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## **Track-wise list of papers**

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Variability and Reliability aware Surrogate Model for Sensing Delay analysis of SRAM Sense Amplifier

*Sapna Khandelwal, Jyoti Meena, Lokesh Garg and Dharmendar Boolchandani*

Modeling and Yield Optimization of SRAM Sub-System for Different Capacities Subjected to Parametric Variations

*Pulkit Sharma, Anil Kumar Gundu and Mohammad S Hashmi*

A High Speed Low Voltage Latch Type Sense Amplifier for Non-Volatile Memory

*Disha Arora, Anil Gundu and Mohammad Hashmi*

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BDD based Synthesis Technique for Design of High-Speed Memristor based Circuits

*Anindita Chakraborty, Rakesh Das, Chandan Bandyopadhyay and Hafizur Rahaman*

High Performance Bit-Sliced Pipelined Comparator Tree for FPGAs

*Ayan Palchaudhuri and Anindya Sundar Dhar*

T-Gate: Concept of partial polarization in Quantum dot Cellular Automata

*Chiradeep Mukherjee, Soudip Sinha Roy, Saradindu Panda and Prof. Dr. Banshibadan Maji*

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Backward Compatible Mil-STD-1553B Analog Transceiver Upgrade for 100-Mb/S Data Rate

*Prateek Pendyala and Vijaya Sankara Rao Pasupureddi*

Design And Measurement Techniques For A Low Noise Amplifier In A Receiver Chain For MedRadio Spectrum Of 401-406 MHz Frequency Band

*Abhishek Srivastava, Nithin Sankar K, Rakesh K K, Baibhab Chatterjee, Devarshi Das and Maryam Shojaei Baghini*

New technique to improve transient response of LDO regulators without an off-chip capacitor

*Chetan Parikh and Gopal Agarwal*

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A FSM Based Approach for Efficient Implementation of K-Means Algorithm

*Rahul Ratnakumar and Satyasai Jagannath Nanda*

An Effective and Efficient Algorithm to Analyse and Debug Clock Propagation Issues

*Akhilesh Chandra Mishra, Aditi Sharma, Sakshi Gupta, Pawan Sehgal and Sujay Deb*

Design of Coherence Verification Unit for CMPs Realizing Dragon Protocol

*Biddesh Chakraborty, Mamata Dalui and Biplab K Sikdar*

Guided Shifting of Test Pattern to Minimize Test Time in Multiple Serial Scan  
*Jaynarayan Tudu and Satyadev Ahlawat*

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A Unified Verilog-A Compact Model for Lateral Si Nanowire (NW) FET Incorporating Parasitics for Circuit Simulation<sup>6</sup>

*Om Prakash, Dr.Satish Maheshwaram, Mohit Sharma, Anand Bulusu, Ashok Kumar Saxena and Sanjeev Manhas*

Frequency Domain Analysis of On-Chip Power Distribution Network

*Shipra Batra, Pankhuri Singh, Shashwat Kaushik and Mohammad S. Hashmi*

Density Gradient Quantum Corrections based Performance Optimization of Triangular TG Bulk FinFETs using ANN and GA

*Ankit Gaurav, Sandeep Gill, Navneet Kaur and Munish Rattan*

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*Sasha Garg and Sumit Darak*

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*Saurav Kumar Ghosh, Akash Mondal, Souradeep Dutta, Aritra Hazra and Soumyajit Dey*

An Efficient FPGA-Based Function Profiler for Embedded System Applications

*Pavan Kumar Nadimpalli and Subir K Roy*

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A Robust 8T FinFET SRAM Cell with Improved Stability for Low Voltage Applications

*C B Singh Kushwah, Devesh Dwivedi and Krisnan S Rengrajan*

New Stable Loadless 6T Dual Port SRAM Cell Design

*Antara Ganguly, Sangeeta Goyal, Sneha Bhatia and Anuj Grover*

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*Purushothaman A.*

An Area and Performance Aware ECG Encoder Design for Wireless Healthcare Services

*Bharat Garg, Sameer Yadav and G K Sharma*

Efficient Implementation of Concurrent Lookahead Decision Feedback Equalizer using Offset Binary Coding

*Mohd Tasleem Khan, Rafi Ahamed Shaik and Amitabh Chatterjee*

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*Ram Prasad Acharya, Abir J Mondal and Alak Majumder*

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*Waikhom Mona Chanu, Vikash Prasad and Debaprasad Das*

Switched Capacitor Circuit Simulator In Q-V Domain Including Non Idealities

*Muralidhar Gadamsetty, G Dinesh and Binsu Kailath*

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*Jaynarayan Tudu*

Approximate Conditional Carry Adder for Error Tolerant Applications

*Avishek Sinha Roy, N Prasad and Anindya Sundar Dhar*

An Effective Test Methodology Enabling Detection of Weak bits in SRAMs: Case Study in 28nm FDSOI

*Nidhi Batra, Anil Gundu Kumar, Anuj Grover, Mohammad S Hashmi and Gangaikondan Subramani Visweswaran*

Skip-Scan: A Methodology for Test Time reduction

*Binod Kumar, Boda Nehru, Brajesh Pandey and Jaynarayan Tudu*

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Towards A Dynamic Associativity Enabled Write Prediction Based Hybrid Cache

*Sukarn Agarwal and Hemangee K. Kapoor*

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*Rahul Shrestha, Vinay Swargam and Mahesh Murty*

