

The 2013 International Conference on Integrated Circuits, Design, and Verification (ICDV 2013)

PROGRAM

*Address: HoChiMinh city University of Sciences (HCMUS)
227 Nguyen Van Cu street, District #5, Ho Chi Minh city, Vietnam*

15-Nov-2013

START	STOP	TIME	Type	Authors	Affiliation	Country	Title
7:30	8:30	60		REGISTRATION			
Session #1		Location: Main Hall		Chairs: Toshimasa Matsuoka, Osaka University Xuan-Tu Tran, VNU University of Engineering and Technology			
8:30	8:50	20	Opening	- The President of HCM University of Science - Prof. Ngoc Binh Nguyen, IEICE Vietnam Section Chair, VNU-UET - Dr. Takeshi Yamamura, IEICE ICD Chair, Fujitsu Labs - Prof. Makoto Ikeda, IEICE VLD Chair, Univ. of Tokyo - Prof. Xuan-Tu Tran, IEICE Vietnam Section Vice-Chair, VNU-UET		Vietnam Japan	- Welcome speech - Opening speeches - Introduction to ICDV 2013 program
8:50	9:40	50	Keynote	Toru Shimizu	Renesas Electronics Corp.	Japan	Two Topics from Embedded System Technology: (1)System Verification for Micro- controller Design and (2) ET Robo-con: Embedded Software Design Contest
9:40	10:00	20	Break				
Session #2		Location: Main Hall		Chairs: Trong-Tu Bui, Ho Chi Minh City University of Technology Makoto Ikeda, University of Tokyo			
9:40	10:30	50	Keynote	Atsuki Inoue	Fujitsu Labs	Japan	Dark silicon Problem and Solution by Supply Voltage Control
10:30	10:50	20	Oral	Hitoshi Aoki and Haruo Kobayashi	Gunma University	Japan	Typical n-MOSFET Modeling using A Skewing Method

10:50	11:10	20	Oral	Toan Dao and Vinh Tran	University of Transport and Communications; VNU University of Engineering and Technology	Vietnam	Fabrication and Characterization of Flexible Organic CMOS Integrated Circuits with PMMA Dielectric
11:10	11:30	20	Oral	Hiroki Nagatomi, Le Duc-Hung, Cong-Kha Pham, Nobuyuki Sugii, Shirou Kamohara, Toshiaki Iwamatsu and Koichiro Ishibashi	The University of Electro-Communications; Low-power Electronics Association & Project (LEAP)	Japan; Vietnam	A 4pA/Gate Sleep Current 65nm SOTB Logic Gates Using On-chip VBB Generator for Energy Harvesting Sensor Network Systems
11:30	11:50	20	Oral	Tri Vo Thanh and Tu Bui Trong	Ho Chi Minh City University of Science	Vietnam	Power Reduction Methodologies for High-Speed Flash ADC Using 180 nm CMOS Process
11:50	13:00	70	LUNCH				

