CENICS 2011

The Fourth International Conference on Advances in Circuits, Electronics and Micro-electronics


August 21-27, 2011

Nice/Saint Laurent du Var, France

CENICS 2011 Editors

Vladimir Privman, Clarkson University - Potsdam, USA

Martin Horauer, University of Applied Sciences Technikum Wien, Austria
CENICS 2011

Foreword

The Fourth International Conference on Advances in Circuits, Electronics and Micro-electronics (CENICS 2011), held between August 21-27, 2011 in Nice/Saint Laurent du Var, France, continued a series of events initiated in 2008, capturing the advances on special circuits, electronics, and micro-electronics on both theory and practice, from fabrication to applications using these special circuits and systems. The topics cover fundamentals of design and implementation, techniques for deployment in various applications, and advances in signal processing.

Innovations in special circuits, electronics and micro-electronics are the key support for a large spectrum of applications. The conference is focusing on several complementary aspects and targets the advances in each on it: signal processing and electronics for high speed processing, micro- and nano-electronics, special electronics for implantable and wearable devices, sensor related electronics focusing on low energy consumption, and special applications domains of telemedicine and ehealth, bio-systems, navigation systems, automotive systems, home-oriented electronics, bio-systems, etc. These applications led to special design and implementation techniques, reconfigurable and self-reconfigurable devices, and require particular methodologies to be integrated on already existing Internet-based communications and applications. Special care is required for particular devices intended to work directly with human body (implantable, wearable, ehealth), or in a human-close environment (telemedicine, house-oriented, navigation, automotive). The mini-size required by such devices confronted the scientists with special signal processing requirements.

We take here the opportunity to warmly thank all the members of the CENICS 2011 technical program committee as well as the numerous reviewers. The creation of such a broad and high quality conference program would not have been possible without their involvement. We also kindly thank all the authors that dedicated much of their time and efforts to contribute to the CENICS 2011. We truly believe that thanks to all these efforts, the final conference program consists of top quality contributions.

This event could also not have been a reality without the support of many individuals, organizations and sponsors. We also gratefully thank the members of the CENICS 2011 organizing committee for their help in handling the logistics and for their work that is making this professional meeting a success.

We hope the CENICS 2011 was a successful international forum for the exchange of ideas and results between academia and industry and to promote further progress in the area of circuits, electronics, and micro-electronics.

We hope Côte d’Azur provided a pleasant environment during the conference and everyone saved some time for exploring the Mediterranean Coast.

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Stefania Perri, DEIS - University of Calabria, Italy
Pasquale Corsonello, DEIS - University of Calabria, Italy

Design and Analysis of a Dual Loop CDR using Maneatis Delay Cell VCO

Khalil Mahmoud, Anna University, India
Dhurga Devi, Anna University, India
P. Ramakrishna, Anna University, India

A Flexible Sensor-mat to Automate the Process of People Counting

Christof Kutschera, University of Applied Sciences Technikum Wien, Austria
Martin Horauer, University of Applied Sciences Technikum Wien, Austria
Markus Ray, Austrian Institute of Technology, Austria
Daniel Steinmair, Bluetechnix GmbH, Austria
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Interaction of Semiconductor Laser Chirp with Fiber Dispersion: Impact on WDM Directly Modulated System Performance

Paloma R. Horche, ETSI Telecomunicacion-UPM, Spain
Carmina del rio Campos, Universidad San Pablo CEU, Spain
Alfredo Martin Minguez, ETSI Telecomunicacion-UPM, Spain
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Olivier Tesson, NXP Semiconductors, France
Stéphane Charlot, NXP Semiconductors, France
Magali Duplessis, NXP Semiconductors, France

Comparison of Three Impedance Analysers Implemented on FPGA Circuits

Abdulrahman Hamed, LIEN-Université Henri Ponicaré de Nancy, France
Etienne Tisserand, LIEN-Université Henri Ponicaré de Nancy, France
Patrick Schweitzer, LIEN-Université Henri Ponicaré de Nancy, France
Yves Berviller, LIEN-Université Henri Ponicaré de Nancy, France

Design of Reconfigurable Quad-band CMOS Class AB Power Amplifier employing MEMS Variable Capacitors in 0.18μm Technology

Mansour Fall, Université de Québec à Trois-Rivières (UQTR), Canada
Frederic Domingue, Université de Québec à Trois-Rivières (UQTR), Canada
Siamak Fouladi, Centre for Integrated RF Engineering (CIRFE), University of Waterloo, Canada
Raafat R. Mansour, Centre for Integrated RF Engineering (CIRFE), University of Waterloo, Canada

The Impact of High Dielectric Permittivity of 2-D Numerical Modeling Nanoscale SOI Double-Gate Mosfet Using Nextnano Simulator

Samia Slimani, Department of Electronic, Faculty of Science, Algeria
Bouaza Djellouli, Department of Electronic, Faculty of Science, Algeria
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