

CONFERENCE VENUE

The conference will be held at the Barceló Hotel Renacimiento, in the Isla de la Cartuja, an island between two branches of the Guadalquivir river that it's today home to the Cartuja 93 technology business park. Seville's downtown (El Centro) is very close and, from there, visitors will find Seville's major monuments and shopping facilities just two steps away.

The Cathedral and the Giralda

"Let us create such a building that future generations will take us for lunatics". That's what churches authorities reputedly agreed back in 1401. And they certainly got themselves the big and magnificent Catedral, one of the largest catholic churches in the world: the main building is 126m long and 83m wide. The original mosque's beautiful minaret (for the cathedral was built over the main mosque that fell to the christians in 1248), La Giralda, still stands on its eastern side, but the cathedral's bulky exterior gives few other hints of the treasures within.

Alcázar

Residence of many generations of kings and caliphs, the not-to-be-missed Alcázar is an intriguing, beautiful complex of gardens, patios, and royal rooms, and it is intimately associated with the lives and loves of many Muslim and Christian rulers, above all Pedro I of Castilla, who was known as Pedro El Cruel and Pedro El Justiciero (the Cruel and the Justice-dispenser) depending which side of him you were on.

Santa Cruz, the Centro and the Arenal

Santa Cruz is Seville's medieval Judería (Jewish quarter), today a tangle of quaint, winding streets and lovely plant-decked plazas perfumed with orange blossom. Plaza de Santa Cruz, Plaza Doña Elvira, the 17th-century Hospital de los Venerables Sacerdotes, are spots the visitor won't want to miss here. The real centre of Sevilla, El Centro, is densely packed with narrow streets and broken up by squares and streets (Calle Sierpes, Casa Pilatos, Plaza del Salvador, ...) around which the city's life has revolved for aeons. The Arenal, a short walk from the Cathedral, brings the visitor to the Río Guadalquivir. Seville's most interesting sights here include the Torre del Oro (a 13th-century islamic watch tower), Plaza de Toros (the bullring, one of the most handsome in Spain and probably the oldest), the Hospital de la Caridad and the Museo de Bellas Artes (Fine-Arts Museum), which is the second Art Gallery in the country.

The contemporary Seville

It preserves the spirit of the old city but in last years, it has moved to a modern city, refurbished for the Universal Exposition Expo'92, being the capital of the most populated region in Spain.



Cathedral (Sevilla)

CONTACT INFORMATION

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ORGANIZATION COMMITTEE

Conference Chairs	José L. Huertas Díaz Ángel Rodríguez-Vázquez	IMSE-CNM/CSIC IMSE-CNM/CSIC
ESSCIRC TPC Chairs	Ángel Rodríguez-Vázquez Manuel Delgado Restituto Kari Halonen	IMSE-CNM/CSIC IMSE-CNM/CSIC Helsinki Univ. Techn./TKK
ESSDERC TPC Chair	Francisco Gámiz Andrés Godoy Michael Östling	University of Granada University of Granada Royal Ins. Tech./KTH
Tutorials & Workshops Chairs	Manuel Delgado Restituto Andrés Godoy	IMSE-CNM/CSIC University of Granada
Fringe Posters Chairs	José L. González Rafael Castro Belén Pérez Verdú	UPC IMSE-CNM/CSIC IMSE-CNM/CSIC & Univ. Sevilla

SCHEDULE AT A GLANCE

Monday, Sept. 13 th , 2010	Tutorials
Tuesday, Sept. 14 th , 2010	Conference Opening Technical Sessions Welcome Reception
Wednesday, Sept. 15 th , 2010	Technical Sessions Conference Dinner
Thursday, Sept. 16 th , 2010	Technical Sessions
Friday, Sept. 17 th , 2010	Workshops

KEY DATES

Submission deadline	April 10 th , 2010
Notification of acceptance	June 4 th , 2010
Early registration deadline	July 20 th , 2010

Final Call for Papers

36th European
Solid-State Circuits
Conference

13-17 September 2010
Sevilla, Spain

Paper submission deadline:
April 10th, 2010
Electronic submission

Organization committee at:



Technical co-sponsorship:



Universidad
de Granada



www.esscirc2010.org

GENERAL SCOPE OF THE CONFERENCE

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 deals with solid-state devices and technologies, are governed by a single Steering Committee. The increasing level of integration for system-on-chip (SoC) design made available by advances in silicon technology is stimulating more than ever before the need for deeper interaction among technologists, device experts, and circuit and system designers.

While keeping separate Technical Program Committees, ESSCIRC and ESSDERC will share Plenary Keynote Presentations and Joint Sessions bridging both communities. Attendees registered for either conference are encouraged to attend any of the scheduled parallel sessions.

