"Hot Chips and Cold Drinks" Industry Showcase

Chair: Nick Cheng, Skyworks Solutions

The Industry Showcase session, held concurrently with the plenary reception and the Interactive Forum, will highlight 12 selected papers submitted by authors from the industry. Authors of these papers will be present to discuss their innovative work, summarized in poster format, and some will also show a demonstration. The media will cover this event, making it an excellent opportunity to announce the latest RFIC developments and breakthroughs. A Best Industry Paper Award will be awarded to the author of one selected paper among these. This year's Industry Showcase papers are:

Experimental Characterization of Packaged Switch Devices for RF and Millimeter-Wave Applications
[1]CRISMAT, France, [2]NXP Semiconductors, France
Thanh Vinh Dinh[1], Philippe Descamps[1], Daniel Pasquet[1], Dominique Lesénéchal[1], Sidina Wane[2]
RMO1A-1 08:00

On the Characterization of Thermal Coupling Resistance in a Current Mirror
Skyworks Solutions, USA
Tianbing Chen, Bhuvaneshwaran Vijayakumar, Tzung-Yin Lee, Chun-Wen Paul Huang, Mike McPartlin
RMO1A-4 09:00

A Direct-Conversion Transmitter for Small-Cell Cellular Base Stations with Integrated Digital Predistortion in 65nm CMOS
Analog Devices, USA
Chris Mayer, David J. McLaurin, Jason Fan, Steve Bal, Christopher Angell, Oliver E. Gysel, Martin McCormick, Manish J. Manglani, Richard P. Schubert, Brian Reggiannini, John Kornblum, Lu Wu, Lex Leonard, Shipra Bhal, Alex Kagan, Tony Montalvo
RMO1C-1 08:00

A Direct-Conversion Receiver for Multi-Carrier 3G/4G Small-Cell Base Stations in 65nm CMOS
Analog Devices, USA
David J. McLaurin, Kevin G. Gard, Richard P. Schubert, Robert Glenn, David Alldred, Trevor C. Caldwell, Zhao Li, Steve Bal, Christopher Angell, Jianxun Fan, Manish J. Manglani, Brian Reggiannini, John Kornblum, Lu Wu, Chris Mayer, Oliver E. Gysel, Wei An, Shipra Bhal, Bruce E. Wilcox, Tony Montalvo
RMO1C-3 08:40

Single Crystal AlGaN Bulk Acoustic Wave Resonators on Silicon Substrates with High Electromechanical Coupling
Akoustis Technologies, USA
Jeffrey B. Shealy, Michael D. Hodge, Pinal Patel, Ramakrishna Vetury, Alexander Yu. Feldman, Shawn R. Gibb, Mark D. Boomgarden, Michael P. Lewis, James B. Shealy, James R. Shealy
RMO2A-1 10:10

A 28GHz SiGe BiCMOS Phase Invariant VGA
IBM, USA
B. Sadhu, J.F. Bulzacchelli, Alberto Valdes-Garcia
RMO2D-4 11:10

A 28nm, 475mW, 0.4-to-1.7GHz Embedded Transceiver Front-End Enabling High-Speed Data Streaming Within Home Cable Networks

[1]Broadcom, USA, [2]Broadcom, Taiwan, [3]imec, Belgium, [4]Broadcom, The Netherlands, [5]Apple, USA

S. Spiridon[1], D. Koh[1], J. Xiao[1], M. Brandolini[1], B. Shen[1], C.-M. Hsiao[2], H. Huang[2], D. Guermandi[3], S. Bozzola[4], H. Yan[4], M. Introini[4], L. Krishnan[1], K. Raviprakash[5], Y. Shin[1], R. Gomez[1], J. Chang[1]

RMO3A-5 14:50

A 20dBm Configurable Linear CMOS RF Power Amplifier for Multi-Standard Transmitters

DSP Group, Israel

Eli Schwartz, Sergey Anderson, Alex Mostov, Ilya Sima, Udi Suissa, Ron Pongratz, Amit Ezer, Avi Cohen, Michael Gulko, Nadav Snir, Asaf Elazari, Avi Bauer

RTU1D-3 08:40

Single Die Broadband CMOS Power Amplifier and Tracker with 37% Overall Efficiency for TDD/FDD LTE Applications

Skyworks Solutions, USA

Florinel Balteanu

RTU1D-4 09:00

A 30-MHz-to-3-GHz CMOS Array Receiver with Frequency and Spatial Interference Filtering for Adaptive Antenna Systems

NEC, Japan

Naoki Oshima, Masaki Kitsunezuka, Kenta Tsukamoto, Kazuaki Kunihiro

RTU2A-1 10:10

A Wideband Single-PLL RF Receiver for Simultaneous Multi-Band and Multi-Channel Digital Car Radio Reception

[1]NXP Semiconductors, The Netherlands, [2]NXP Semiconductors, Germany

Jan van Sinderen[1], Lucien Breems[1], Hans Brekelmans[1], Frank Leong[1], Nenad Pavlovic[1], Robert Rutten[1], Jan Niehof[1], Raf Roovers[1], Bernard Burdiek[2], Jochen Rudolph[2], Ulrich Moehlmann[2], Peter Blinzer[2], Manfred Biehl[2], Niels Gabriel[2], Andreas Wichern[2], Gerd Schippmann[2], Frank Rethmeier[2], Janusz Klimczak[2], Joerg Wenzel[2], Ralf-Gero Pilaski[2]

RTU2A-2 10:30

A 60GHz Packaged Switched Beam 32nm CMOS TRX with Broad Spatial Coverage, 17.1dBm Peak EIRP, 6.1dB NF at <250mW

IBM, USA

B. Sadhu, Alberto Valdes-Garcia, J.-O. Plouchart, H. Ainspan, A.K. Gupta, M. Ferriss, M. Yeck, M. Sanduleanu, X. Gu, C. Baks, D. Liu, D . Friedman

RTU2C-1 10:10