



**IEEE SOLID-STATE
CIRCUITS SOCIETY**
Where ICs are in IEEE

November 2016

EDUCATION

Upcoming Webinar



"High Performance MEMS Inertial Sensors," Presented by Derek K. Shaeffer

Tuesday, January 3 @ 12:00 PM EST.

*Continuing Education Certificates can be requested for this webinar. See news section

for more details*

[CLICK HERE TO REGISTER!](#)

Derek K. Shaeffer will be available during the webinar to answer any questions. Please follow the link to register for the webinar which is free and open to all SSCS members.

Abstract: Over the past few years, MEMS-based inertial sensors such as gyroscopes and accelerometers have proliferated into a wide variety of consumer products. Today, these sensors are found as standard components in smart phones, tablets, gaming systems, remote controls, toys and digital still cameras. Emerging applications include wearables, health and fitness monitoring and the 'Internet of Things'. This talk will provide a tutorial overview highlighting some of the important design challenges to be faced when realizing high performance MEMS sensors.

Bio: Derek K. Shaeffer received the BSEE degree from the University of Southern California in 1993, the MSEE degree from Stanford University in 1995 and the Ph.D. degree from Stanford University in 1999, for which he did early work in the field of RF CMOS, demonstrating the world's first CMOS GPS receiver. His 1997 paper on CMOS

low-noise amplifiers is one of the most frequently cited papers in the history of the IEEE Journal of Solid-State Circuits with over 1500 citations to-date. He is the author or co-author of twenty-two issued patents and several pending patents, twenty-two papers, multiple tutorials and a book on CMOS RF design. He has worked professionally in the fields of test instrumentation, semiconductor memory, optical communications, wireless communications and MEMS inertial sensors. Dr. Shaeffer has also served as Guest and Associate Editors of the IEEE Journal of Solid-State Circuits. For the past several years, he has been Sr. Director, IC Development with InvenSense, Inc.

Upcoming Distinguished Lecturer Events in December

	SPEAKER	CHAPTER	TOPIC
December 5	Antonio Liscidini	SSCS Italy	Topic TBD For more details, please click here.
December 7	Antonio Liscidini	SSCS Switzerland	"Analog techniques for ultra-low-power transceivers" - The talk will be divided in two parts: "How to transform a simple LC-VCO into complete analog RF front-ends" "Adaptive filters and passive switched capacitors" For more details, please click here.
December 8	Pavan Hanumolu, Sven Mattisson, Samuel Palermo	SSCS Distinguished Lecture Colloquia - Lehigh, Princeton, and Columbia Chapters	"Time-based signal representation and its applications to data conversion" - Pavan Hanumolu "Overview of 5G Requirements and Future Wireless Network" - Sven Mattisson "Silicon Photonic Microring Resonator-Based Transceivers for Compact WDM Optical

Interconnects" - Samuel
Palermo

For more details, [please
click here.](#)

For more information on upcoming Distinguished Lecturer Tours, [CLICK HERE.](#)

CONFERENCES

Upcoming Conferences/Call for Papers

2017 IEEE International Solid-State Circuits Conference (ISSCC) San Francisco	February 5 - 9, 2017
2017 Design, Automation & Test in Europe Conference & Exhibition (DATE) Switzerland	March 27 - 31, 2017
2017 International Symposium on VLSI Technology, Systems and Application (VLSI-TSA) Taiwan	April 24 - 27, 2017
2017 International Symposium on VLSI Design, Automation and Test (VLSI-DAT) Taiwan	April 24 - 27, 2017
2017 IEEE Custom Integrated Circuits Conference (CICC) Texas	April 30 - May 3, 2017
IEEE 2017 Wireless Power Transfer Conference (WPTC) Taipei	May 10 - 12, 2017
IEEE Radio Frequency Integrated Circuits Symposium (RFIC) Honolulu	June 4 - 6, 2017
2017 Symposia on VLSI Technology and Circuits Kyoto	June 5 - 9, 2017

RFIC 2017 Call for Papers

The 2017 IEEE Radio Frequency Integrated Circuits Symposium (RFIC 2017) welcomes technical papers. The conference will solicit papers describing original work in RFIC circuits, system engineering, design methodology, RF modeling and CAD simulation, RFIC technologies, devices, fabrication, testing, reliability, packing and modules to support RF applications in areas such as, but not limited to:

- Wireless cellular & connectivity ICs
- Low Power transceivers
- RF front-end ICs
- Mixed-signal RF and analog baseband circuits
- Reconfigurable and tunable front-ends



- Large-signal circuits
- VCOs and frequency multipliers
- Frequency generation circuits
- Modeling, CAD and testing
- Process, Device and packing technologies
- mm-Wave circuits and systems
- High-Speed data transceivers

Submission Deadline - January 9, 2017

For further information, please click [here](#).

