

IEEE International Symposium on Integrated Circuits and Systems (ISICAS 2024)						
Start	End	Duration	Session 1 (Viceroy 1)	Session 2 (Viceroy 2)	Session 3 (Viceroy 3)	
Day 1   18 October 2024   Friday						
8:30	9:00	0:30	Welcome/Registration			
9:00	9:30	0:30	Inauguration Ceremony Shri. Sudhir Marwaha, Group Coordinator / Scientist-G, Ministry of Electronics and Information Technology (MeitY) Government of India Manuel Delgado-Restituto, Past President IEEE Circuits and Systems Society			
9:30	10:00	0:30	Visionary Keynote Talk : AI-Assisted Design Automation of Analog Circuits: An Overview of The State of The Art and Challenges Distinguished Speaker: José M. de la Rosa, Ph.D., Professor, IEEE Fellow			
10:00	11:00	1:00	Panel Discussion : SKILLING SEMICONDUCTORS FOR ALL Sunny Malhotra, Strategy Advisor at Kaynes Semiconductors and RK Electronics, Chairman of IES (NCR Chapter) Shanthi Pavan, IIT Madras, India Francois Rivet, IMS Laboratory Bordeaux, France Nitin Kishore, CEO Truechip Solutions NCR, India			
11:00	11:30	0:30	Tea / Coffee Break			
Technical Papers Session: 1A			Technical Papers Session: 1B		Session: 1C	
Power Management and Wireless			Digital Circuits		IEEE CASS Blitz	
11:30	11:50	0:20	<b>PID_22 : On-chip Configurable RF Energy Harvester for Biomedical Implantable Devices</b> [Nagaveni S (IIT Dharwad); Praveen Hunsurajidat (IIT Dharwad); Deepali Pathak (IIT Hyderabad); Ashudeb Dutta (IIT Hyderabad)]			
11:50	12:10	0:20	<b>PID_45 : A 6-Gbps 16-nm FinFET CMOS I/O Buffer With Variation Insensitivity Ensured By Genetic Algorithm</b> [Chua-Chin Wang (National Sun Yat-sen University (NSYSU), Taiwan); L S S Pavan Kumar Chodisetti (National Sun Yat-sen University (NSYSU), Taiwan); Jih-Ying Ke (National Sun Yat-sen University (NSYSU), Taiwan); Cheng Yao Lo (National Sun Yat-sen University (NSYSU), Taiwan); Tzung-Je Lee (National Sun Yat-sen University (NSYSU), Taiwan); Lean Karlo Santos Tolentino (Technological University of the Philippines, Philippines)]			
12:10	12:30	0:20	<b>PID_23 : A DVS-Enabled Distributed Digital LDO Providing Rapid Uniform Power Grid and Ripple Reduction Achieving 20.1-ps FOM in 28nm CMOS</b> [Yuli Han (Kyungpook National University); Jaemin Kim (Korea Advanced Institute of Science and Technology (KAIST), Daejeon, South Korea); Gunmo Koo (Kyungpook National University, Daegu, South Korea); Jaemin Kim (Kyungpook National University); Jusung Kim (Hankai National University, Daejeon, South Korea); Joo-Young Kim (Korea Advanced Institute of Science and Technology (KAIST), Daejeon, South Korea); Kunhee Cho (Kyungpook National University)]			
12:30	12:50	0:20	<b>PID_27 : Enhancing Continuous Beam Angle Resolution for Next Generation Wireless Systems: A Multi-Stage Phase-Shifting Polyphase Filters Approach</b> [Adam Slater (Washington State University); Hesam Abbasi (Washington State University); Sreeni Poolakkal (Washington State University); Foad Behesti (Washington State University); Subhanshu Gupta (Washington State University)]		<b>PID_44 : An M-metric Readout Circuit for MLC Phase Change Memory with a Comparator-Based Push-Pull Bit-Line Driver</b> [Seo, Min-Jae (University of Seoul)]	
12:50	13:00	0:10	Session 1A wrap up		Session 1B wrap up	
