2012 IEEE
Compound Semiconductor IC Symposium

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

October 14–17, 2012
Hyatt Regency Hotel at La Jolla, California, 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

2012 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 more recently 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:

- Innovative device concepts in emerging technologies
    - Nitrides, InP, III-V on Si, Ge on Si, Graphene
- Analog, RF, mixed-signal, mm-wave, THz circuit blocks and ICs in III-V, CMOS, SiGe BiCMOS
- Power conversion circuits and technologies
- Optoelectronic and photonic devices and ICs
- System applications
    - Wireless handsets and basestations
    - Vehicular and military RADAR
    - High-speed digital systems
    - Fiberoptics and photonics
- Device and circuit modeling / EM and EDA tools
- Thermal simulation and advanced packaging of high-power devices and ICs
- Device and IC manufacturing processes, testing methodologies, & reliability

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*.

Compound Semiconductor Primer Course

The Symposium will again offer the popular primer course, “Basics of Compound Semiconductor ICs,” which is an introductory-level class intended for those wishing to obtain a broad overview of RFIC and High-Speed Analog-Mixed Signal technology. The Sunday evening course will cover Si/SiGe, GaAs, InP and GaN materials and processes, BJT/HBT, HEMT & FET device operation, and both analog/microwave and digital ICs. The Course will be tailored to provide the specific background needed for participants to understand and appreciate the papers presented in the Symposium Technical Program.

Short Course

Two short courses, preliminary titled “Emerging device technologies for future Compound Semiconductor ICs” and “Thermal Management of Wide Bandgap Devices and ICs” will be held on Sunday, October 14, 2012. Organizer: Douglas S. McPherson, Ciena, Ph: +1 613-670-3371, dmcphers@ciena.com.

Deadline for Electronic Receipt of Abstracts is Close of Business, May 7, 2012

Authors must submit an Abstract (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 abstract.

The abstract must concisely and clearly state:

- **a) The purpose of the work**
- **b) What specific new results have been obtained**
- **c) How it advances the state-of-the-art or the industry**
- **d) References to prior work**
- **e) Sub-committee preference:**
    - **Analog, RF, Microwave ICs**
    - **mm-wave and THz ICs**
    - **High speed digital, mixed-signal & Optoelectronic**
    - **Advanced Devices and modeling**

The abstract must include: the title, name(s) of the authors(s), organization(s) represented, corresponding authors’ postal and electronic addresses, and telephone and FAX numbers. 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.

The accepted abstracts may be used for publicity purposes. Portions of these abstracts may be quoted in magazine articles publicizing the Symposium. **Please note on the abstract if this is not acceptable.**

Authors must submit the Abstract electronically using the www.csics.org web page. Please note that the **only** accepted file format is **PDF**. Authors will be informed regarding the results of their submissions by July 7, 2012. Authors of accepted papers will be required to submit an **MS-Word version** of a 4-page camera-ready extended abstract to IEEE by August 8, 2012 for publication in the Symposium Technical Digest.

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

Francois Colomb
Raytheon Company
Tel: 978-684-5435
fcolomb@raytheon.com

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

http://www.csics.org

2012 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:

Seyed Tabatabaei
T-Optics
Tel: 707-849-2842
seyed@t-optics.com

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

NORTH AMERICA

Sorin Voinigescu
University of Toronto
Ph:+1-416-946-8664
sorinv@eecg.toronto.edu

Francois Colomb
Raytheon Company
Ph: +1-978-684-5435
fcolomb@raytheon.com

ASIA/PACIFIC

Toshihide Kikkawa
Fujitsu Laboratories Ltd. (Japan)
Ph: +81-46-250-8243
Fax: +81-46-250-4337
kikkawa.toshi@jp.fujitsu.com

Chul Soon Park
Korea Advanced Institute of Science & Technology (Korea)
Ph: +82-42-350-3455
parkcs@ee.kaist.ac.kr

Huei Wang
National Taiwan University (Taiwan)
Ph: +886-2-2363-5251 x317
Fax: +886-2-2368-3824
hueiwang@ew.ee.ntu.edu.tw

Kazuya Yamamoto
Mitsubishi Electric Corporation
Ph: +81-727-84-7234
Yamamoto.Kazuya@bk.MitsubishiElectric.co.jp

EUROPE

Marc Rocchi
OMMIC (France)
Ph: +33-01-4510-6896
Fax: +33-01-4510-6953
m.rocchi@ommic.com

Freek van Straten
NXP Semiconductors (The Netherlands)
Ph: +31-24-353-5673
Fax: +31-24-353-5186
freek.van.straten@nxp.com

Executive Committee

Symposium Chair
Sorin Voinigescu
University of Toronto
Ph: +1-416-946-8664
sorinv@eecg.toronto.edu

Technical Program Chair
Francois Colomb
Raytheon Company
Ph: +1-978-684-5435
fcolomb@raytheon.com

Technical Program Vice-Chair
Short Course Moderator
Douglas S. McPherson
Ciena
Ph: +1 613-670-3371
dmcphers@ciena.com

Local Arrangements Chair
Charles Campbell
TriQuint Semiconductor
Ph: +1-972-994-3644
ccampbell@tqs.com

Treasurer
Harris (Chip) Moyer
HRL Laboratories, LLC.
Ph: +1-310-317-5784
hpmoyer@hrl.com

Publicity Chair
Jim Carroll
AWR Corporation
Ph: +1-469-248-5462
jim.carroll@awrcorp.com

Publications Chair
Herbert Zirath
Chalmers University
herbert.zirath@chalmers.se

Exhibition Chair
Seyed Tabatabaei
T-Optics
Tel: 707-849-2842
seyed@t-optics.com

Website Administrator
David Osika
ANADIGICS, Inc.
Ph: +1-908-668-5000 Ext 5343
dosika@anadigics.com

Manager Conference Planning
Lisa Boyd, CMP
IEEE Meetings and Conference Management
Ph: +1-732-562-6359
l.boyd@ieee.org

Exhibition Planning and Management
Harry Kuemmerle, III
VIP MEETINGS & CONVENTIONS
Ph +1-310-459-4691
harry.k@vipmeetings.com

Are You On Our Mailing List?

If you did not receive this Call for Papers in the mail and would like to be added to our mailing list, please send your name and address to: Jim Carroll, AWR Corporation, e-mail: jim.carroll@awrcorp.com

Institute of Electrical and Electronic Engineers
445 Hoes Lane
Piscataway, NJ 08855-1331

First Class Mail
US Postage Paid
IEEE
Piscataway, NJ
Permit #52

2012 IEEE Compound Semiconductor IC Symposium
October 14-17, 2012

FIRST CLASS MAIL