

ESSCIRC / ESSDERC STEERING
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CONFERENCE VENUE

The 2009 ESSDERC-ESSCIRC Conference will be organized in Athens, Greece for the first time. Athens of today is a modern metropolis, a vibrant, appealing, hospitable and exciting city. Athens is also a cultural channel, the city of artists and a scientific centre. Athens, a gateway between the east and the west, hosts artistic happenings, festivals, conventions, athletic competitions, and celebrations.

Conference venue

The Divani Caravel Hotel faces the spectacular Acropolis and it is located few minutes walk from the city centre, and very close to the National Art Gallery, the Byzantine, the Cycladic Art and the Benaki museums, many major companies, shopping areas, embassies and historical sights.



<http://www.esscirc2009.org>

CONTACT INFORMATION

Local Organization

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ORGANISING COMMITTEE

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Tutorials and Workshops Chairs

ESSCIRC: Matthias Bucher
Technical University of Crete
ESSDERC: Charalambos Dimitriadis
University of Thessaloniki

Local Organising Committee

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Harry Contopanagos NCSR Demokritos

Fringe Poster Session Chairs

Panos Dimitrakis NCSR Demokritos
Stavros Chatzandroulis NCSR Demokritos

Conference Secretariat

Efi Papastavropoulou Triaena Tours & Congress



<http://www.esscirc2009.org>

ESSCIRC

ATHENS-GREECE

14-18 September



DIVANI CARAVEL HOTEL

35th European Solid-State Circuits Conference

Paper submission deadline:

April 4th, 2009

Electronic submission

www.esscirc2009.org



FINAL CALL FOR PAPERS

The aim of the ESSCIRC conference is to provide an annual European forum for the presentation and discussion of recent advances in solid-state circuits. ESSCIRC, and its sister conference ESSDERC, (which focuses on solid-state devices and technologies), share a single Steering Committee, and are held together to enable both communities to share advances in the technologies and design which enable increasing levels of sophistication and performance in integrated systems. The advances in silicon technology and the conflicting opportunities and constraints on designers demand closer than ever interaction between technologists, device experts, and circuit and system designers. While keeping separate Technical Programmes, ESSCIRC and ESSDERC will share Plenary Presentations and Joint Technical Sessions on topics chosen to bridge the two communities. Attendees registered for either conference are encouraged to attend any of the scheduled parallel sessions of their choice. Submissions to ESSCIRC2009 are solicited describing original contributions in the field of microelectronic circuit design and implementation. The conference's core themes are set out below. The programme committee also welcomes novel contributions from other related areas.

Analog Circuits

Amplification stages, power amplifiers for audio applications, continuous and discrete time filters, comparators, instrumentation and sensor interfaces, voltage references, LDOs, DC-DC converters, HV circuits.

Data Converters

Nyquist rate and oversampled A/D and D/A converters, sample-and-hold circuits, A/D and D/A converter calibration and error correction circuits.

RF Circuits and Devices

RF/IF/analog baseband circuits including LNAs, mixers, PA, IF amplifiers, power detectors, modulators, demodulators, VCOs, PLLs, frequency synthesizers, frequency dividers, integrated passive components including microwave components over silicon substrates
Wireless and Wireline Communication Circuits
Receivers/transmitters/transceivers for wireless systems, base stations and handsets, advanced modulation systems, TV/radio/satellite receivers, UWB and data links, wireless sensor networks, RFIDs.

Sensors, Imagers, MEMS, Bioelectronic Integration

Sensor subsystems and interfaces, accelerometers, temperature sensing, imaging circuits, MEMS subsystems, RF MEMS, bioelectronic systems, implanted electronic ICs, telemetry.

Digital and Memory Circuits

Digital circuit techniques, I/O and interchip communication, reconfigurable digital circuits, clocking memories, microprocessors, DSPs, arithmetic building blocks.

High Speed Interfaces

Gigabit serial links, CDR, equalization, memory interfacing, bus interfacing, multirate link IC's, pre-emphasis de-emphasis circuitry, PCI-express 3, SATA etc.

ESSDERC/ESSCIRC JOINT SESSIONS

These sessions will focus on topics at the boundary between design and technology depending on the submitted abstracts. Contributions are solicited (but not limited) in the areas of circuit design and simulation techniques for process variability in nm-scale technologies as well as of microwave components over silicon substrates.

