First Call for Papers

The IEEE 11th International Conference on ASIC

November 3-6, 2015  Chengdu, China

Sponsored by IEEE Beijing Section
Co-Sponsored by Fudan University
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IEEE SSCS Shanghai Chapter
IET Shanghai Branch
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Chinese Institute of Electronics (CIE)
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The 11th International Conference on ASIC (ASICON 2015) will be held in Chengdu, China, during November 3-6, 2015. The conference is intended to provide an international forum for VLSI circuit designers, ASIC users, System Integrators, IC manufacturers, process & Device Engineers and CAD/CAE tool developers to present their updated progresses, developments and research results in their respective fields. The four-day event features keynote speeches on state-of-the-art VLSI circuit, device, process design and manufacturing technologies, regular paper presentations, as well as tutorials delivered by leading experts in the respective fields. The Excellent Student Paper award will be announced at the conference. Additionally, an exhibition on EDA tools, foundry technologies, IC processing/Testing facilities, and novel ASIC products will be held during the conference.

The Scope of the Conference

Papers are solicited in, but not limited to, the following:

I. Design Techniques

[1] VLSI Design and Circuits
- Low power techniques, high-speed circuits
- Embedded processors and DSP
- Chaos/neural/fuzzy-logic circuits
- Programmable devices (PLD, EPLD, HDPLD, FPGA, etc)
- NoC

[2] Analog, Mixed Signal and RF Circuits
- Data converters (ADCs and DACs)
- RF circuits(narrowband RF, ultra low power and millimeter-wave circuits (MMDS, 60GHz), RF/IF and power amplifiers, frequency generators, RF switches, power detectors, active antennas)
- Power systems and power electronic circuits

[3] Application-Specific SoCs
- Auto-mobile electronics and Industry Control
- Biomedical circuits and systems
- Sensory systems
- Graph theory and computing
- Neural systems and Applications
- Mobile Computing

- Receivers, transmitters technologies for wireless systems (WLAN, WPAN, WMAN, GPS, DVB/DMB, UWB, Bluetooth, GSM/EDGE/CDMA/UMTS/3G/4G base stations and handsets, TV, radio, satellite)
- RFID
- ISM band systems
- Digital/analog/mix-signal testing
- Design for testability and reliability
- Advanced ESD protection design
- Test vector compression and silicon debug and diagnosis
- Variation-aware design
- Static and dynamic defect and fault recoverability

[6] Advanced Memory
- DRAM & SRAM
- Flash Memory
- Ferroelectric Memory
- Phase Change Memory, RRAM, MRAM

[7] FPGA
- Tools and Design Technique for FPGA
- Architectures for FPGA
- Device technology for FPGA
- Application of FPGA

II. CAD Techniques
[8] Circuits Simulation, Synthesis, Verification and Physical design
- Analog Circuits modeling and simulation
- Logic synthesis, simulation and formal verification
- Partitioning, placement and floor planning
- Routing and detailed physical design

[9] CAD for system, Design for Manufacturing and Testing
- Embedded systems
- Mixed technology/domain, reliable and alternative systems
- Design for manufacturability and testing

III. New Techniques, New Processing, New Devices and Their Applications
[10] MEMS Techniques
- Piezoelectric and MEMS application
- Pyroelectric/IR/optical application
- Sensors, Chemical and Bio-Chips

- Nano Devices and NEMS


[14] VLSI application for Energy generation, conservation and control

[15] Processing Modeling & Simulation

IV. Other VLSI Design and Device Related Topics

**Papers Submission**

Prospective authors are requested to submit full-length papers in English of no more than four pages using the proceedings format, double columned, 10pt fonts including figures, tables and reference. For further information on paper, please refer to “template”. The papers are to be submitted in final form and, if accepted, will be published as submitted. All submissions must be delivered through website. For student authors who want to compete for the Excellent Student Paper, please remark it on an additive page. Detailed instructions for paper preparation and submission can be found at web-site of the conference.

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**For further information please visit our web site:**
http://www.asicon.org

**Deadline of papers submittal is June 30, 2015**

**Paper acceptance/rejection will be informed by Aug. 15, 2015**