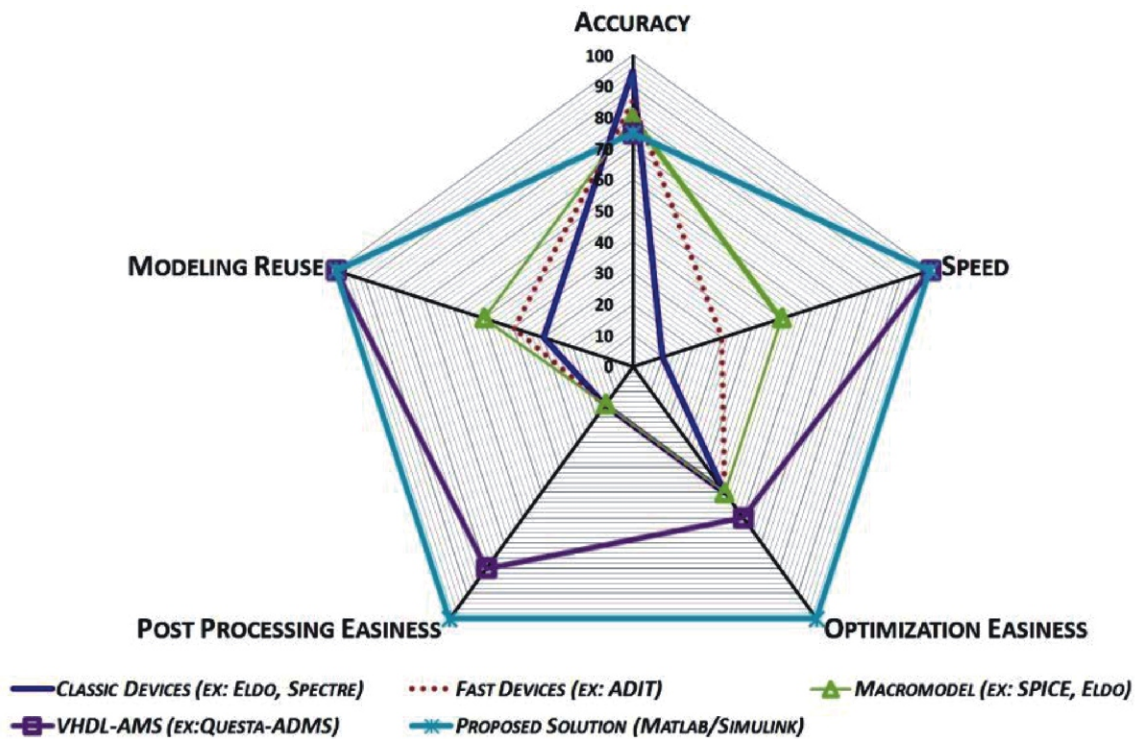




Circuits and Systems



Journal Editorial Board

ISSN Print: 2153-1285 ISSN Online: 2153-1293

<http://www.scirp.org/journal/cs>

Editor-in-Chief

Prof. Gyungho Lee Korea University, Korea (South)

Associate Editor-in-Chief

Prof. Jichai Jeong Korea University, Korea (South)

Editorial Board

Prof. Radim Belohlavek Palacky University, Czech Republic
Prof. Dong-Ho Cho Korea Advanced Institute of Science and Technology, Korea (South)
Prof. John Choma University of Southern California, USA
Dr. Bhaskar Choubey University of Glasgow, UK
Prof. Wonzoo Chung Korea University, Korea (South)
Prof. Juwook Jang Sogang University, Korea (South)
Prof. Chi Chung Ko National University of Singapore, Singapore
Prof. Fathi M. Salem Michigan State University, USA
Prof. Victor Sreeram University of Western Australia, Australia
Prof. Theodore B. Trafalis The University of Oklahoma, USA
Prof. Fan-Gang Tseng National Tsing Hua University, Chinese Taipei
Prof. Vincenzo Tucci University of Salerno, Italy
Dr. Fei Zhang Michigan State University, USA
Dr. Zuxing Zhang Tohoku University, Japan

Editorial Assistant

Tian Huang Scientific Research Publishing, USA Email: cs@scirp.org

TABLE OF CONTENTS

Volume 3 Number 1

January 2012

System-on-Chip Design Using High-Level Synthesis Tools

E. Oruklu, R. Hanley, S. Aslan, C. Desmouliers, F. M. Vallina, J. Saniie.....1

A C-Based Variable Length and Vector Pipeline Architecture Design Methodology and Its Application

T. Kambe, N. Araki.....10

A Survey on the Stability of 2-D Discrete Systems Described by Fornasini-Marchesini Second Model

M. Tiwari, A. Dhawan.....17

Characterization of a Novel Low-Power SRAM Bit-Cell Structure at Deep Sub-Micron CMOS Technology for Multimedia Applications

R. K. Singh, M. Pattanaik, N. Kr. Shukla.....23

Novel Threshold-Based Standard-Cell Flash ADC

M. S. Njinowa, H. T. Bui, F.-R. Boyer.....29

A New Approach to Complex Bandpass Sigma Delta Modulator Design for GPS/Galileo Receiver

N. Ahmadpoor, E. Farshidi.....35

The Effects of Fabrication Parameters and Electroforming Phenomenon on CdTe/Si (p)

Heterojunction Photovoltaic Solar Cell

W. F. Mohammad.....42

Thermodynamical Phase Noise in Oscillators Based on L-C Resonators (Foundations)

