# 2008 International Conference Communications, Circuits and Systems

Xiamen, China 25-27 May 2008

**Pages 1-468** 



A Weight Method of Decoding the (23, 12, 7) Golay Code Using Reduced Table Lookup	1
On Efficient and Reliable Network Coding in Practical Environment	6
Efficient Encoding of Cycle Codes on Graphs with Large Girths	11
A Fast and Efficient Encoding Structure for QC-LDPC Codes	16
Improved Digital Image Transmission with Turbo Product Codes	21
Construction of Quasi-Cyclic LDPC Codes From One-Coincidence Sequences	26
Design of Signal Space Diversity Based on non-Binary LDPC Code	31
On Decoding of Quadratic Residue Codes with Irreducible Generator Polynomials	35
An Efficient Scheme to Determine the Weight Distribution of Binary (138, 69, 22) Extended Quadratic Residue Code	38
Decoding of the (48, 24, 12) Extended Quadratic Residue Code up to Six Errors	41
Performance of STBC-IDMA System over Quasi-Static Rayleigh Fading Channel Shanshan Yang, Weikai Xu, Lin Wang, Qinfang Wei	44
Volterra-TLS Method for Chaotic Time Series Prediction	48
Frequency Offset and Phase Noise Influence and its Compensation in the DFT-Spread OFDM System Yingshan Li, Heung-Gyoon Ryu, Li-jie Zhou, Dongyan Sun, Haiyuan Liu, Junwen Li	52
Implement of Channel Estimation for OFDM Communicaton System under UWA Channel	57
Investment in Telecommunications Markets	62
An Improved Narrowband High Frequency Channel Model	65
A New Simulation Model for Frequency Hopping Wideband Rayleigh Fading Channels	70
A T-Intersection Street Model of MIMO Vehicle-to-Vehicle Fading Channel	75
3.52-GHz MIMO Radio Channel Sounder	79
VANET Link Characteristics and Analysis in Urban and Suburban Scenarios	84
Channel Cognitive Multi-channel MAC Protocol in Wireless Mesh Network	89

Distributed Amplifier using Enhancement-mode AlGaN/GaN HEMTs	94
The Influence of Sensitivity Coefficient on the Performance of Microwave Devices	97
A 96-dB CMOS Programmable Gain Amplifier for Low-IF GPS Receiver	<b>D1</b>
Design of Multiple Turbo-coded Modulation Diversity	05
Iterative Joint Source Channel Decoding in Wireless Sensor Networks	
LDPC Coded Modulation with Unequal Protection	14
A Fast ML Sphere Decoder with Multi-Layer Multi-Path Search	19
Statistical Performance Analysis of STBC with Co-Channel MIMO Interferers	24
New Resource Management Strategy for Multi-Service Mobile Wireless Cellular Networks	29
Media Independent Handover Enabled Advanced Mobility Management and its Functional Mapping	34
Network Controlled Mobility Management with Policy Enforcement Towards IMT-A	39
Performance Analysis of Multi-User Scheduling over Time-Varying Channel	14
Design and Test of a Carrier Interferometry OFDM System in Underwater Acoustic Channels	48
Simulation Research on P-Aloha Protocol in Underwater Acoustic Network Based on OPNET	53
A Simplified Downlink Transmission and Receiving Scheme for IDMA	57
An MLD Scheme for Interference Suppression Based on Noise Subspace Projection for MIMO-OSTBCs System	<b>62</b>
Jie Wang, Zhonghao Zhang, Yuehuan Gong	
Performance of Fixed Channel Assignment for Uplink Transmission and Direct Peer-to-Peer Communications in Multihop Cellular Networks	67
Performance Study of Packet-Switched TDD-CDMA Multihop Cellular Networks	72
The Influence of Network Traffic Correlation on the Queueing Performance	77
SNOOP-based TCP Enhancements with FDA in Wireless Cellular Networks: A Comparative Study	31
Design and Performance Analysis of Compact Planar Inverted-L Diversity Antenna for handheld	
terminals	36

