



# IEEE

# FIRST CALL FOR PAPERS

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# IEEE CIRCUITS AND SYSTEMS SOCIETY



## 25<sup>th</sup> IEEE International SoC Conference (SOCC)

September 12 – 14, 2012

Niagara Convention Center, Niagara Falls, NY, USA

System on Chip (SoC) has been the enabling technology behind the evolution of many of today's ubiquitous technologies, such as Internet, mobile wireless technology, and high definition television. The information technology age, in turn, has fuelled a global communications revolution. SoC devices today include some or all of the major electronics technologies, comprising RF, analog, optical, digital, and Nano-Electro-Mechanical Systems (NEMS). Recent advances in systems, deep-submicron and nano process technology are unleashing new opportunities, but also creating new challenges. Managements of design and verification complexity, EDA tools, on-chip communication, and design reuse for SoCs are significant complications, and SoC fault detection is becoming more difficult as chip size is increasing.

The SOCC Conference is a premier forum for sharing advances in SoC technologies and applications in the areas of digital systems, circuit architectures, design methods, tools, automation, manufacturing, test, and emerging technologies. The 25<sup>th</sup> SOCC will be held in the City of Niagara Falls, New York and will offer three days of technical papers, technical workshops, and a vendor exhibition. For updates, please check our website regularly <http://www.ieee-socc.org> or follow us on twitter "@ieeee\_socc" (or [http://twitter.com/ieee\\_socc](http://twitter.com/ieee_socc)).

### SUBMISSION OF PAPERS AND WORKSHOP/TUTORIAL PROPOSALS

Electronic paper submissions require a full paper in *pdf* format, limited to **six** double-column IEEE format pages, and including figures and references. You must submit a 50 word abstract by April 16, 2012 and the full paper **by April 23, 2012**. SOCC 2012 also welcomes embedded tutorial proposals in the related areas of SoC. A proposal with title, a half-page summary, and speaker's short biographies should be submitted to the Tutorial Chair, **by April 23, 2012**. The SOCC proceedings will be published on **IEEE Xplore®**. **Efforts will be made to publish select papers as a special section in an international journal.**

### SPONSORSHIP OPPORTUNITIES

2012 marks the conference silver jubilee. We expect the conference to attract significantly more participants from all areas of SOC. We seek sponsorship from corporations, government and academia at various levels. For sponsorship and exhibition, please contact the SoC Conference office at [info@ieee-socc.org](mailto:info@ieee-socc.org)

### SOCC TECHNICAL SCOPE

Papers are invited which address new and previously unpublished results in the area of Systems on Chip, and related topics.

- Analog, Mixed-Signal, and Biomedical Circuits and Systems
- Wireline and Wireless Communication Circuits and Systems
- Digital Signal Processing (DSP) Circuits and Systems (*Video, Multimedia, Software-Defined Radio, etc.*)
- Green Circuits, Systems, and Design Methodologies
- Embedded Systems, Multi/Many Core Systems and Embedded Memory Technologies
- Network on Chip (NoC), Interconnects, and 3D-IC
- Reconfigurable and Programmable Circuits and Systems, System on Programmable Devices (*FPGAs*)
- System Level Design Methodology, EDA and Design Tools for SoC
- Signal Integrity, Design for Testability, and Design Verification
- Design for Manufacturability, Variation-Aware Methodologies

### IMPORTANT DATES

Paper submission deadline:	Full submission: April 23, 2012 (Abstract due April 16 <sup>th</sup> )
Notification of acceptance:	June 15, 2012
Final camera-ready paper due:	July 13, 2012

### ORGANIZING COMMITTEE

Conference General Chair: *Ramalingam Sridhar, Univ at Buffalo*  
 Technical Program Chair: *Norbert Schuhmann, Fraunhofer IIS*  
 Technical Program Co-Chair: *Kaijian Shi, Cadence Design Systems*  
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Please visit the conference web site <http://www.ieee-socc.org> or contact the SoC Conference office at [info@ieee-socc.org](mailto:info@ieee-socc.org) for more information.