Decisions of the Program Committee

The list of papers selected for VDAT2006 Symposium

Paper	Title	Category
103	A Novel Distributed and Interleaved FIFO for Source-synchronous Interconnect	Regular Paper
107	Handling Trapezoidal Conductor Cross-sections in a Statistical Capacitance Extractor	Regular Paper
124	Implementation of MPEG4 Video Decoder on a SoC Multimedia Processor	Short Paper
128	Highly Linear, Highly Efficient Power Amplifier Design Using Diode Nonlinear Capacitance	Short Paper
137	Novel Architecture of Context Modeling for JPEG2000 & a comparison with Taubman's Architecture	Regular Paper
145	Low Voltage Sample and Hold circuit	Short Paper
158	Automatic Test Generation for Temporal Coverage Points Using a Stochastic Tree Model	Regular Paper
159	Efficient DRC for Verification of Large VLSI Layouts	Short Paper
172	RF Energy Scavenging for Wireless Sensor Nodes	Regular Paper
183	A Dedicated Processor to Realize Inverse Radon Transform for CT Imaging	Short Paper
186	High Performance and Area Efficient n-BIT Tree Based Binary Squarer	Regular Paper
196	Energy Efficient Application Specific Banked Register Files	Regular Paper
216	Detecting Faults at the Time They Occur	Regular Paper
219	Constructing Online Testable Circuits Using Reversible Logic	Regular Paper
233	Detection of Bridging Fault in Reversible Circuits	Regular Paper
235	SOC implementation of the neural network based isolated word recognition	Short Paper
242	Design of Hardware Coprocessor for OTDR Application	Regular Paper
245	An Energy-Efficient Packet Filtering Architecture for Wireless Sensor Nodes	Short Paper
247	A Novel all Digital Phase Locked Loop for Phase Tracking in GPS Receivers	Regular Paper
262	Design and Optimization of On-chip Spiral Inductor for Silicon Based RF IC'S	Short Paper
267	A Novel Unified Framework for Functional Verification of Processors Using Constraint Solvers	Short Paper
284	Study and Charecterization of Gallium Arsenide (GaAs) and Indium Phosphide (InP) Devices for Nanoapplications	Short Paper
322	A Novel CMOS Compatible Three Terminal 3D Tunable Micro Inductor	Regular Paper
324	Design and Power-Performance Optimization of A Low Leakage Serial CAM	Regular Paper
325	Gas Sensor Interface ASIC on 0.7µm CMOS Technology	Short Paper
326	General Purpose Capacitive Sensing Circuit using Correlated Double sampling	Regular Paper
329	Critical Path modeling for Dynamic Voltage Scaling (DVS) in Low Power Applications	Regular Paper
333	Design & Study of an Electrostatic Torsion Micro Actuator for Beam Steering in Horizontal Plane	Regular Paper
340	Fault Tolerant FPGA using Redundant Columns	Short Paper
347	FPGA Implementation of a new hardware architecture for Smoothing Two Dimensional Images	Short Paper
356	A Novel Low Power Bus Encoding Technique for Minimizing RGB Transitions for LCD Display of Digital Camera	Regular Paper
359	An efficient FPGA Implementation of a Cryptographic Hash Algorithm Based on Cellular Automata	Regular Paper
363	A Power-Efficient Architecture for the 2-D Discrete Wavelet Transform	Short Paper

367	Design and Implementation of Morphological Operations and Median Filter for Image Processing Applications	Short Paper
371	A Novel LO circuit for Sub-Harmonic Mixer	Regular Paper
374	Exact Method for Estimating Expected Settling Power in Sequential Circuits	Regular Paper
375	A Fully On-chip automatic gain control for RF-Transceivers complying IEEE 802.15.4, LR-WPAN	Short Paper
379	Waveform Analysis and Delay Prediction for a CMOS Gate Driving RLC Interconnect Load	Short Paper
384	Comparison of Compression techniques for FPGA configuration bit stream	Short Paper
387	Simulation Of Silicon Nanowire Field Effect Transistors, Carbon Nano Tube Field Effect Transistors and Comparison with Double Gate di-Electric silicon MOSFET	Short Paper
392	A Novel Algorithm for Fault Diagnosis in Analog Circuits using Small Change Sensitivity Computation	Short Paper
394	An Improved Direct Injection Readout Structure for IR FPA	Short Paper
405	Architectural Design and Implementation of a PC based Ultrasound Imaging System	Short Paper
406	Design of an Efficient Low Power AES Engine for Zigbee Systems	Short Paper
407	On the Quality of Transition Fault Tests	Regular Paper
412	Spectral Characterization of Functional Vectors for Gate-Level Fault Coverage Tests	Regular Paper
414	Cross talk Aware Multi-objective Optimal Routing for Island Style FPGA	Short Paper
415	Electrostatic Discharge Reliability for designers	Tutorial
416	Silicon Technology Scaling and ESD Reliability	Tutorial
417	Compact modeling and simulation for ESD protection design	Tutorial
420	Robust Power Delivery for Sub-100nm Integrated Circuits	Tutorial
421	Beyond CMOS: Problems and Prospects of Nanoelectronics	Tutorial
423	MEMS capacitors	Tutorial
424	Design and Testing Issues in Core Based Systems	Tutorial
425	Integrated Stability Analysis Methods for Hybrid Systems	Regular Paper
426	Design and Analysis of Robust Clock Trees	Tutorial
427	System-level Verification of Wireless Systems	Tutorial