A panel discussion will be organized by **Dimitri Antoniadis** (MIT) on 'Technology, Circuit and System Co-Design in the New Scaling Era' with expert panelists from industry and academia.

JOINT PLENARY TALKS

Joachim Burghartz (IMS CHIPS)
'Ultra-thin Chips and Related Applications - A New Paradigm in Silicon Technology'

Tze-chiang (T.C.) Chen (IBM)
'Challenges for silicon technology scaling in Nanoscale Era'

Carlo Cognetti (STMicroelectronics)
'The impact of semiconductor packaging technologies on system integration: An Overview'

Michael Rookes (Caltech)
'Nano Electro-Mechanical devices: A new opportunity for microelectronics'

Tadashi Shibata (University of Tokyo)
'Bio-inspired devices and circuits'

Victor Zhirnov (SRC)
'Scaling beyond CMOS'

ESSCIRC PLENARY TALKS

Klaas Bult (Broadcom)
'Data Converters for Embedded Applications'

Wim Dehaene (KULeuven)
'RFIDs where are they?'

Ali Hajimiri (Caltech)
'On-Chip Phased Arrays'

TUTORIALS AND WORKSHOPS

A Tutorial Day will be organized on Monday, September 14th, 2009, while a Workshop Day will take place on Friday, September 18th, 2009.

BEST PAPER AWARD

Papers presented at the conference will be considered for the Best Paper Award and for the best 'Young Scientist' Paper Award. The selection will be based on the results of the paper selection process and the judgment of the conference participants. The award delivery will take place at ESSCIRC 2010.

PAPER SUBMISSION

The 2009 ESSDERC conference will allow only electronic submission of papers in PDF format. Prospective authors must submit their paper(s) via the conference website. Papers must be submitted in the final format to be published in the proceedings. They must not exceed four A4 pages with all illustrations and references included. The size of the PDF files submitted should not exceed 2 MBytes. Manuscript guidelines as well as instructions on how to submit electronically will be available on the conference website.

www.esscirc2009.org

All paper submissions must be received by April 4th, 2009.

After selection of papers, the authors will be informed of the decision of the Technical Program Committee by e-mail at the beginning of June 2009. At the same time, the complete program will be published on the conference website.

The working language of the conference is English, which must also be used for all presentations and printed material.

REVIEW PROCESS

Papers submitted for review must clearly state:

- The purpose of the work.
- How and to what extent it advances the state-of-the-art.
- Specific results and their impact.

The degree to which the paper deals with the above issues is fundamental to a successful review and selection of the paper. The most frequent cause of rejections of submitted papers is a lack of new results. Only work that has not been previously published at the time of the conference will be considered. Submission of a paper for review and subsequent acceptance is considered by the committee as a commitment that the work will not be placed in the public domain prior to the conference.

Fringe Poster Session

Following a successful 'fringe' event during last Conference in Edinburgh, ESSCIRC and ESSDERC will be holding also a Fringe Poster Session event in addition to the main conference in Athens. The Fringe forum is ideally suited for the submissions of recent progress which may, in some cases, not be ready for a full paper submission. The emphasis of fringe submissions should be on the presentation of the latest data (both measurement and/or simulation) and new ideas. This forum provides the opportunity for young researchers to network with the ESSDERC/CIRC community to discuss these ideas and latest results. Reviewing will

be undertaken by a sub-committee under the main Technical Programme committee, and a separate proceedings will be published on CD for this event. To attract the latest results, submissions close at the later date of 12 June 2009. Submissions will be in the form of abstracts of one page of text and one page of figures. Submission will be via the website www.esscirc2009.org/fringe, where further details can be found.

SCHEDULE AT A GLANCE

Monday, September 14th 2009
Tutorials

Tuesday, September 15th 2009
Conference Opening
Technical Sessions
Welcome Reception

Wednesday, September 16th 2009
Technical Sessions
Conference Dinner

Thursday, September 17th 2009
Technical Sessions

Friday, September 18th 2009
Workshops

KEY DATES

4th April 2009
Abstract submission deadline

22nd May 2009
Notification of acceptance

20th July 2009
Early registration deadline