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*Pranab Roy, Sudeshna Chakraborty, Hafizur Rahaman and Parthasarathi Dasgupta*

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*Moumita Chakraborty, Amlan Chakrabarti, Partha Mitra, Debasri Saha and Krishnendu Guha*

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*Bikromaditya Mondal, Kushal Dey and Susanta Chakraborty*

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*Debasis Pal, Abir Pramanik, Parthasarathi Dasgupta and Debesh Kumar Das*

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*Sri Harsha Gade, Praveen Kumar and Sujay Deb*

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*Mohamed Asan Basiri M and Sandeep K. Shukla*

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*Satyadev Ahlawat and Jaynarayan T Tudu*

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*Celia Dharmaraj and Nitin Chandrachoodan*

SAT: A New Application Mapping Method for Power Optimization in 2D – NoC

*Aravindhan Alagarsamy and Lakshminarayanan G.*

On Determination of Instantaneous Peak and Cycle Peak Switching using ILP

*Rohini Gulve, Nihar Hage and Jaynarayan T Tudu*

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*Paromita Bhattacharjee, Abir J Mondal and Alak Majumder*

Programmable Output Switched Capacitor Step-down DC-DC Converter with High Accuracy using Sigma-Delta Feedback Control Loop

*Mahesh Zanwar and Subhajit Sen*

Design Methodology of Closed Loop MEMS Capacitive Accelerometers based on  $\Sigma\Delta$  Modulation Technique

*Procheta Chatterjee, Sougata Kar and Siddhartha Sen*

Optimal Design Flow of CMOS Doubler-based Rectifiers

*Soumik Sarkar, Gaurav Saini, Mahima Arrawatia and Maryam Shojaei Baghini.*

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*Surajit Das, Shirshendu Das and Hemangee K. Kapoor*

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*Rajib Lochan Jana, Soumyajit Dey, Pallab Dasgupta, Shashank Kuchibhotla and Rakesh Kumar*

A Low-Cost Energy Efficient Image Scaling Processor for Multimedia Applications

*Bharat Garg, V N S K Chaitanya Goteti and G K Sharma*

EGON: Portable In-Situ Energy Measurement for Low-Power Sensor Devices  
*Nils Heitmann, Philipp Kindt and Samarjit Chakraborty*

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*Kiran Garje, Shravan Kumar, Amitesh Tripathi, Maruthi G and Madhav Kumar M. A High CMRR*

Temperature Dependent IR-Drop and Delay Analysis in Side-Contact Multilayer Graphene Nanoribbon Based Power Interconnects  
*Sandip Bhattacharya, Debaprasad Das and Hafizur Rahaman*

Design, Integration and Performance Analysis of  $\Sigma\Delta$  ADC for Capacitive Sensor Interfacing  
*Procheta Chatterjee, Sougata Kar, Dushyant Juneja and Siddhartha Sen*

A Strategy for Fault Tolerant Reconfigurable Network-on-Chip Design  
*Navonil Chatterjee, Priyajit Mukherjee and Santanu Chattopadhyay*

Formal Verification of Switched Capacitor DC to DC Power Converter Using SPICE Circuit Simulation Traces  
*Ambuj Mishra and Subir Kumar Roy*

Golden IC free Methodology for Hardware Trojan Detection using Symmetric Path Delays  
*Ramakrishna Vaikuntapu, Lava Bhargava and Vineet Sahula*

FFT/IFFT implementation using Vivado HLS  
*Amit Salaskar and Nitin Chandrachoodan*

Reducing FIFO Buffer Power Using Architectural Alternatives at RTL  
*Ashish Sharma, Manoj Singh Gaur, Lava Bhargava, Vijay Laxmi and Ruby Ansar*

Data Dependent Suprious Power Reduction for FWM  
*Bharti Navlani, Pankaj U. Joshi and Raghavendra Deshmukh*

A Mismatch Insensitive Reconfigurable Discrete Time Biosignal Conditioning Circuit in 180 nm MM CMOS Technology  
*Priyanka Kimtee, Devarshi Mrinal Das and Maryam Shojaei Baghini*

Quantification of figures of merit of 7T and 8T SRAM cell in sub-threshold region and their comparison with the conventional 6T SRAM cell  
*Pulkit Sharma, Jasmine Kaur Gulati, K. Bharath, Renduchinthala Anusha, Preet Kaur Walia and Sumit Darak*

A Low Power High Speed Hybrid Full Adder  
*Manan Mewada and Mazad Zaveri*

FSK Demodulator And FPGA Based BER Measurement System For Low IF Receivers  
*Nithin Sankar K, Abhishek Srivastava, Baibhab Chatterjee, Rakesh K K and Maryam Shojaei Baghini*

Energy-efficient Reconfigurable Framework for Evaluating Hybrid NoCs

*Raghav Kishore, Hemanta Kumar Mondal and Sujay Deb*

An 8-bit 500 MSPS Segmented Current Steering DAC using Chinese Abacus Technique

*Sachin Khandagale and Santanu Sarkar*

A Novel Low power 6-bit FLASH ADC using Charge steering amplifier For RF Application

*Krishna Kumar Movva and Azeemuddin Syed*

Design of Fault Tolerant Majority Voter for TMR Implementation in QCA

*Subrata Chattopadhyay, Shiv Bhushan Tripathi, Mrinal Goswami and Bibhash Sen*

Smart Handheld Platform For Electrochemical Bio Sensors

*Suraj Hebbar, Vinay Kumar, M S Bhat and Navakanta Bhat*