A Simple Transmit Scheme to Exploit Signal Space Diversity in V-BLAST System	190
Spatially Selective STBC-VBLAST in MIMO Communication System	195
A Novel Broadband Antenna with Right/Left-Handed Transmission Line	200
The Cross Polarization Discrimination OF MIMO Antennas at Mobile Station	203
On Medium Access Control for Multi-hop Wireless Networks with Directional Antennas	207
Research of a Kind of Adaptive MIMO Transmission and Detection	212
Guard-Interval Mode Detection Method for the Chinese DTTB System	216
Optimum Zero-Forcing Detection of a Modified V-BLAST System with Delay Offsets	220
Analysis of Fractal Traffic Source Based on Sup-FRPP Model	224
A Subspace Constrained LSCM Algorithm	228
Soft-output MMSE MIMO Detector under MMSE Channel Estimation	233
Turbo Equalization based on a New Kalman Filter for OFDM over Doubly-Selective Channels	237
Blind SNR Estimation with Empirical Characteristic Function's Derivative in High-Order Modulation System  Zhijiang Xu, Kang Wang, Jingyu Hua, Guomin Zhong	242
Channel Estimation for Cyclic Postfixed OFDM	246
Hop Status Estimation Algorithm based on Coherent Demodulation of CPM	250
An Estimation Scheme for Integer Frequency Offsets based on Pilot Channel Estimation in Wireless  OFDM Systems  Jingyu HUA, Zhijiang XU, Limin MENG, Gang LI, Banteng LIU	254
Optimal Correlation Based Frequency Estimator with Maximal Estimation Range	259
An Algorithm Design and Performance Analysis for Carrier-frequency Offset Estimation in DMB-T System	264
Modified Decision Feedback Methods for OFDM Channel Tracking	268
Blind CFO Tracking in MIMO-OFDM Systems at Low SNR	273
Semi-Blind Iterative Receiver for MIMO-OFDM System with Multi-Tone Narrow-Band Interference  Dongming Wang, Junhui Zhao, Xiaoyun Hou, Xiaohu You	278

Performance of Peak Cancellation for PAPR Reduction in OFDM System	283
Optimal Channel Estimation for MIMO/OFDM Systems in Time-varying Wireless Channels	288
MIMO M-ary Code-Selected DS-BPSK Communication System	292
A Fast Method of Examining the Feasibility of the Successive Interference Cancellation Algorithm in a DS-CDMA System	296
Call Admission Control Algorithm in Wireless Cellular Network with Successive Interference  Cancellation	301
STBC Based DS-BPAM UWB Communication System	306
Kalman Filter Based UWB TOA Estimation via PCA	310
Design of Frequency Domain A/D Conversion Based UWB Receiver in the Presence of Quantization Noise Feng Yang, Xiangshun Jiang, Jianhao Hu, Shaoqian Li	314
Game Theoretic Analysis of Joint Rate and Power Control in Cognitive Radio Networks	319
On Achievable Rates and Spectrum Allocation in Cognitive Wireless Networks	323
Modulation Recognition of Symbol Shaped Digital Signals	328
Uplink Cell Capacity of Cognitive Radio Networks with Interference Outage Constraints	333
Analysis of Opportunistic Access in the Spectrum Sharing System with Heterogeneous Secondary Users	339
Design of a Software Defined Radio Channel Simulator for Mobile Communications: Performance  Demonstration with DSRC for Different Vehicle Speeds	345
Demystifying White Spaces	350
A Cross-Layer Design Combining Method of AMC with HARQ Based On LDPC Codes Wen Hong, Yang ShuYa, He Ning, Zhou Liang	355
Energy-efficient Cross-layer Scheme in Wireless Sensor Networks Based on Utility	360
An Energy-Efficient and Reliable MAC for Sensor Network	364
Researches on IEEE 802.11 Access Mechanism	369
Uplink Cell Capacity of Cognitive Radio Networks with Peak Interference Power Constraints	372
Time-based Broadcasting for Power-aware Routing in Wireless Ad Hoc Networks	378