13:00	14:00	1:00	Lunch Break			
Technical Papers Session: 2A			Technical Papers Session: 2B			
Power Management and Communication			Analog Techniques I			
14:00	14:20	0:20	<b>PID_2 : Ultra-Low-Power High PSRR Sub-1V Voltage Reference Circuit in 22nm FDSOI CMOS</b> [Adilet Dossanov (Technische Universität Braunschweig, Germany); Christian Ziegler (Technische Universität Braunschweig, Germany); Vadim Issakov (Technische Universität Braunschweig, Germany)]			
14:20	14:40	0:20	<b>PID_26 : A Wireless-Powered Battery-Less Electrical Stimulator with Delay-Shift Keying (DSK): Based Downlink Data Communication</b> [Dao-Han Yao (National Yang Ming Chiao Tung University); Chia-Ching Hung (National Yang Ming Chiao Tung University); Wen-Po Lo (National Yang Ming Chiao Tung University); Po-Hung Chen (National Yang Ming Chiao Tung University)]			
14:40	15:00	0:20	<b>PID_28 : A 102-Gb/s/lane 1.4-Vppd Linear Range PAM-8 Receiver Frontend with Multi-Path Continuous-Time Linear Equalization in 28-nm CMOS</b> [Sangwan Lee (Hanyang University); Hyeonmin Seo (Hanyang University); Saungwoo Son (Hanyang University); Sungh Yeom (Hanyang University); Jaeduk Han (Hanyang University)]		<b>PID_4 : 0.4-V Supply, 12-nW Reverse Bandgap Voltage Reference with Single BJT and Indirect Curvature Compensation</b> [Chen-Fai Lee (University of Macau); Chi-Wia Li (University of Macau); Rui P. Martins (University of Macau and Universidade de Lisboa); Chi-Seng Lam (University of Macau)]	
15:00	15:20	0:20	<b>PID_29 : A 3x12-Gbit/s 1.26-pJ/b Single-Ended PAM-3 Transmitter with Crosstalk Cancellation Technique in 28-nm CMOS</b> [Dongwoo Kang (Yonsei University); Han-Gon Ko (ONE Semiconductor); Kwansoo Park (Yonsei University)]		<b>PID_25 : A Phase Interpolated Dual-Phase Adaptive On-Time Controlled Buck Converter</b> [Tsai, Chieh-Ju (National Taiwan University); Chen, Hsiao-Hsuan (National Taiwan University); Chen, Ching-Jan (National Taiwan University)]	
15:20	15:30	0:10	Session 2A wrap up		Session 2B wrap up	
15:30	16:00	0:30	Tea / Coffee Break			
Technical Papers Session: 3A			Technical Papers Session: 3B			
Frequency Generation and Wireline			Analog Techniques II			
16:00	16:20	0:20	<b>PID_30 : A 0.09-pJ/b/dB 28-Gb/s Digital CDR with ISI-Resistant Phase Detector</b> [Sull Kang (Yonsei University); Dongwoo Kang (Yonsei University); Sinho Lee (Yonsei University); Minkyoo Shim (Yonsei University); Seungja Roh (Yonsei University); Sunjin Choi (Yonsei University); Kwansoo Park (Yonsei University)]			
16:20	16:40	0:20	<b>PID_31 : High-Precision Built-In Phase Noise Measurement Circuit with a Hybrid ΔΣ Time-to-Digital Converter for SoC Clocking Applications</b> [Jihun Cho (Hanyang University); Sangwoo Na (Hanyang University); Hojin Kim (Samsung Electronics); Hyungdong Roh (Samsung Electronics); Youngjae Cho (Samsung Electronics); Michael Choi (Samsung Electronics); Min-Seong Cho (Hanyang University); Jeongin Roh (Hanyang University)]			
16:40	17:00	0:20	<b>PID_32 : A 5.4-7.4GHz Ultra-Low Jitter Injection-Locked Frequency Tripler with 3rd Harmonic Current Boosting Input Buffer</b> [Sonam Sadhukhan (Texas Instruments, USA); Arpan Thakkar (Texas Instruments, India); Pranav Kumar (Texas Instruments, India); Saurabh Saxena (Indian Institute of Technology, Madras)]		<b>PID_6 : A High-Voltage Differential SPDT T/R Switch for Ultrasound Systems</b> [Yaohua Zhang (University College London); Dai Jiang (University College London); Andreas Demosthenous (University College London)]	
