

First Announcement



ESSCIRC 2008

34th European Solid-State Circuits Conference

15 - 19 September 2008

Edinburgh International Conference Centre, Scotland, UK

Paper submission deadline:

05 April 2008

www.esscirc2008.org



IEEE





34th European Solid-State Circuits Conference 15 - 19 September 2008

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 Keynote Presentations and Joint Technical Sessions on topics chosen to bridge both communities. Attendees registered for either conference are encouraged to attend any of the scheduled parallel sessions of their choice.

Submissions to ESSCIRC2008 are solicited describing original contributions in the field of silicon design and implementation. The conference's core themes are set out below. The programme committee also welcomes novel contributions from other related areas.

Analogue Circuits

Analogue circuits including: small signal amplifiers; variable gain amplifiers, power audio amplifiers continuous-time & discrete-time filters; comparators; instrumentation and sensor interfaces, voltage references, LDO regulators, DC-DC converters, HV circuits, lighting control.

Data Conversion Circuits and Integrated Systems

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

RF/IF/baseband circuits including: LNAs; mixers; IF amplifiers; power amplifiers; power detectors; active antennas; modulators; demodulators; VCOs; frequency dividers; frequency synthesisers; PLLs.

Wireless and Wireline Communication Circuits

Receivers/transmitters/transceivers for wireless systems, base stations and hand-sets; advanced modulation systems; TV/radio/satellite receivers; Ultrawideband and data links, wireless sensor networks, RFID.

Sensors, Imagers, MEMS, Bioelectronic Integration

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

Digital and Memory Circuits

Digital circuit techniques; I/O and interchip communication; reconfigurable digital circuits; clocking; memories; microprocessors.



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Digital Signal Processing and Arithmetic

DSPs and DSP kernels, signal processing and arithmetic building blocks.

Nanoelectronics

Digital, analogue and mixed signal circuits using emerging devices such as multi-gate MOSFETs (Double-Gate MOSFETs; FinFETs, Triple-Gate MOSFETs), nanowires/nanotubes and quantum devices.

Joint ESSCIRC / ESSDERC Sessions:

These sessions will focus on topics where technology and design issues are closely linked and of shared interest. Possible topics include Sensors and Imagers, Integration of IC designs with other technologies and materials, Yield and Reliability related technology developments and Design for Manufacture.

Plenary Sessions

ESSCIRC and ESSDERC share Plenary Sessions where distinguished invited speakers will discuss issues of interest for the attendees of both conferences. In addition, ESSCIRC will include prominent invited speakers who will address issues of specific interest to the integrated circuit design community. Details of speakers will be published in May 2008.

Tutorials and Workshops

A Tutorial Day will be organised on Monday 15 September 2008, while a Workshop Day will take place on Friday 19 September 2008.

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 awards will be made at ESSCIRC 2009.

Paper Submission

The 2008 ESSCIRC 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 must not exceed 2 MBytes. Manuscript guidelines as well as instructions on how to submit electronically will be available on the conference website.

All paper submissions must be received by 5 April 2008

After selection of the papers for the conference, the authors will be informed of the decision of the Technical Programme Committee by e-mail at the beginning of June 2008. At the same time, the complete programme 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.



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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.

Edinburgh ESS-Fringe Poster Session

Following the parallel of cultural events of the Edinburgh Festival with its famous "Fringe" events, ESSCIRC and ESSDERC will all be holding a "fringe" event in addition to the main conference. 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 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 13 June 2008. Submissions will be in the form of abstracts of one page of text and two pages of figures. Submission will be via the website www.esscirt2008.org/fringe,

where further details can be found. All PhD students making fringe submissions will be offered a reduced registration rate.

Schedule at a Glance

Monday 15 September 2008

Tutorials

Tuesday 16 September 2008

Conference Opening
Technical Sessions
Welcome Reception

Wednesday 17 September 2008

Technical Sessions
Conference Dinner

Thursday 18 September 2008

Technical Sessions

Friday 19 September 2008

Workshops

Key Dates

5th April 2008

Abstract submission deadline

23rd May 2008

Notification of acceptance

20th July 2008

Early registration deadline

Conference Venue

The conference will be held at the Edinburgh International Conference Centre (EICC) located in the heart of Scotland's capital city. With its stunning Georgian and Victorian architecture, and winding medieval streets, it's easy to see why Edinburgh has been listed as a World Heritage Site.



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Edinburgh has one of the most beautiful cityscapes in the world with the famous castle perched atop the crags of an ancient volcano dominating the urban skyline. At the opposite end of "The Royal Mile" lies the Palace of Holyrood, the Queen's official residence in Scotland. It contains historic apartments where Mary, Queen of Scots lived.

The capital is bustling with arts, culture, sports and attractions and is famous for playing host to the world's largest arts festival. The city is the birthplace of James Clerk Maxwell, Sir Arthur Conan Doyle, author of the Sherlock Holmes novels and Alexander Graham Bell, inventor of the telephone. The author Robert Louis Stevenson lived in the City and famous landmarks associated with him include the Jekyll & Hyde pub, Deacon Brodie's Tavern and The Hawes Inn in South Queensferry which features in his novel 'Kidnapped'. The author J K Rowling wrote the first "Harry Potter" novel in an Edinburgh café. After dark Edinburgh has a lively nightlife with stylish bars and

pubs, restaurants, clubs and live entertainment to rival any European City.

The National Gallery of Scotland with an extensive collection of old masters, adjoins Princes Street Gardens in the City centre which boasts the World's oldest floral clock. A fifteen minute walk away are the Scottish National Gallery of Modern Art and Dean Galleries with their fine modern collections. The City centre also hosts the National Museum of Scotland. The collections in the landmark Museum of Scotland building tell the story of Scotland its land, its people and culture. The Royal Museum building, with its magnificent glass ceiling, houses international collections covering nature to art, culture to science.

Edinburgh is within easy reach of the Scottish countryside, and excursions to lochs and mountains, the East Lothian and Fife coasts and the home of golf, St Andrews, are all possible.



ESSCIRC/ESSDERC Steering Committee

Reinout Woltjer (Chair), NXP Semiconductors

Ralf Brederlow, Texas Instruments

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Anthony O'Neil, Newcastle University

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