



<http://www.asicon2009.com>

## First Call for Papers

# IEEE ASICON 2009

The IEEE 8<sup>th</sup> International Conference  
on ASIC

October 20-23, 2009, Changsha, China

Preess Resort & Hotel

### General Co-Chairs

Ting-Ao Tang

Chenming Hu

Satoshi Goto

Xuejun Yang

Richard M.M. Chen

### Advisory Committee

#### Co-Chairs

Yangyuan Wang

Omar Wing

Ernest Kuh

Qianling Zhang

Lin Yang

### Program Committee

#### Co-Chairs

Xiaoyang Zeng

Shuming Chen

Hidetoshi Onodera

Bin Zhao

Cheng-Wen Wu

Pei-Hsin Ho

Martin Wong

### Organizing

#### Committee

#### Co-Chairs

Mengqi Zhou

Huihua Yu

### Industry Liaison

Junyan Ren

### Tutorial Committee

Linming Jin

### Secretary-General

Yun Chen

Sponsored by *IEEE Beijing Section*

*Fudan University*

Co-sponsored by *IEEE China Council*

*National University of Defence, Tech*

*IEEE SSCS Shanghai Chapter*

*IET Beijing Branch*

Technically Co-sponsored by *IEEE-CAS, IEEE-SSCS*

*Chinese Institute of Electronics (CIE)*

Supported by *National NSF of China*

The 8<sup>th</sup> International Conference on ASIC (ASICON 2009) will be held in Changsha, China, during October 20-23, 2009. The conference is intended to provide an international forum for VLSI circuit designers, ASIC users, System Integrators, IC manufacturers and CAD/CAE tool developers to present their updated progresses, developments and research results in their respective fields. The three-day event features keynote speeches on state-of-the-art VLSI design methodologies and circuit techniques, regular paper presentations, as well as tutorials delivered by leading experts in the respective fields. Post conference tours will be arranged. Additionally, an exhibition on EDA tools, foundry technologies, IC test facilities, and novel ASIC products will be held during the conference. The Excellent Student Paper award will be announced at 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

- [4] Circuits and Systems for Wireless Communications
    - 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
  - [5] Testing, Reliability, Fault-Tolerance
    - Digital/analog/mix-signal testing
    - Design for testability and reliability
    - Test vector compression and silicon debug and diagnosis
    - Variation-aware design
    - Static and dynamic defect and fault recoverability
  - [6] Advanced Memory
    - Flash Memory
    - Ferroelectric Memory
    - Phase Change Memory & RRAM & MRAM
- II. CAD Techniques**
- [7] 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
  - [8] CAD for system, Design for Manufacturing and Testing
    - Embedded systems
    - Mixed technology/domain, reliable and alternative systems
    - Design for manufacturability and testing
- III. Emerging Applications and New Technologies**
- [9] MEMS Techniques
    - Piezoelectric and MEMS application
    - Pyroelectric/IR/optical application
    - Chemical and Bio-Chips
  - [10] Nanoelectronics and Gigascale systems
    - Nano Devices and NEMS
  - [11] New Devices, Hetro-integration, 3-D integration and so on
  - [12] VLSL New Processing, New Technologies and their integration
  - [13] VLSI application for Energy generation, conservation and control
- IV. Other VLSI Device and Design 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. **Tutorial proposals are also invited.**

**Contact persons:**      **Prof. Huihua Yu**                      **Prof. Yun Chen**  
 Email: [hhyu@fudan.edu.cn](mailto:hhyu@fudan.edu.cn)      Email: [asicon\\_org@fudan.edu.cn](mailto:asicon_org@fudan.edu.cn)  
 (Conference Issue)                      (Paper Submission)

**For further information please visit our web site:**

**<http://www.asicon2009.com>**

**Deadline for receipt of papers submittal is [May 31, 2009](#)**

**[Paper acceptance/rejection will be informed by July 15, 2009](#)**