17:00	17:20	0:20	<b>PID_33 : A 32-Gb/s Single-Ended PAM-4 Transceiver with Asymmetric Termination and Equalization Techniques for Next-Generation Memory Interfaces</b> [Hyuntae Kim (Hanyang University, Seoul, South Korea); Yunsong Jo (Hanyang University, Seoul, South Korea); Sangjun Lee (Hanyang University, Seoul, South Korea); Eunsang Lee (Memory Division, Samsung Electronics, Hwaseong, Gyeonggi-do, South Korea); Young Choi (Memory Division, Samsung Electronics, Hwaseong, Gyeonggi-do, South Korea); Jaewoo Park (Memory Division, Samsung Electronics, Hwaseong, Gyeonggi-do, South Korea); Myoungso Kwak (Memory Division, Samsung Electronics, Hwaseong, Gyeonggi-do, South Korea); Jung-Hwan Choi (Memory Division, Samsung Electronics, Hwaseong, Gyeonggi-do, South Korea); Youngdon Choi (Memory Division, Samsung Electronics, Hwaseong, Gyeonggi-do, South Korea); Jaeduk Han (Hanyang University, Seoul, South Korea)]		<b>PID_8 : A 10 23-bit ENOB 1 kS/s Differential VCO-based ADC with Resistive Input Stage in Low-Temperature Poly-Silicon TFT Technology</b> [Yueqin Lou (Shanghai Jiao Tong University, Shanghai, China); Hanbo Zhang (Shanghai Jiao Tong University, Shanghai, China); Jun Li (Shanghai Jiao Tong University, Shanghai, China); Chen Lin (Tsinghua University, Beijing, China); Lailai Shao (Shanghai Jiao Tong University, Shanghai, China); Xiaojun Guo (Shanghai Jiao Tong University, Shanghai, China); Yongtu Lu (Shanghai Jiao Tong University, Shanghai, China); Guoxing Wang (Shanghai Jiao Tong University, Shanghai, China); Fakhrul Rokhman Jian Zhao (Universiti Putra Malaysia, Selangor, Malaysia)]	
17:20	17:30	0:10	Session 3A wrap up		Session 3B wrap up	
17:30	18:00	0:30	Networking Break			
18:00	19:00	1:00	Cultural Evening			

19:00	20:30	1:30	Ethnic Evening Dinner with Dance and Music			
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<b>Day 2   19 October 2024   Saturday</b>						
<b>Welcome/Registration</b>						
8:30	9:00	0:30	Visionary Keynote Talk : Implantable neural interfaces. Applications and challenges Distinguished Speaker: Manuel Delgado-Restituto, Past President IEEE Circuits and Systems Society			
9:00	9:30	0:30	Visionary Keynote Talk : Future of Automotive mobility Distinguished Speaker: Amardeep Purnhanj, Sr. Director, Digital IP and NXP Semiconductors Noida Site Lead			
9:30	10:00	0:30	WICASS & YP-CASS Panel Discussion : Elevating Women and Young Engineers to Next Level of Professional Growth Preet Yadav, Head India Innovation Ecosystem NXP Semiconductors and Chair IEEE CASS-CS Chapter Delhi Ms. S Usha, Associate Professor, Sri Sairam Engineering College Yann Deval, Professor, Bordeaux Institute of Technology Harini Kandadal, Staff Engineer, Micron India			
10:00	11:00	1:00	<b>Tea / Coffee Break (WICASS - YPCAS)</b>			
11:00	11:30	0:30	<b>Technical Papers Session: 4A</b>	<b>Technical Papers Session: 4B</b>	<b>WICASS-YPCAS Forum talks:</b>	
11:30	13:00	1:30	<b>Power Management and Data Converters</b>	<b>SoC Building Blocks</b>		