Session #3		Location:		Chairs: Takeshi Yoshida, Hiroshima University Truong Vu Bang Giang, VNU University of Engineering and Technology			
13:00	13:30	30	Invited	Kenji Itoh	Kanazawa Institute of Technology	Japan	The Bridge RF Rectifier with an Impedance Transformer for the Miniaturized circuit topology
13:30	13:50	20	Oral	Li Mingyu, Zhang Yu, Chen Gong, Dong Qing and Nakatake Shigetoshi	The University of Kitakyushu; Nakatake Lab	Japan	Wideband Digital Predistorter Design Using Subspace Pursuit-Based Volterra Model
13:50	14:10	20	Oral	Trung-Khanh Le, Duc-Hung Le, Cong-Kha Pham and Trong-Tu Bui	Ho Chi Minh City University of Science; The University of Electro-Communications	Vietnam; Japan	A Design of Differential Digital-Controlled Oscillator in a 0.18um CMOS Process
14:10	14:30	20	Oral	Zhang Yu, Gong Chen, Mingyu Li, Qing Dong and Shigetoshi Nakatake	The University of Kitakyushu	Japan	A Delay-Locked Loop with Multi-Level Channel Length Decomposed Programming Delay Elements
14:30	15:30	60	Break & Poster				
Session #4		Location:		Chairs: Ngoc Binh Nguyen, VNU University of Engineering and Technology Fumio Arakawa, Nagoya University			
15:30	16:00	30	Invited	Ritsu KUSABA†, Hiroyuki UZAWA‡, Tomoaki KAWAMURA‡, Satoshi SHIGEMATSU‡, Mitsuo IKEDA†, and Atsushi SHIMIZU†	†NTT Media Intelligence Laboratories; ‡NTT Microsystem Integration Laboratories	Japan	Fast and Accurate Estimation of Power Consumption with Power Modeling for Large-Scale SoCs
16:00	16:20	20	Oral	Yuuki Tanaka, Yunlei Zhang and Shugang Wei	Gunma University	Japan	Efficient Implementations of Canonical Signed-Digit Recoding Algorithm
16:20	16:40	20	Oral	Nam-Khanh Dang and Xuan-Tu Tran	VNU University of Engineering and Technology	Vietnam	A VLSI Implementation for Inter-Prediction Module in H.264/AVC Encoders
16:40	17:00	20	Oral	Quang-Kien Trinh, Xuan-Tien Do, Van-Phuc Hoang, Thi-Thanh-Dung Phan and Cong-Kha Pham	Le Quy Don Technical University; The University of Electro-Communications	Vietnam; Japan	A Compact Improved TDES Cryptography Module for Wearable Medical Devices
17:00	17:20	20	Oral	Duc-Phuc Nguyen, Cao-Quyen Tran, Khac-Minh Ho, Minh-Triet Luu, Huu-Thuan Huynh and Trong-Tu Bui	Ho Chi Minh City University of Science	Vietnam	Hardware-Software Co-design of an Embedded System for Noise Cancellation
17:20	20:20	180	Banquet	Bus leaves HCMUS at 17h30 and will be at the restaurant at 18h00. The banquet will start at 18h00			

16-Nov-2013

16-Nov-2013							
Session #5		Location:		Chairs: Shigetoshi Nakatake, University Kita-Kyu. Xuan-Tu Tran, VNU University of Engineering and Technology			
8:30	9:00	30	Invited	Win Chaivipas	Fujitsu Laboratories Ltd.	Japan	Wireline Transceivers: Equalization, Clocking and Architecture
9:00	9:20	20	Oral	Hidehiro Fujiwara, Makoto Yabuuchi and Koji Nii	Renesas Electronics	Japan	Silicon Measurements of Uniqueness and Reliability for 45-nm SRAM-based PUFs with Power-on and Low/Low Write Schemes
9:20	9:40	20	Oral	Shaiful Nizam Mohyar, Harnani Hassan, Masahiro Murakami, Haruo Kobayashi, Osamu Kobayashi, Tatsuji Matsuura, Nobukazu Takai, Isao Shimizu, Kiichi Niitsu, Masanobu Tsuji, Masafumi Watanabe, Noriaki Dobashi, Sadayoshi Umeda and Takahiro J. Yamaguchi	Gunma University; Universiti Malaysia Perlis; Universiti Teknologi Mara; Nagoya University; STARC	Japan; Malaysia	SFDR Improvement Algorithms for Current-Steering DACs
9:40	10:00	20	Oral	Masahiro Murakami, Shaiful Nizam Mohyar, Haruo Kobayashi, Tatsuji Matsuura, Osamu Kobayashi, Masanobu Tsuji, Sadayoshi Umeda, Ryoji Shiota, Noriaki Dobashi, Masafumi Watanabe, Isao Shimizu, Kiichi Niitsu, Nobukazu Takai and Takahiro J. Yamaguchi	Gunma University; Semiconductor Technology Academic Research Center; Nagoya University	Japan	Study of Complex Multi-Bandpass Delta-Sigma Modulator for I-Q Signal Generation
10:00	11:00	60	Break & Poster				
Session #6		Location:		Chairs: Truong Vu Bang Giang, VNU University of Engineering and Technology Cong-Kha Pham, The University of Electro-Communications			

