# **ASP-DAC 2009 Best Papers**

## **Best Paper Award**

1C-1 FastYield: Variation-Aware, Layout-Driven Simultaneous Binding and Module Selection for Performance Yield Optimization

Gregory Lucas, Scott Cromar, Deming Chen (Univ. of Illinois, Urbana-Champaign, United States)

5C-1 Efficiently Finding the 'Best' Solution with Multi-Objectives from Multiple Topologies in Topology Library of Analog Circuit

Yu Liu, Masato Yoshioka, Katsumi Homma, Toshiyuki Shibuya (Fujitsu Laboratories Ltd., Japan)

## **Best Paper Candidates**

1A-1 Adaptive Inter-router Links for Low-Power, Area-Efficient and Reliable Networkon-Chip (NoC) Architectures

Avinash Karanth Kodi (Ohio Univ., United States), Ashwini Sarathy, Ahmed Louri, Janet Wang (Univ. of Arizona, United States)

1C-1 FastYield: Variation-Aware, Layout-Driven Simultaneous Binding and Module Selection for Performance Yield Optimization

Gregory Lucas, Scott Cromar, Deming Chen (Univ. of Illinois, Urbana-Champaign, United States)

3A-1 System-Level Cost Analysis and Design Exploration for Three-Dimensional Integrated Circuits (3D ICs)

Xiangyu Dong, Yuan Xie (Pennsylvania State Univ., United States)

4B-3 Analog Placement with Common Centroid and 1-D Symmetry Constraints Linfu Xiao, Evangeline Young (Chinese Univ. of Hong Kong, Hong Kong)

4C-1 Stochastic Current Prediction Enabled Frequency Actuator for Runtime Resonance Noise Reduction

Yiyu Shi (Univ. of California, Los Angeles, United States), Jinjun Xiong, Howard Chen (IBM, United States), Lei He (Univ. of California, Los Angeles, United States)

5B-1 **Efficient Analytical Determination of the SEU-induced Pulse Shape** *Rajesh Garg, Sunil P Khatri (Texas A&M Univ., United States)* 

5C-1 Efficiently Finding the 'Best' Solution with Multi-Objectives from Multiple Topologies in Topology Library of Analog Circuit

Yu Liu, Masato Yoshioka, Katsumi Homma, Toshiyuki Shibuya (Fujitsu Laboratories Ltd., Japan)

6B-1 Efficient Simulated Evolution Based Rerouting and Congestion-Relaxed Layer Assignment on 3-D Global Routing

Ke-Ren Dai, Wen-Hao Liu, Yih-Lang Li (National Chiao Tung Univ., Taiwan)

7B-1 **Dependent Latch Identification in the Reachable State Space** *Chen-Hsuan Lin, Chun-Yao Wang (National Tsing Hua Univ., Taiwan)* 

# 8A-1 Improving Scalability of Model-Checking for Minimizing Buffer Requirements of Synchronous Dataflow Graphs

Nan Guan (Northeastern Univ., China), Zonghua Gu (HKUST, China), Wang Yi (Uppsala Univ., Sweden), Ge Yu (Northeastern Univ., China)

# $8B-1 \quad \textbf{A Novel Toffoli Network Synthesis Algorithm for Reversible Logic}$

Yexin Zheng, Chao Huang (Virginia Tech, United States)

# 8C-4 Design for Burn-In Test: A Technique for Burn-In Thermal Stability under Dieto-Die Parameter Variations

Mesut Meterelliyoz, Kaushik Roy (Purdue Univ., United States)

### **Design Contest Award**

#### **Best Design Award**

#### 1D-1 A Wireless Real-Time On-Chip Bus Trace System

Shusuke Kawai, Takayuki Ikari (Keio Univ., Japan), Yutaka Takikawa (Renesas Design Corp, Japan), Hiroki Ishikuro, Tadahiro Kuroda (Keio Univ., Japan)

### **Special Feature Award**

#### 1D-13 Ultra Low-Power ANSI S1.11 Filter Bank for Digital Hearing Aids

Yu-Ting Kuo, Tay-Jyi Lin, Yueh-Tai Li (National Chiao Tung Univ., Taiwan), Chou-Kun Lin (ITRI, STC, Taiwan), Chih-Wei Liu (National Chiao Tung Univ., Taiwan)