2017 Symposium on VLSI Circuits - Call for Papers



The 2017 Symposium on VLSI Circuits welcomes the submission of original papers on all aspects of VLSI Circuits. The Symposium on VLSI Technology will overlap with the Symposium on VLSI Circuits and will be held at the same location. Papers are welcome in the following areas:

- Innovative system directions
- Digital circuits, processors and architectures, including circuits and techniques
- Memory circuits, architectures and interfaces
- Frequency generation and clock circuits
- Analog and mixed-signal circuits
- Wireline receivers and transmitters
- Wireless receivers and transmitters
- Power conversion circuits
- Imagers, displays, sensors, VLSI circuits and systems
- and other related topics

Submission deadline: January 23, 2017

Click [here](#) for more details and submission instructions

2017 IEEE Wireless Power Transfer Conference - Call for Papers

The 2017 IEEE Wireless Power Transfer Conference (WPTC) is a conference on wireless powering. The meeting is intended to cover a broad range of areas related to devices, integrated circuits, systems and applications of WPT across the electromagnetic spectrum. WPTC welcomes submissions of original work on:

- Technologies for wireless power transfer and energy harvesting
- Power transmitters and receivers for wireless power transfer and energy harvesting
- Integrated circuits and systems for wireless power transfer and energy harvesting
- Applications of wireless power transfer and energy harvesting
- Other device, system or application topics related to wireless power
- and other topics

Submission deadline: February 6, 2017

Click [here](#) for more details

NEWS

JSSC 50th Anniversary



The IEEE Journal of Solid-State Circuits, the flagship journal of the solid-state circuits community, also known as the "red rag" to many, has reached half a century of age. The IEEE Institute has written about the milestone in special article. [Click here to read.](#)

Keep an eye out for the [special 50th anniversary issue of JSSC](#) and the [special Solid-State Circuits Magazine](#) issue on the anniversary.

SSCS Members Join CAS for Just \$5! Use code SSCXCAS2017



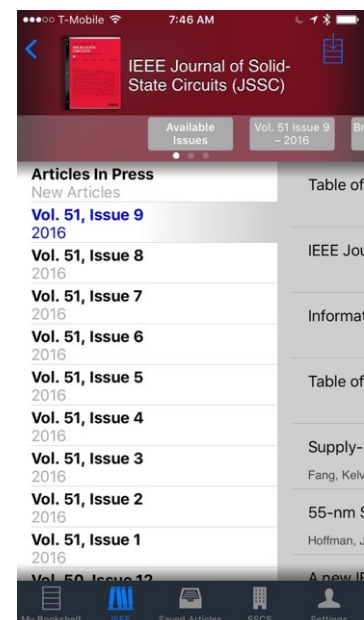
If you have not renewed your SSCS membership for 2016, you can enter the promotion code at checkout to join CAS for \$5 and start making the added connections you need to forward professionally. If you have already renewed for 2016, sign in with your IEEE account. The discounted CAS membership will be present in your cart.



[Click here for more details](#)

IEEE SSCS BrowZine App Now Contains Articles in Press

The IEEE SSCS App has just had an update which now supports the Early Access content from JSSC via its Articles in Press Feature. Articles in Press feature the latest peer-reviewed content from the JSSC giving researchers access to the latest content before it has been fully edited and placed in an issue. With the latest version of the app, users will now have easy access to this content for the JSSC by simply changing the issue and seeing the "Articles in Press" area above the current issue. You can read more about this new feature by [clicking here](#).



Earn Continuing Education Hours

Have you attended an SSCS webinar? Attendees of upcoming and past webinars have the opportunity to earn professional development hours. Certificates of completion are offered to participants who view a

webinar. A certificate of completion confirms one hour of professional development. After you attend the webinar, you may request a certificate of completion by completing the form [HERE](#).

Seeking News

Please send any chapter news or happenings (Distinguished Lecturer visits, events hosted by your SSCS chapter, awards received by members, etc) to Abira Sengupta, SSCS Magazine News Editor, for inclusion in an upcoming issue of the magazine. Please email - Abira.Sengupta@ieee.org. We look forward to receiving your news articles!

For more chapter news, [check out](#) the Fall 2016 issue of the Solid-State Circuits Magazine.

FEEDBACK

Let us know what you think! Please [email us](#) to send us your comments about the newsletter, what you would like to see included each month, or any other comments.

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