

2012 International Conference on Anti-Counterfeiting, Security and Identification

(ASID 2012)

**Taipei, Taiwan
24-26 August 2012**



**IEEE Catalog Number: CFP1220C-PRT
ISBN: 978-1-4673-2144-0**

TABLE OF CONTENTS

Identification Persons - Security Components Of ID Card	1
<i>Radek Holy, Jana Kalikova, Marek Kalika</i>	
Effective Watermarking Based On Energy Balancing In Audio Signals	7
<i>Shang-En Tsai, Yen-Chun Lin, Shih-Ming Yang</i>	
On The Security Of Key Derivation Functions In Office	12
<i>Jun Zhou, Jie Chen, Kun Pan, Cuicui Zhao, Xiaochao Li</i>	
Robust Digital Watermarking Based On Chaotic Maps	17
<i>Nian-Sheng Liu, Dong-Hui Guo</i>	
Empirical Exploration Of Lattice Attacks For Building Secure Knapsack Cryptosystems	22
<i>Shang-Ming Jen, Chia-Yu Lu, Tse-Lin Lai, Jar-Ferr Yang</i>	
Grid-Density Based Feature Classification For Speaker Recognition	27
<i>Lin Li, Wei Wang, Shan He</i>	
Two Sufficient Conditions Of The R-SPR Property	31
<i>Lingyun Li, Junqing Li, Huishan Yu, Shengxian Xie</i>	
Non-Linear Pseudo-Random Number Generators Via Coupling DX Generators With The Logistic Map	36
<i>Chung-Yi Li, Lih-Yuan Deng, Jyh-Jen Horng Shiau</i>	
An Improved DCT Based Zero-Watermarking Algorithm For Text Image	41
<i>Gui Feng, Xihui Huang</i>	
Specifying And Checking Network Protocol Based On TLA	45
<i>Liang Wan, Wenchang Shi</i>	
Tourists Effective Management And Reminder System Based On RFID	49
<i>Chiung-Hsing Chen, Hung-Wei Lin, Guan-Yu Chen, Jwu Jenq Chen</i>	
Constructing A Security- Mechanism RFID System	53
<i>Chin-Chang Rau, Chin-Sung Hsiao</i>	
A 0.18 Um Cmos Reconfigurable Digital Baseband Transceiver With 2FSK For RFID	56
<i>Caifeng Wei, Chun Zhang, Pan Wu, Hanjun Jiang, Zhihua Wang</i>	
A New Physical Unclonable Functions Based On Measuring Power Distribution System Resistance Variations	60
<i>Jianrui Zhang, Jianfeng Xue</i>	
A Multi-Phase Clock Design For Super High-Speed Time Interleaved Analog-To-Digital Converter	63
<i>Yu-Han Gao, Yong-Lu Wang, Zheng-Ping Zhang</i>	
The Design Of Multi-Channel Temperature Detecting System	67
<i>Yuanyuan Chen , Jing Chen</i>	
A Security Query Protocol Of ONS In EPC System	70
<i>Zhongwen Li, Yi Xie, Chengbin Wu, Binbin Ding</i>	
Application Of Computational Verb Theory To Gas Recognition	76
<i>Bin Liu, Yuan Liu, Daoping Cai, Taihong Wang, Tao Yang</i>	
Balance Analysis Of Self-Powered Sensor And Application In Building Automation	80
<i>Fangming Ruan, Ruishan Zhou, Eugene You, Sheng Li</i>	
A Novel Approach To Improve Differential Signal Integrity	84
<i>Mon-Chau Shie, Shin Dian Dian</i>	
Implementation Of A Single-Stage Quasi Z-Source AC-DC Power Factor Correction Converter	87
<i>Quang Trong Nha, Chien-Yu Lin, Mohammed Mahmood Alam</i>	
Accurate Power-Loss Estimation For Continuous-Current- Conduction-Mode Synchronous Buck Converters	92
<i>Chia-Hsing Li, Yu-Kang Lo, Huang-Jen Chiu, Tung Yen Chen</i>	
Single-Stage Quasi Z-Source Flyback Power Factor Correction Converter	97
<i>Quang Trong Nha, Mohammed Mahmood Alam</i>	
Design And Implementation Of A High-Voltage Power Supply For Industrial In-Mold Labeling Applications	102
<i>Tung-Yen Chen, Huang-Jen Chiu, Yu-Kang Lo</i>	
Design And Implementation Of A Switching DC-DC Converter IC Using Sigma-Delta Modulator	107
<i>Chi-Yuan Huang , Yi-Ting Tsai, Chien-Hung Tsai</i>	
A 10-Bit Area-Efficient Sar ADC With Re-Usable Capacitive Array	112
<i>Chung-Yi Li, Chih-Wen Lu, Hao-Tsun Chao, Chin Hsia</i>	

