibration and self-adaptation techniques
- Built-in test and design-for-test
- * High speed data converter test and characterization
- * 3D and KGD considerations
- * High speed PLL test and characterization
- * Clock jitter and skew measurement
- * Phase noise measurement
- Precision delay-line test and characterization
- AC and DC supply noise measurement
- Analog fault modeling and fault simulation
- Analog test bus design
- ATE technology
- * Board technology
- Economics of test and yield optimization

Author information

Prospective authors are invited to submit extended summaries or full papers up to 6 pages. Proposals for special sessions, hot topics, and panel sessions are also invited. Submissions are due no later than June 15th, 2013. Submissions should be made by e-mail to

Amit Majumdar E-mail: amit.majumdar@xilinx.com Haralampos Stratigopoulos E-mail: haralampos.stratigopoulos@imag.fr

Notification e-mails of acceptance will be sent by July 15th, 2013.

Authors of accepted papers, special sessions, hot topics, and panel sessions should submit final manuscripts by July 31, 2013 for inclusion in the Workshop Digest of Papers, which will be provided to the attendees.