11:00	11:20	20	Oral	Yusuke Osawa, Daiki Hirabayashi, Naohiro Harigai, Haruo Kobayashi, Osamu Kobayashi, Masanobu Tsuji, Sadayoshi Umeda, Ryoji Shiota, Noriaki Dobashi, Masafumi Watanabe, Tatsuji Matsuura, Kiichi Niitsu, Takahiro J. Yamaguchi, Nobukazu Takai and Isao Shimizu	Gunma University; Semiconductor Technology Academic Research Center; Nagoya University	Japan	Phase Noise Measurement and Testing with Delta-Sigma TDC
11:20	11:40	20	Oral	Tran Van Hoi, Hoang Duc Long and Bach Gia Duong	VNU University of Engineering and Technology	Vietnam	Low Noise Block Downconverter Design for Satellite Receiver System Vinasat 1 Operating at C-band
11:40	12:00	20	Oral	Takayuki Negishi, Naoki Arai, Nobukazu Takai, Masato Kato, Hiroaki Seki, Sumit Kumar Biswas and Haruo Kobayashi	Gunma University	Japan	Automatic Synthesis of Comparator Circuit Using Genetic Algorithm
12:00	13:00	60	Lunch				

Session #7		Location: C31		Chairs: Takeshi Yamamura, Fujitsu Labs. Trong-Tu Bui, Ho Chi Minh City University of Sciences+F51			
13:00	13:50	50	Keynote	Masanori Odaka	Hitachi	Japan	Ultra-low Energy Computing Technology for Environmentally-friendly Social Innovation - Trend of Devices and LSIs
13:50	14:10	20	Oral	Minh Son Nguyen and Huu Nhan Nguyen	VNUHCM International University; VNUHCM University of Information Technology	Vietnam	New Encoder Based on Double-Base Number System for SOC Architecture of DSP Applications
14:10	14:30	20	Oral	Ngoc-Sinh Nguyen, Duy-Hieu Bui and Xuan-Tu Tran	VNU University of Engineering and Technology	Vietnam	An Efficient Video Coding Algorithm Targeting Low Bitrate Stationary Cameras
14:30	14:50	20	Oral	Vinh Truong Quang, Tai Nguyen Ngoc and Tri Le Quoc Bao	Ho Chi Minh City University of Technology	Vietnam	Design of Portable Ear-Nose-Throat Endoscope Supporting Image Enhancement
14:50	15:10	20	Break				

Session #8		Location:		Chairs: Huynh Huu Thuan, Ho Chi Minh City University of Sciences Xuan-Tu Tran, VNU University of Engineering and Technology			
15:10	15:40	30	Invited	Youhua Shi, Hiroaki Igarashi, Nozomu Togawa and Masao Yanagisawa	Waseda University	Japan	Predication based Timing Speculation Technique for Throughput Improvement
15:40	16:00	20	Oral	Shu Wu, Yasunori Kobori, Zachary Nosker, Murong Li, Feng Zhao, Li Quan, Qiulin Zhu, Tetsuji Yamaguchi, Eiji Shikata, Tsuyoshi Kaneko, Kimio Ueda, Nobukazu Takai and Haruo Kobayashi	Gunma University; AKM Technology Corporation	Japan	Design of a Simple Feed-Forward Controller for DC-DC Buck Converter
16:00	16:20	20	Oral	Trong-Tuan Nguyen, Van-Cuong Nguyen and Mai-Duyen Le-Nguyen	Acronics Systems; Danang University of Technology; Duy Tan University	Vietnam	A Novel Architecture for Cryptosystem with Simultaneous Encryptions/Decryptions HW-Threads and Self-Dynamic Reconfiguration
16:20	16:40	20	Oral	Ramin Khatami, Haruo Kobayashi, Nobukazu Takai, Yasunori Kobori, Tetsuji Yamaguchi, Eiji Shikata, Tsuyoshi Kaneko and Kimio Ueda	Gunma University; AKM Technology Corporation	Japan	Delta-Sigma Digital-to-Time Converter and its Application to SSCG
16:40	17:00	20	Oral	The-Duy Phan-Dinh, Nhan H. Pham, Khoi-Nguyen Le-Huu and Anh-Vu Dinh-Duc	Ho Chi Minh City University of Technology; VNUHCM University of Information Technology	Vietnam	Quadrotor Helicopter: a Practical Design Approach
17:00	17:20	20	Closing	- Prof. Cong-Kha Pham* - Prof. Ngoc Binh Nguyen**	*UEC, Japan **IEICE Vietnam Section, VNU-UET		- Conference summary - Closing speech & ICDV 2014 announcement