A Switched-Current Third-Order Oversampling Modulator With Coupled Differential Replica FMC	117
<i>Guo-Ming Sung, Ying-Tzu Lai, Kuo-Hsuan Chang</i>	
Mos Translinear Principle Based Analog Four-Quadrant Multiplier	122
<i>Ruiqi Wu, Jianli Xing</i>	
A Two-Stage Cascode Class F Cmos Power Amplifier For Bluetooth	126
<i>Guo-Ming Sung, Xiang-Jun Zhang, Tuan-Chen Hsiao</i>	
An Efficient Soft Error Protection Scheme For Mpsoc And Fpga-Based Verification	131
<i>Weichen Liu, Wei Zhang, Fubing Mao</i>	
The Design Of Ideal Diode	136
<i>Dabing Ma, Jianli Xing</i>	
Opamp-Sharing MDAC Design For Pipelined Successive-Stage Of A 1.8v 80ms/S 14-Bit Pipelined ADC	140
<i>Xian-Zhong Guan, Hong-Hui Deng, Liang Chang</i>	
A 2.4Ghz Low Power Low Phase Noise Ring VCO	144
<i>Chenggang Zhang, Jianyang Zhou</i>	
Design Of Low-Jitter Clock Duty Cycle Stabilizer In High-Performance Pipelined ADC	148
<i>Mingwen Zhang, Yongsheng Yin, Honghui Deng, Hongmei Chen</i>	
Power Optimization In Pipeline Analog-To-Digital Converters	153
<i>Ting Li, Lu Liu, Yan Wang, Yong Zhang, Xu Wang</i>	
Analysis And Design Of High-Performance Relaxation Osc	158
<i>Yanbin Du, Jianli Xing</i>	
An Effective Approach For Hardware Design Of Intra Prediction In H.264/AVC	162
<i>Jianwei Zheng, Chunhang Xu, Jiefeng Guo</i>	
A Novel Current Sensing Circuit For Boost DC-DC Converter	166
<i>Weiwei Huang, Xiao Yang, Chaodong Ling</i>	
On-Line Real-Time Task Management For Three-Dimensional Network On Chips	170
<i>Cyun-Yi Jheng, Ya-Shu Chen</i>	
A Study Of Communication Performance In The Infrastructure Of Cluster-Based MPSoC	175
<i>Duo-Li Zhang, Yun Xia, Gao-Ming Du, Ning Hou</i>	
Hybrid Circuit-Switched Noc For Low Cost On-Chip Communication	180
<i>Hongyin Luo, Shaojun Wei, Deming Chen, Donghui Guo</i>	
Dynamic Slot-Based Task Scheduling Based On Node Workload In A Mapreduce Computation Model	185
<i>Hsin-Yu Shih, Jih-Jia Huang, Jenq-Shiou Leu</i>	
Detection Of Copy-Move Forgery Image Using Gabor Descriptor	190
<i>Hao-Chiang Hsu, Min-Shi Wang</i>	
Computational Identification Of Proteins Sub-Network In Parkinson's Disease Study	194
<i>Yue Huang, Jun Zhang, Yuning Huang</i>	
A New CV Image Interpolation Algorithm Based On Adaptive Patter	198
<i>Yinghao Liao, Xin Wang</i>	
A Survey Of The Virtual Rebuilding Of Manufacturing Process Based On Virtual And Reality Technologies	202
<i>Yaping Gao, Hong Duan</i>	
Binary-Channel Can Covers Defects Detection System Based On Machine Vision	207
<i>Bin Feng, Shu-Xia Guo, Feng-Ling Zhang, Chao-Jun Zhu, Lei Wang</i>	
Implementation Of Face Detection Algorithm Based On KL-Gaussian Model On Dsp	211
<i>Hezhi Lin, Kunqing Wu, Xiangping Kong, Lianfen Huang, Zhiyuan Shi, Siyan Chen</i>	
Hierarchical Semantic Model For Objectionable Web Text Content Detection	215
<i>Jiangjiao Duan, Jianping Zeng, Shiyong Zhang</i>	
Application Of Computational Verb Theory To Association Rule Mining	220
<i>Alian Cai, Tao Yang</i>	
Can Defects Classification Based On Improved SOFM Neural Network	225
<i>Lusheng Xie, Chaojun Zhu, Pengfei Ding, Bin Feng, Tianlin Hu</i>	
Robust Bayesian Sparse Representation Based On Beta-Bernoulli Process Prior	229
<i>Zengyuan Mi, Qin Lin, Yue Huang, Xinghao Ding</i>	
Exploration Of Two Dimensional Computational Verb Cellular Networks With T-Neighborhood	233
<i>Rui Zhou, Kun Wen, Xuezhi Wu, Tao Yang</i>	
Diffusion And Wave Propagation Patterns In Computational Verb Cellular Networks	238
<i>Kun Wen, Xuezhi Wu, Tao Yang</i>	
The Method To Increase The Estimation Accuracy Of Time Differences Of Arrival At The Cost Of Propagation Channel Features	242
<i>Mikhail Mironov, Evgenii Voroshilin</i>	