The main themes for original contributions to be submitted to ESSCIRC 2010 include, but are not limited to the following:

Analogue Circuits

Amplification stages, Power amplifiers for audio applications, Continuous- and discrete-time filters, Switched-capacitor circuits, Comparators, Nonlinear circuits, Voltage/current references, HV circuits

Data Converters

Nyquist rate converters, Oversampled A/D and D/A converters, Sample-and-hold circuits, A/D and D/A converter calibration and error correction circuits, Adaptive and smart data converters

RF and mm Wave

RF/IF/analog baseband circuits, LNAs, Mixers, Power amplifiers, IF amplifiers, Power detectors, Modulators-Demodulators, VCOs, PLLs, Frequency synthesizers, Frequency dividers, Integrated passive components

Wireless and Wireline Communication Circuits and Systems

Receivers/transmitters/transceivers for wireless systems, Base stations and handsets, Advanced modulation systems, TV/radio/satellite receivers, Radar

Sensors, Imagers and MEMs

Sensor subsystems and interfaces, Accelerometers, Temperature sensing, Imaging and smart imaging chips, Vision systems on chip, AMOLED, MEMs subsystems, RF MEMs

Digital Circuits

Digital circuit techniques, I/O and inter-chip communication, Reconfigurable digital circuits, Clocking, Arithmetic building blocks

Processors, Memories and Interfaces

Memories, Microprocessors, DSPs, Gigabit serial links, Clock data recovery, Equalization, Memory interfacing, Bus interfacing, Multi-rate link IC's

Bio-Medical and Bio-Electronic Circuits & Systems

Implantable electronic ICs, Bio-electronic integrated systems, Bio-medical imagers, Bio-MEMS integrated systems, Lab-on-chip, Wireless body area networks

Circuit & Systems in Emerging Technologies

Digital, analogue and mixed-signal circuits using emerging devices such as: Multi-gate MOSFETs (Double-Gate MOSFETs, FinFETs, Triple-Gate MOSFETs); Flexible electronic components; Organic transistors; Nano-wires/nano-tubes; Quantum devices

Power Management and Energy Scavenging

Energy transducers, Power regulators, DC-DC converters, LDOs, Boost converters, Buck converters, LED drivers, Sequencers and supervisors, Green circuits

PLENARY TALKS

A total of twelve Plenary Sessions, where distinguished invited speakers will discuss issues of interest for the attendees of both conferences, have been scheduled:

- ▶ 3D Integration Technology: Status and Application Development
Dr. Peter Ramm (Fraunhofer IZM-M, Munich)
- ▶ Energy Harvesting - from Devices to Systems
Dr. Yiannos Manoli (IMTEK -University of Freiburg and HSG-IMT)
- ▶ Technical and Economical Trends in Wireless Applications
Lecturer to be confirmed (ST-Ericsson)
- ▶ FDSOI: From Materials to Devices and Circuit Applications
Dr. Carlos Mazuré (SOITEC)
- ▶ High Performance Mixed Signal: Business and Technology
Dr. Rene Penning de Vries (NXP)
- ▶ Engineering Hope with Biomimetic Microelectronic Systems
Dr. Wentai Liu (University of California at Santa Cruz)
- ▶ Terahertz Imaging with CMOS/BiCMOS Process Technologies
Dr. Ulrich Pfeiffer (University of Wuppertal)
- ▶ Analog Mixed-Signal Circuits in Advanced Nano-Scale CMOS Technology for Microprocessors and SoCs
Dr. Ian Young (Intel Corporation)
- ▶ Ultra Low Power and Miniaturized MEMS-based Radio for BAN and WSN Applications
Dr. David Ruffieux (CSEM SA)
- ▶ Trends and Perspectives for Electrical Characterization and Reliability Assessment in Advanced CMOS Devices and Technologies
Dr. Guido Groeseneken (IMEC)
- ▶ High Power LEDs for Solid State Lighting
Dr. Berthold Hahn (Osram Opto Semiconductors)
- ▶ GaN-on-Si Technology, A New Approach for Advanced Devices
Dr. Tomás Palacios (Massachusetts Institute of Technology)

TUTORIALS AND WORKSHOPS

A Tutorial Day will be organized on Monday, September 13th, 2010, while a Workshop Day will take place on Friday, September 17th, 2010.

BEST PAPER AWARDS

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 2011.

JOINT ESSDERC/ESSCIRC SESSIONS

To further emphasize the interactions between the devices and circuits communities the conference will offer joint sessions. These sessions will focus on topics at the frontier between devices and circuits in all conference themes. Contributions are solicited in all potential boundary areas including (but not limited to) emerging technologies, medical electronics, sensors, design in deep submicron CMOS, microwave components, handling of variability in nm-scale technologies, etc.

FRINGE POSTER SESSION

A fringe poster session will be scheduled to run parallel to the conference sessions. This is basically open to Master and PhD students and suited for the submissions of original ideas and developments which may not be proven on silicon and hence not ready for a regular conference submission. All papers submitted to the fringe session will be subjected to review and selected on the basis of their originality and completeness

PAPER SUBMISSION

The 2010 ESSCIRC conference will allow only electronic submission of papers in PDF format. Prospective authors must submit their paper(s) via the conference web site.

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 must not exceed 2 MBytes. Manuscript guidelines as well as instructions on how to submit electronically are available on the conference web site.

Conference Web site
<http://www.esscirt2010.org>

All paper submissions must be received by April 10th, 2010.

After selection of papers, the authors will be informed about the decision of the Technical Program Committee by e-mail at the beginning of June, 2010. At the same time, the complete program will be published on the conference web site.

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

Fringe Poster submissions close at June 25th, 2010.

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.

ESSCIRC / ESSDERC STEERING COMMITTEE

William Redman-White (Chair)	NXP
Sorin Cristoloveanu (Vice-Chair)	ENSERG-IMEP
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