

## 2012 Lewis Winner Award for Outstanding Paper

*“128Gb 3b/Cell NAND Flash Memory in 19nm Technology with 18MB/s Write Rate and 400Mb/s Toggle Mode”*

Yan Li<sup>1</sup>, Seungpil Lee<sup>1</sup>, Ken Oowada<sup>1</sup>, Hao Nguyen<sup>1</sup>, Qui Nguyen<sup>1</sup>, Nima Mokhlesi<sup>1</sup>, Cynthia Hsu<sup>1</sup>, Jason Li<sup>1</sup>, Venky Ramachandra<sup>1</sup>, Teruhiko Kamei<sup>1</sup>, Masaaki Higashitani<sup>1</sup>, Tuan Pham<sup>1</sup>, Mitsuaki Honma<sup>2</sup>, Yoshihisa Watanabe<sup>2</sup>, Kazumi Ino<sup>2</sup>, Binh Le<sup>1</sup>, Byungki Woo<sup>1</sup>, Khin Htoo<sup>1</sup>, Tai-Yuan Tseng<sup>1</sup>, Long Pham<sup>1</sup>, Frank Tsai<sup>1</sup>, Kwang-ho Kim<sup>1</sup>, Yi-Chieh Chen<sup>1</sup>, Min She<sup>1</sup>, Jong Yuh<sup>1</sup>, Alex Chu<sup>1</sup>, Chen Chen<sup>1</sup>, Ruchi Puri<sup>1</sup>, Hung-Szu Lin<sup>1</sup>, Yi-Fang Chen<sup>1</sup>, William Mak<sup>1</sup>, Jonathan Huynh<sup>1</sup>, Jim Chan<sup>1</sup>, Mitsuyuki Watanabe<sup>1</sup>, Daniel Yang<sup>1</sup>, Grishma Shah<sup>1</sup>, Pavithra Souriraj<sup>1</sup>, Dinesh Tadepalli<sup>1</sup>, Suman Tenugu<sup>1</sup>, Ray Gao<sup>1</sup>, Viski Popuri<sup>1</sup>, Behdad Azarbayjani<sup>1</sup>, Ravindra Madpur<sup>1</sup>, James Lan<sup>1</sup>, Emilio Yero<sup>1</sup>, Feng Pan<sup>1</sup>, Patrick Hong<sup>1</sup>, Jang Yong Kang<sup>1</sup>, Farookh Moogat<sup>1</sup>, Yupin Fong<sup>1</sup>, Raul Cernea<sup>1</sup>, Sharon Huynh<sup>1</sup>, Cuong Trinh<sup>1</sup>, Mehrdad Mofidi<sup>1</sup>, Ritu Shrivastava<sup>1</sup>, Khandker Quader<sup>1</sup>

<sup>1</sup>Sandisk, Milpitas, CA

<sup>2</sup>Toshiba Semiconductor, Yokohama, Japan

## 2012 Takuo Sugano Award for Outstanding Far-East Paper

*“A 14.2mW 2.55-to-3GHz Cascaded PLL with Reference Injection, 800MHz Delta-Sigma Modulator and 255fsrms Integrated Jitter in 0.13 $\mu$ m CMOS”*

Dongmin Park, SeongHwan Cho

KAIST, Daejeon, Korea

## 2012 Jan Van Vessel Award for Outstanding European Paper

*“A 1kPixel CMOS Camera Chip for 25fps Real-Time Terahertz Imaging Applications”*

Hani Sherry<sup>1,2,3</sup>, Janusz Grzyb<sup>2</sup>, Yan Zhao<sup>2</sup>, Richard Al Hadi<sup>2</sup>, Andreia Cathelin<sup>1</sup>, Andreas Kaiser<sup>3</sup>, Ullrich Pfeiffer<sup>2</sup>

<sup>1</sup>STMicroelectronics, Crolles, France

<sup>2</sup>University of Wuppertal, Wuppertal, Germany

<sup>3</sup>IEMN / ISEN, Lille, France

## **2012 Jack Kilby Award for Outstanding Student Paper**

*"A Blocker-Tolerant Wideband Noise-Cancelling Receiver with a 2dB Noise Figure"*

David Murphy<sup>1,2</sup>, Amr Hafez<sup>1,2</sup>, Ahmad Mirzaei<sup>2</sup>, Mohyee Mikhemar<sup>2</sup>, Hooman Darabi<sup>2</sup>, Mau-Chung Frank Chang<sup>1</sup>, Asad Abidi<sup>1</sup>

<sup>1</sup>University of California, Los Angeles, Los Angeles, CA

<sup>2</sup>Broadcom, Irvine, CA

## **2012 ISSCC Award for Outstanding Forum Presenter**

*"Silicon-Based Integrated Beamforming and On-Chip Radiators"*

Ali Hajimiri

California Institute of Technology, Pasadena, CA

## **2012 Evening Session Award**

*"Little-Known Features of Well-Known Creatures"*

Organizer:

Un-Ku Moon, Oregon State University, Corvallis, OR

Moderator:

Shanthi Pavan, Indian Institute of Technology, Madras, India

Panelists:

Asad A. Abidi, University of California, Los Angeles, CA

Paul Brokaw, Integrated Device Technology, Tucson, AZ

Rinaldo Castello, University of Pavia, Pavia, Italy

Mark Horowitz, Stanford University, Stanford, CA

Thomas H. Lee, Defense Advanced Research Project Agency, Arlington, VA

David Robertson, Analog Devices, Wilmington, MA

## **2013 ISSCC Silkroad Award**

*"A 57.9-to-68.3GHz 24.6mW Frequency Synthesizer with In-Phase Injection-Coupled QVCO in 65nm CMOS"*

X. Yi, C. Boon, H. Liu, J. Lin, J. Ong, W. Lim

Nanyang Technological University, Singapore, Singapore

*“Self-Super-Cutoff Power Gating with State Retention on a 0.3V 0.29fJ/Cycle/Gate 32b RISC Core in 0.13 $\mu$ m CMOS”*

J-S. Chen, C. Yeh, J-S. Wang

National Chung Cheng University, Chaiyi, Taiwan

## **2012 ISSCC Student-Research Preview (SRP) Award**

*“An Ultra-Low Power, Low Voltage, Wideband CMOS LNA with Partial Noise and Distortion Cancellation”*

Mahdi Parvizi

McGill University, Montreal, Canada