11:30	11:50	0:20	<b>PID_3 : Analysis and Design of a Self-bias Cross-coupled CMOS Rectifier to Enhance Input Power Range</b> [Terence, Teo Boon Chiat (Nanyang Technological University, Singapore); Lim Wu Cong (Nanyang Technological University, Singapore); Rabeek, S. Mohamed (Nanyang Technological University, Singapore); Raja, M. Kumarasamy (Nanyang Technological University, Singapore); Navaneethan, Venkadasamy (Nanyang Technological University, Singapore); Lim, Xian Yang (Nanyang Technological University, Singapore); Siek, Litar (Nanyang Technological University, Singapore)]	<b>PID_34 : A Loop-Break Decision Feedback Equalizer for DAC/ADC-DSP-based Wireline Transceivers</b> [Kim, Donggeon (Daegu Gyeongbuk Institute of Science and Technology (DGIST), South Korea); Choi, Yujin (Daegu Gyeongbuk Institute of Science and Technology (DGIST), South Korea); Lee, Jaewon (Daegu Gyeongbuk Institute of Science and Technology (DGIST), South Korea); Jang, Seoyoung (Daegu Gyeongbuk Institute of Science and Technology (DGIST), South Korea); Song, Sungyu (Daegu Gyeongbuk Institute of Science and Technology (DGIST), South Korea); Braemdi, Matthias (IBM Research Europe Zurich Laboratory, Switzerland); Morf, Thomas (IBM Research Europe Zurich Laboratory, Switzerland); Kossel, Marcel (IBM Research Europe Zurich Laboratory, Switzerland); Francese, Pier (IBM Research Europe Zurich Laboratory, Switzerland); Kim, Gain (Daegu Gyeongbuk Institute of Science and Technology (DGIST), South Korea)]		
11:50	12:10	0:20	<b>PID_7 : Up to 45% Faster Supply Boosted Voltage Sense Amplifier (SBVSA) for High-Speed SRAMs</b> [Rachit Sharma (Indian Institute of Technology Delhi); Anuj Grover (Indraprastha Institute of Information Technology Delhi); Ajay Shrotri (Indraprastha Institute of Information Technology Delhi); Shouh Chatterjee (Indian Institute of Technology Delhi)]	<b>PID_36 : A Configurable ML-KEM/Kyber Key-Encapsulation Hardware Accelerator Architecture</b> [Hyunseon Kim (Inha University, Incheon, South Korea); Haesung Jung (Inha University, Incheon, South Korea); Ardiando Saritawan (Inha University, Incheon, South Korea); Hanho Lee (Inha University, Incheon, South Korea)]		
12:10	12:30	0:20	<b>PID_9 : A 4.3 GS/s Time-Interleaved <math>\Delta\Sigma</math> DAC with Temperature-Insensitive Bias and Harmonic Cancellation for Qubit Control</b> [Jaeyun Park (Seoul National University of Science and Technology); Jaewon Nam (Seoul National University of Science and Technology)]	<b>PID_35 : Mobile-X: Dedicated FPGA Implementation of the MobileNet Accelerator Optimizing Depthwise Separable Convolution</b> [HyeonSeok Hong (Seoul National University of Science and Technology); DaHun Cho (Seoul National University of Science and Technology); NamJoon Kim (Seoul National University of Science and Technology); Hyun Kim (Seoul National University of Science and Technology)]		
12:30	12:50	0:20	<b>PID_11 : A 0.6-V 4-MS/s Asynchronous SAR ADC With 2-bit Conversion/cycle Time-Domain Comparator</b> [Sanghun Lee (Seoul National University of Science and Technology); Won-Young Lee (Seoul National University of Science and Technology)]	<b>PID_39 : Accelerated Image Processing through IMPLY-Based NoCarry Approximated Adders</b> [Fabian Seiler (TU Wien); Nima TaheriNejad (Heidelberg University and TU Wien)]		
