

CALL FOR PAPERS

Special Session on Special Session on Verification of Hardware Systems and Circuits

to be held in the frame of
IECON 2013 - The 39th Annual Conference of the IEEE Industrial Electronics Society
10th - 13th of November 2013, Austria Center, Vienna, Austria



TOPIC OF THE SPECIAL SESSION

The reliability and correctness of designed hardware products gets an intensified attention in recent years. Design flaws which are shipped to customers damage the reputation of the manufacturer especially in industrial applications but also in less sensitive fields like consumer devices. Verification of designed products start at system level and will reach down to the manufactured product where test sequences end the verification process. Verification is typically applied on purely digital circuits but has been extended into the analog and mixed-signal domains in past research. The verification is either based on a formal proof or tries to identify undesirable behavior in a confidence based classical simulation. In contrast to classical simulation that is based on a limited set of input vectors formal verification results in a proof that the designed hardware corresponds to the analyzed specification properties. This special session addresses all the aforementioned topics and encourages researchers and industrial experts to propose new ideas, methodologies and practical approaches in this field. Topics of interest include, but are not limited to:

SPECIAL SESSION ORGANISATION

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The organizers look forward to welcoming you to Vienna, Austria from 10th to 13th November 2013.

Important Dates

Regular Paper submission:	April 01, 2013
Notification of acceptance:	June 15, 2013
Final submission:	August 01, 2013



- Formal verification of hardware circuits (digital, mixed-signal)
- Assertion based verification
- Symbolic simulation
- Functional verification
- Model checking
- Hybrid system verification
- Verification in the analog domain
- Verification in industrial practice
- Integration into state of the art design flows
- Verification in combination with testing

SUBMISSION OF PAPERS

The working language of the conference is English. Submit the full paper as PDF following the IEEE layout requirements by using the templates given at the conference web page. Accepted and presented papers will be published in an IEEE Proceedings volume and will be sent to IEEE Xplore. In addition, selected authors are encouraged to submit their papers for publication in the IEEE Transactions on Industrial Electronics or in the IEEE Transactions on Industrial Informatics.

THE CONFERENCE

IECON 2013 is the 39th Annual Conference of the IEEE Industrial Electronics Society, focusing on industrial and manufacturing theory and applications of electronics, controls, communications, instrumentation and computational intelligence. The objectives of the conference are to provide high quality research and professional interactions for the advancement of science, technology, and fellowship.

Papers with new research results are encouraged for submission. IECON 2013

will be held concurrently with the 7th IEEE International Conference on E-Learning in Industrial Electronics (ICE-LIE 2013). Participation in any of these events just requires a single conference registration fee. The world's industry, research, and academia are cordially invited to participate in the wealth of presentations, tutorials, special sessions and social activities, and furthermore, enjoy beautiful Vienna.