J.-I. Izpura, J. Malo.....48

Thermodynamical Phase Noise in Oscillators Based on L-C Resonators

J. Malo, J.-I. Izpura.....61

Floquet Eigenvectors Theory of Pulsed Bias Phase and Quadrature Harmonic Oscillators

F. Palma, S. Perticaroli.....72

Design of Robust Power System Stabilizer Based on Particle Swarm Optimization

M. S. Mahmoud, H. M. Soliman.....82

Switching Optimization for Class-G Audio Amplifiers with Two Power Supplies

P. Russo, F. Yengui, G. Pillonnet, S. Taupin, N. Abouchi.....90

Design and Analysis of a Power Efficient Linearly Tunable Cross-Coupled Transconductor Having Separate Bias Control

V. Bhadauria, K. Kant, S. Banerjee.....99

A High Color Rendering Index on Multichip LED Light Source

J.-Y. Shieh, L. K. Wang, M.-L. Chiu.....107

Experimental and Theoretical Considerations of Electrolyte Conductivity in Glucose Alkaline Fuel Cell

L. Mor, Z. Rubin.....111

The figure on the front cover is from the article published in Circuits and Systems, 2012, Vol. 3, No. 1, pp. 90-98 by Patrice Russo, Firas Yengui, Gael Pillonnet, Sophie Taupin and Nacer Abouchi.

Circuits and Systems

Journal Information

SUBSCRIPTIONS

The *Circuits and Systems* (Online at Scientific Research Publishing, www.SciRP.org) is published quarterly by Scientific Research Publishing, Inc., USA.

Subscription rates:

Print: \$39 per copy.

To subscribe, please contact Journals Subscriptions Department, E-mail: sub@scirp.org

SERVICES

Advertisements

Advertisement Sales Department, E-mail: service@scirp.org

Reprints (minimum quantity 100 copies)

Reprints Co-ordinator, Scientific Research Publishing, Inc., USA.

E-mail: sub@scirp.org

COPYRIGHT

Copyright©2012 Scientific Research Publishing, Inc.

All Rights Reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except as described below, without the permission in writing of the Publisher.

Copying of articles is not permitted except for personal and internal use, to the extent permitted by national copyright law, or under the terms of a license issued by the national Reproduction Rights Organization.

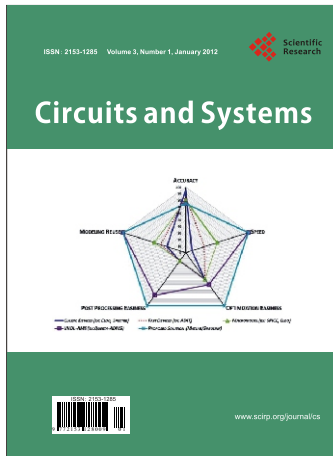
Requests for permission for other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works or for resale, and other enquiries should be addressed to the Publisher.

Statements and opinions expressed in the articles and communications are those of the individual contributors and not the statements and opinion of Scientific Research Publishing, Inc. We assume no responsibility or liability for any damage or injury to persons or property arising out of the use of any materials, instructions, methods or ideas contained herein. We expressly disclaim any implied warranties of merchantability or fitness for a particular purpose. If expert assistance is required, the services of a competent professional person should be sought.

PRODUCTION INFORMATION

For manuscripts that have been accepted for publication, please contact:

E-mail: cs@scirp.org



Circuits and Systems

ISSN Print: 2153-1285 ISSN Online: 2153-1293

<http://www.scirp.org/journal/cs>

Circuits and Systems is an international journal dedicated to the latest advancement of theories, methods and applications in electronics, circuits and systems. The goal of this journal is to provide a platform for scientists and academicians all over the world to promote, share, and discuss various new issues and developments in different areas of electronics, circuits and systems.

Subject Coverage

All manuscripts must be prepared in English, and are subject to a rigorous and fair peer-review process. Accepted papers will immediately appear online followed by printed hard copy. The journal publishes original papers including but not limited to the following fields:

- Analog Integrated Circuits
- Analog Signal Processing
- Biomedical Circuits and Systems
- Biomedicine, Nano Systems, and Circuits
- BioNEMS (Biomedical Nano-Electro-Mechanical Systems)
- Blind Signal Processing
- Cellular Neural Networks and Array Computing
- Circuits and Systems for Communications
- Computer-Aided Network Design
- Digital Integrated Circuits
- Digital Signal Processing
- Electronic Design Automation
- Embedded Software
- Graph Theory and Computing
- Live Demonstrations of Circuits and Systems
- Low-Voltage Low-Power Circuits
- Multimedia Systems and Applications
- Nanoelectronics and Gigascale Systems
- Neural Systems and Applications
- Nonlinear Circuits and Systems
- Optoelectronics and Laser Technology
- Power Systems and Power Electronic Circuits
- Reconfigurable Architectures
- Sensory Systems
- Systematic Application of Information Technology
- System-Level Synthesis
- Tradeoffs and Optimization in the Design of Circuits and Systems
- Visual Signal Processing and Communications
- VLSI Systems and Applications

We are also interested in: 1) Short Reports—2-5 page papers where an author can either present an idea with theoretical background but has not yet completed the research needed for a complete paper or preliminary data; 2) Book Reviews—Comments and critiques.

Notes for Intending Authors

Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. Paper submission will be handled electronically through the website. All papers are refereed through a peer review process. For more details about the submissions, please access the website.

Website and E-Mail

<http://www.scirp.org/journal/cs>

E-mail: cs@scirp.org