POSTER PRESENTATIONS

<p>FIRST DAY POSTER SESSION</p>	<p>14h30 - 15h30 15-Nov-2013</p>	Poster	Thien T. Vu, The-Duy Phan-Dinh, Thanh T. Vu, Phuong T. Vo, Khoi-Nguyen Le-Huu and Anh-Vu Dinh-Duc	Ho Chi Minh City University of Technology; VNUHCM University of Information Technology	Vietnam	A Joint Scenario Based Consumed and Budget Energy Model for Power Manager in Super Capacitor Based Energy Harvesting WSN
		Poster	Zachary Nosker, Yasunori Kobori, Haruo Kobayashi, Kiichi Niitsu, Nobukazu Takai, Tetsuji Yamaguchi, Eiji Shikata, Tsuyoshi Kaneko and Kimio Ueda	Gunma University; Nagoya University; AKM Technology Corporation	Japan	A Single Supply Bootstrapped Boost Regulator for Energy Harvesting Applications
		Poster	Hien Dinh Sy	Ho Chi Minh City University of Science	Vietnam	Some New Results of Simulating of Emerging Nanoelectronics Devices
		Poster	Yukiko Arai, Yu Liu, Haruo Kobayashi, Tatsuji Matsuura, Osamu Kobayashi, Masanobu Tsuji, Masafumi Watanabe, Ryoji Shiota, Noriaki Dobashi, Sadayoshi Umeda, Isao Shimizu, Kiichi Niitsu, Nobukazu Takai and Takahiro Yamaguchi	Gunma University; STARC; Nagoya University	Japan	Noise-Shaping Cyclic ADC Architecture
		Poster	Sundaresan Chidambaram, Chaitanya Cvs, Venkateswaran Pr, Somashekara Bhat and Mohan Kumar J.	Manipal University; BHEL	India	Multi Operand BCD adder using High Speed BCD Adder
		Poster	Satoru Kawauchi, Daiki Oki, Congbing Li, Masataka Kamiyama, Seiichi Banba, Toru Dan, Nobuo Takahashi, Koji Sakata, Haruo Kobayashi and Nobukazu Takai	Gunma University; Sanyo Semiconductor	Japan	A Power-Efficient Noise Canceling Technique Using Signal-Suppression Feed-forward for Wideband LNAs
		Poster	Anh Viet Nguyen, Trinh Dang and Nguyen Thanh Loan Pham	RMIT University Vietnam; Hanoi University of Science and Technology	Vietnam	Low phase noise, low reference spurious and linear tuning voltage LC VCO for high-performance RF receivers
		Poster	Gong Chen, Jing Li, Bo Yang, Qing Dong and Shigetoshi Nakatake	Design Algorithm Laboratory; University of Kitakyushu	Japan	Routability-driven Common-centroid Capacitor Array Generation with Signal Coupling Constraints
		Poster	Wei-Chun Tung, Hong-Thang Nguyen, Minh-Triet Luu, Cao-Quyen Tran, Huu-Thuan Huynh, Cong-Kha Pham and Kenzo Ozaki	The University of Electro-Communications; Ho Chi Minh City University of Science;	Japan	Point-to-Point Real-time H.264 Video Streaming over IEEE 802.15.4