Power Management System Based On ZigBee	246
<i>Chiung-Hsing Chen, Hung-Wei Lin, Yen-Sou Huang, Jwu Jenq Chen</i>	
Modified LT Coding With Systematic Connections	251
<i>Van Hoan Tran, Kuen-Tsair Lay, Lun-Chung Peng</i>	
Secure Anonymous Authentication Protocol With Unlinkability For Mobile Wireless Environment	255
<i>Jia-Lun Tsai, Nai-Wei Lo, Tzong-Chen Wu</i>	
Research On Quality Assessment Metric Based On H.264/AVC Bitstream	260
<i>Zhiyuan Shi, Pingbo Chen, Chao Feng, Lianfen Huang, Weijian Xu</i>	
Wireless Networks Designs Through Advanced Regulation Machine	265
<i>Hua-Ching Chen, Dong-Hui Guo, Hsuan-Ming Feng, Ji-Hwei Horng</i>	
An Improved Ieee 802.11 DCF Protocol Based On TCP/UDP Hybrid Stream	270
<i>Yong Zhang, Yongtao Hu, Bin Wu</i>	
Design Of A High Precision Band-Gap Reference With Piecewise-Linear Compensation	275
<i>Lei Quan, Yongsheng Yin, Xinbo Yang, Honghui Deng</i>	
Study And Design Of A Digital Interphone Based On DPMR446	280
<i>Chaodong Ling, Zheping Chen, Ruimin Huang</i>	
Improved Joint Correlated Detection In Cell Search And Synchronization Procedure In 3GPP LTE Downlink System	284
<i>Ding-Bing Lin, Jung-Cheng Hsieh, Hsin-Piao Lin</i>	
A Search Algorithm For Code Sets Of Time Frequency Coding Used In Underwater Acoustic Communications	289
<i>Fang Hou</i>	
An Overview Of Physical Layers On Wireless Body Area Network	293
<i>Miaoxin Li, Mingjie Zhuang</i>	
A Miniaturized Electronic Beam-Scanning Phased-Array Antenna For Radio-Frequency Identification (RFID) Applications	298
<i>Chih-Lin Chang, Chi-Hsing Wu, Chao-Hsiung Tseng</i>	
Oblique Projection Based Receiver With Interference Cancellation In OFDMA Uplink	302
<i>Jie-Liang Huang, Wen-Hsien Fang, Po-Wen Cheng</i>	
Online Propagation Model Correction Based On PSO Algorithm In LTE SON System	307
<i>Lianfen Huang, Xiaoxin Chen, Zhibin Gao, Hongxiang Cai</i>	
Bridging SNS ID And User Using NFC And SNS - Design Of NFC And SNS Based Event Attendance Management System	311
<i>Hiroaki Ninomiya, Eisuke Ito, Brendan Flanagan, Sachio Hirokawa</i>	
Parallel One- And Two-Dimensional FFTS On GPGPUs	316
<i>Mehrdad Fallahpour, Chang-Hong Lin, Ming-Bo Lin, Chin-Yu Chang</i>	
Holistic Comparison Of Optical Routers For Chip Multiprocessors	321
<i>Yaoyao Ye, Xiaowen Wu, Jiang Xu, Wei Zhang, Mahdi Nikdast, Xuan Wang</i>	
A Bp-Based Path Selection Model For Dynamic Transportation Network	326
<i>Jianhong Li</i>	
An Efficient Resource Allocation Scheme For Cross- Cloud Federation	330
<i>Nai-Wei Lo, Kuo-Hui Yeh, Pei-Yun Liu</i>	
Adaptive MB Size Selecting Based Video Error Concealment Algorithm	334
<i>Qiwei Lin, Yuan Mao</i>	
Thermal-Aware Service Rate Adjustment For Cyber-Physical Systems	338
<i>Hsin-Hao Chu, Ting-Hao Tsai, Ya-Shu Chen</i>	
A Survey Of Mass Data Mining Based On Cloud-Computing	343
<i>Tingting Hu, Haishan Chen, Xiaodan Zhu, Lu Huang</i>	
Mobile Augmented Reality Based On Cloud Computing	347
<i>Bai-Ruei Huang, Chang Hong Lin, Chia-Han Lee</i>	
Author Index	