12:50	13:00	0:10	<b>Session 4A wrap up</b>	<b>Session 4B wrap up</b>		
13:00	14:00	1:00	<b>Lunch Break (WICASS - YPCAS/ Mentorship)</b>			
14:00	15:30	1:30	<b>Technical Papers Session: 5A</b>	<b>Technical Papers Session: 5B</b>		<b>IEEE CASS Mentoring Program: Special focus to WICASS - YPCAS</b>
14:00	14:20	0:20	<b>ADCs and Power Management</b>	<b>Compute-in-Memory and Power Management</b>		
14:20	14:40	0:20	<b>PID_10 : Design Methodology for Compact Single-Channel 3-Stage Capacitor-Array-Assisted Charge-Injection DAC-Based SAR ADC</b> [Chan-Ho Kye (The University of Suwon); Yu-Jin Byeon (Hanyang University); Kyojin Choo (EPFL); Min-Seong Choo (Hanyang University)]	<b>PID_14 : An 11T1C Bit-Level-Sparsity-Aware Computing-in-Memory Macro with Adaptive Conversion Time and Computation Voltage</b> [Ye Lin (Nanjing University); Yuandang Li (Nanjing University); Heng Zhang (Nanjing University); He Ma (Nanjing University); Jingling Lv (Nanjing University); Anying Jiang (Nanjing University); Yuan Du (Nanjing University); Li Du (Nanjing University)]		
14:40	15:00	0:20	<b>PID_16 : A 22-nA Quiescent Current, 50-mA Output-Capacitor-Less Low-Dropout Regulator With Multiple-Feedback Loop for IoT Devices</b> [Raghav Bansal (IIT Delhi); Shoun Chatterjee (IIT Delhi)]	<b>PID_15 : CLUT-CIM: A Capacitance Lookup Table-Based Analog Compute-in-Memory Macro with Signed-Channel Training and Weight Updating for Nonuniform Quantization</b> [Fu, Yuzhao (University of Macau, China); Li, Jixuan (University of Macau, China); Yu, Wei-Han (University of Macau, China); Un, Ka-Fai (University of Macau, China); Chan, Chi-hang (University of Macau, China); Zhu, Yan (University of Macau, China); Martins, Rui (University of Macau, China); Mak, Pui-In (University of Macau, China)]		
15:00	15:20	0:20	<b>PID_17 : A Ripple-Based Real-Time Built-In-Resistance Compensation for Switching Battery Charger Achieving Fast Charging</b> [Geuntae Park (Kyungpook National University, Daegu, South Korea); Seongil Yoo (Kyungpook National University, Daegu, South Korea); Chanjung Park (Kyungpook National University, Daegu, South Korea); Kunhee Cho (Kyungpook National University, Daegu, South Korea)]	<b>PID_19 : A 2.5-A 3-ns-Response-Time Calibration-Free Hybrid LDO Using Scalable Self-Clocked Stochastic Flash-ADC for In-Loop Quantization</b> [Tianrui Lyu (Sun Yat-sen University); Zixin Wang (Sun Yat-sen University); Jianping Guo (Sun Yat-sen University)]		
15:20	15:30	0:10	<b>Session 5A wrap up</b>	<b>Session 5B wrap up</b>		
15:30	16:00	0:30	<b>Tea / Coffee Break (WICASS - YPCAS / mentoring program)</b>			
16:00	17:30	1:30	<b>Technical Papers Session: 6A</b>	<b>Technical Papers Session: 6B</b>		
16:00	16:20	0:20	<b>SoC Building Blocks</b>	<b>Digital Systems and Power Management</b>		