Poster	Pham Van-Huong, Nguyen Ngoc-Binh and Bui Ngoc-Hai	VNU University of Engineering and Technology	Vietnam	Optimizing Source Code of Embedded Software Based on Replacing Equivalent Expressions
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		Poster	Shunsuke Tanaka, Tatunori Nagasima, Yasunori Kobori, Kotaro Kaneya, Takashi Okada, Takahiro Sakai, Sumit Kumar Biswas, Nobukazu Takai, Haruo Kobayashi, Tetsuji Yamaguchi, Kimio Ueda, Eiji Shikata and Tsuyoshi Kaneko	Gunma University; AKM Technology Corporation	Japan	Single Inductor Multi Output DC-DC Converter Design with Hysteresis Control
		Poster	Hung Phammanh and Hoang Chuduc	Hanoi University of Science and Technology	Vietnam	The parameters of disease manifestations in iEMG
		Poster	Thanh Le, Hong-Thang Nguyen, Xuan-Thuan Nguyen and Hoang-Dat Tran	Ho Chi Minh City University of Science	Vietnam	A Design of Low-Cost Low-Power Multiaccess Full-HD System for Home Entertainment Applications
SECOND DAY POSTER SESSION	10h00-11h00 16-Nov-2013	Poster	Ngo Thi Huong, Trung Le Trong, Nguyen Quoc Dinh, Ta Chi Hieu and Le Dinh Thanh	Le Quy Don Technical University; The University of Electro-Communications	Vietnam; Japan	A Design of Ultra-Wideband Antenna
		Poster	Minh Son Nguyen, Quan Le-Trung and Azman Osman Lim	VNUHCM International University; Japan Advanced Institute of Science & Technology	Vietnam; Japan	Low-Power Wifi Sensor Mote for Internet of Things Application
		Poster	Le Thi Xuan, Ha Quoc Anh, Nguyen Quoc Dinh and Ta Chi Hieu	Le Quy Don Technical University	Vietnam	Antenna Miniaturization for 4G Mobile Devices
		Poster	Thi Nguyen Duy Manh and Loan Nguyen Thi Thuy	Ho Chi Minh City University of Science	Vietnam	Logic Optimization Methods used in Synthesis flow for a deep submicron design
		Poster	Nguyen Xuan Truong	Broadcasting College 1, VOV	Vietnam	Using subband coding with 5 channels to compress audio data
		Poster	Tran Tuan Trung and Viktor Stempitsky	Belarusian State University of Informatics and Radioelectronics	Belarus	Concept of new compact model for deep-submicron MOSFET
		Poster	Tran Van Hoi, Hoang Duc Long and Bach Gia Duong	Broadcasting College 1, VOV; VNU University of Engineering and Technology	Vietnam	Wideband low noise amplifier design used for RF front end application
		Poster	Chuc Doan Huu, Long Hoang Duc and Duong Bach Gia	Hai Phong Private University; VNU University of Engineering and Technology	Vietnam	Study, design and fabrication of power amplifier module to be used for wireless power transmission system operating at S band
		Poster	Khoa Dang, Phuong Nguyen and Thu Nguyen Thi Hong.	Ho Chi Minh City University of Science	Vietnam	Implementing a Low Complexity Wavelet OFDM Based on FPGA for Optical Communication Systems
		Poster	Hieu Binh Nguyen, Bao Thuong Cao Tran, Trong Tu Bui and Huu Thuan Huynh	Ho Chi Minh City University of Science	Vietnam	A Performance Evaluation of HMM Based Text- to- Speech System on Various Platforms
		Poster	Hoan Doan Ngoc, Tran Nguyen Minh, Nhuong Tran Quang and Giang Truong Vu Bang	VNU University of Engineering and Technology	Vietnam	Design and Fabrication of a Microstrip Antenna for IEEE 802.11 b/g/n Applications