



2016 IEEE



Compound Semiconductor IC Symposium



INTEGRATED CIRCUITS and DEVICES in
GaAs, InP, GaN, SiGe, and other compound semiconductor and CMOS technologies



October 23–26, 2016

Doubletree by Hilton, Austin, TX, USA



Sponsored by the IEEE Electron Devices Society
Technically co-sponsored by the Solid State Circuits Society
and the Microwave Theory & Techniques Society



FINAL CALL FOR PAPERS

2016 CSIC Symposium

From its beginning in 1978 as the GaAs IC symposium, the IEEE Compound Semiconductor IC Symposium (CSICS) has evolved to become the preeminent international forum for developments in compound semiconductor integrated circuits and devices, embracing GaAs, InP, GaN, SiGe, and CMOS technology. Coverage includes all aspects of the technology, from materials, device fabrication, IC design, testing, and system applications. CSICS provides the ideal forum to present the latest results in high-speed digital, analog, microwave, millimeter wave, THz, mixed-mode, and optoelectronic integrated circuits. First-time papers addressing the utilization and application of InP, GaAs, GaN, Silicon, Germanium, SiGe, and other compound semiconductors in military and commercial products are invited. Specific technical areas of interest include:

- High performance devices such as GaN power conversion devices, 700 GHz SiGe HBTs & InP HEMTs
- Novel devices such as tunnel FETs (TFETs), carbon nanotubes, MEMS, graphene & diamond transistors
- Integration of III-V devices on Si
- Optoelectronic and photonic devices such as optical modulators, lasers, photodetectors, and Silicon Photonics
- Device and circuit modeling concepts and implementation / EM and EDA tools
- Thermal management technologies, thermal simulation, and advanced packaging of high-power devices and ICs
- Device and IC manufacturing processes, testing methodologies, & reliability
- Analog, RF, mixed-signal, mm-wave, THz, power conversion and optoelectronic circuit blocks and ICs in III-V, CMOS, SiGe BiCMOS

Symposium Highlights

High quality technical papers will be selected from worldwide submissions for oral presentation and publication in the Symposium Digest. Invited papers and panel sessions on topics of current importance to the Compound Semiconductor IC community will complete the program. Extended versions of selected papers from the Symposium will be published in a special issue of the *IEEE Journal of Solid State Circuits*.

Primer Course

The Symposium will offer a primer course which is an introductory-level class intended for those wishing to obtain a broad and fundamental understanding of RFIC and High-Speed Analog-Mixed Signal technology. The Sunday evening course is designed to provide insight into the design of the principal RF building blocks, namely PAs, LNAs, Mixers and Oscillators, emphasizing the specific background needed for participants to understand and appreciate the papers presented in the Symposium Technical Program.

Short Courses

Two short courses will be held on Sunday, October 23, 2016; Short Course 1: "Terahertz SiGe HBT technologies: Creating the winning design engine" and Short Course II: "GaN and SiC technologies for Power Electronics." Organizer: Brian Moser, Qorvo. Ph: +1-336-678-8573, E-mail: Brian.Moser@qorvo.com.

**Deadline for Electronic Receipt
of Papers is
Close of Business, April 22, 2016**

Authors must submit a paper (not more than 4 pages including figures and other supporting material) of results not previously published or not already accepted by another conference. Papers will be selected on the basis of the content and measured results.

The abstract must concisely and clearly state:

- The purpose of the work**
- What specific new results have been obtained**
- How it advances the state-of-the-art or the industry**
- References to prior work**
- Sub-committee preference:**
 - **Advanced Devices and modeling**
 - **Analog, RF, and Microwave ICs**
 - **mm-Wave and THz ICs**
 - **High-Speed digital, Mixed-Signal & Optoelectronic ICs**

The paper must include: the title, name(s) of the author(s), organization(s) represented, corresponding authors' postal and electronic addresses, and telephone number. A paper template is available from www.csics.org. Please indicate your preference for subcommittee review. The program committee will honor the authors' preference where possible, but reserves the right to place the paper in other review categories.

All company and governmental clearances must be obtained prior to submission of the abstract.

Authors must submit their papers in PDF format electronically using the www.csics.org web page. They will be informed regarding the results of their submissions by June 3, 2016. Authors of accepted papers will be required to submit to the IEEE their final camera-ready paper by July 22, 2016 for publication in the Symposium Technical Digest. The accepted papers may be used for publicity purposes. Portions of these papers may be quoted in magazine articles publicizing the Symposium. **Please note on the paper if this is not acceptable.**

Further questions on paper submission may be addressed to the Symposium Technical Program Chair:

Jim Carroll
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E-mail: jim.carroll@ni.com

All Symposium information, including paper submission instructions and a link to our paper submission address is available on the CSICS website at:

www.csics.org

2016 Compound Semiconductor IC Symposium Exhibition

As in past years, the Symposium will sponsor an exhibition of products from various vendors of materials, IC products, processing equipment, test equipment, CAD tools, and foundry services specifically addressing the Compound Semiconductor industry. Numerous vendors will be on-hand to discuss their products and to answer questions.

Inquiries concerning the exhibits should be addressed to:

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The following members of the Technical Program Committee are available for guidance or for answering questions regarding paper preparation:

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