16:20	16:40	0:20	<b>PID_24 : Two-phase Hybrid Buck-Boost Converter with Coupled-Inductors under ZVS Operation for USB PD Bidirectional Conversion</b> [Yi-Ching Chiu (National Yang Ming Chiao Tung University, Hsinchu, Taiwan); Nan-Hsiung Tseng (National Yang Ming Chiao Tung University, Hsinchu, Taiwan); Chih-Cheng Liao (National Yang Ming Chiao Tung University, Hsinchu, Taiwan); Hao-Wen Guan (National Yang Ming Chiao Tung University, Hsinchu, Taiwan); Po-Shuan Chang (National Yang Ming Chiao Tung University, Hsinchu, Taiwan); Ke-Hong Chen (National Yang Ming Chiao Tung University, Hsinchu, Taiwan); Kuo-Lin Zheng (Chip-GaN Power Semiconductor Corporation, Hsinchu, Taiwan); Ying-Hsi Lin (Realtek Semiconductor Corporation, Hsinchu, Taiwan); Shian-Ru Lin (Realtek Semiconductor Corporation, Hsinchu, Taiwan); Tsung-Yen Tsai (Realtek Semiconductor Corporation, Hsinchu, Taiwan)]	<b>PID_41 : An Efficient FPGA-based Dilated and Transposed Convolutional Neural Network Accelerator</b> [Wu, Tsung-Hsi (National Taiwan University); Shu, Chang (National Taiwan University); Liu, Tsung-Te (National Taiwan University)]		
16:40	17:00	0:20	<b>PID_18 : A 2 <math>\mu</math>A Iq Passive-Ramp-Adaptive-Extended-TON Controlled Buck Converter Leveraging Clamped Adaptive Biased Error Amplifier to Achieve DVS/Load Transient One-Cycle Recovery Time</b> [Tsai, Chieh-Ju (National Taiwan University); Chen, Hsiao-Hsuan (National Taiwan University); Chen, Ching-Jan (National Taiwan University)]	<b>PID_37 : RAW Images-based Motion-assisted Object Detection Accelerator Using Deformable Parts Models Features on 1080p Videos</b> [Zhang, Ling (ShanghaiTech University); Li, Haoyan (ShanghaiTech University); Zhang, Xiangyu (ShanghaiTech University); Lou, Xin (ShanghaiTech University)]		
17:00	17:20	0:20	<b>PID_46 : Area-Delay-Energy-Efficient Approximate Dividers based on Piecewise Linear Fitting of Surface</b> [Wu, Chaoyuan (Shenzhen University, Shenzhen, China); Shi, Weiwei (Shenzhen University, Shenzhen, China); Yuan, Yida (WingSemi Technology (Shanghai), Shanghai, China); Zou, Zhaoliang (Shenzhen University, Shenzhen, China); Mo, Zhong (Shenzhen University, Shenzhen, China); He, Jiangwei (Shenzhen University, Shenzhen, China)]	<b>PID_38 : A Real-Time and High Precision Hardware Implementation of RANSAC Algorithm for Visual SLAM Achieving Mismatched Feature Point Pair Elimination</b> [Wenzheng He (Xi'an Jiaotong University, China); Zikuo Lu (Xi'an Jiaotong University, China); Xin Liu (Xi'an Jiaotong University, China); Ziwel Xu (Xi'an Jiaotong University, China); Jingshuo Zhang (Xi'an Jiaotong University, China); Chen Yang (Xi'an Jiaotong University, China); Li Geng (Xi'an Jiaotong University, China)]		
17:20	17:40	0:20	<b>PID_42 : An FPGA-Based Transformer Accelerator with Parallel Unstructured Sparsity Handling for Question-Answering Applications</b> [Ruijun Cao (University of Macau); Zhongyu Zhao (University of Macau); Ka-Fai Un (University of Macau); Wei-Han Yu (University of Macau); Rui P. Martins (University of Macau and Universidade de Lisboa); Pui-In Mak (University of Macau)]	<b>PID_40 : High Logic Density Cyclic Redundancy Check and Forward Error Correction Logic Sharing Encoding Circuit for JESD204C Controller</b> [Peng Yin (Henan University); Hongli Chen (Henan University); Jingjun Xia (Henan University); Jinlong Zhang (Henan University); Mingqiu Liu (Henan University); Cheng Gu (Henan University); Weizhou Hou (Henan University); Amine Bernak (Hamad Bin Khalifa University); Fang Tang (Chongqing University)]		

17:20	17:30	0:10	Session 6A wrap up	Session 6B wrap up	
17:30	18:00	0:30		Closing Session	