Throughput Modeling Analysis of IEEE 802.11 DCF Mechanism in Multi-hop Non-Saturated Wireless Ad-Hoc Networks	383
Wang Bo, Song Fei, Zhang Sidong, Zhang Hongke	
Balanced Incomplete Block Designs based Scheduling Scheme for Multi-hop Ad Hoc Networks	388
An Ad Hoc Routing Algorithm of Low-Delay Based on Hybrid Particle Swarm Optimization	394
A Survey of Service Discovery Protocols for Mobile Ad Hoc Networks	398
Multi-Sink Opportunistic Routing Protocol for Underwater Mesh Network	405
Design and Simulation of A Virtual Circuit Protocol Based on TDMA-based Tactical Internet Environment	410
Distributed Weighting Fault-Tolerant Algorithm for Event Region Detection in Wireless Sensor Networks Yao Xiang, Hong Li, Zheng Xie, Ping Li	414
An Energy-Efficient Single-Hop Wireless Sensor Network Using Repeat-Accumulate Codes	419
An improved Polynomial-Based Key Predistribution Scheme for Wireless Sensor Networks	424
An energy balance reliable routing measurement method	429
Design and Implementation of Wireless Smart-home Sensor Network Based on ZigBee Protocol	434
Maximization for Wireless Sensor Network Lifetime with Power Efficient Cover Set Alternation	439
An Efficient Data Collecting Network Structure in Wireless Sensor Networks	444
QoS-Aware Multicasting in Multi-Domain Autonomic Networks	448
Insertion Based Packets Scheduling for Providing QoS Guarantee in Switch Systems	453
A Survivability Over Security (SOS) Model for Computer Network Inspired by Biological Immunology and Gene Mutation	457
Modeling of Network Situation Awareness  Juan Wang, Zhi-Guang Qin, Li Ye, Jing Jin	461
Apply Nonlinear Dimensionality Reduction Method to Large-Scale Communication Network Traffic	
Analysis	466
Anonymous M+1-st Price Auction Using Ring Signature  Xiong Hu, Qin Zhiguang, Lan Tian, Jin Jing	469
Designated Verifier Signature without Random Oracles	474

Identity-based Threshold Ring Signature Without Pairings	478
An Efficient ID-Based Ring Signcryption Scheme	483
An Efficient and Provably Secure ID-Based Threshold Signcryption Scheme	488
Breaking Instance I of New TTM Cryptosystems	493
Improved Otway Rees Protocol and Its Formal Verification	498
A Lightweight Authentication Scheme for Session Initiation Protocol	502
A Fair Admission Control Scheme with Counter Control Based on Delay Reservation Method in Multimedia Network	506
One Immunization Strategy of Complex Networks	510
Traffic Classification Using An Improved Clustering Algorithm	515
Using Data Fusion for Awareness of Intrusion In Large-scale Network	519
Analysis of Voice Capacity in IEEE 802.11 Wireless LANs with/without Data Traffic	524
A Performance Enhancing Proxy for Terrestrial-Satellite Hybrid Networks	529
Performance Analysis of Soft Switch Network Based on Jackson Network Theory	534
Cross Correlation Analysis and Construction of Joint Distribution Traffic Model	538
Traffic Stochastic Interactions on Blocking and Outage Probabilities in CDMA Networks	543
A IEEE 802.21 Handover Design with QOS Provision Across WLAN and WMAN	548
Dynamic Control Policy for Wireless Sensor Networks	553
An Improved FSM-based Method for BGP Protocol Conformance Testing Lei Xie, Jiaolong Wei and Guangxi Zhu	557
Adaptive Load-balancing in WDM Mesh Networks with Partial Traffic Information	562
Dynamic Multicast Traffic Grooming for Survivable WDM Mesh Networks	567
A Novel Method for Constructing Network: Cyclebased Hybrid Switching Optical Networks	572
Shared Protection in Multicast Optical Networks	577

Image Simulation of PMMW based on Multibeam Reflector Antenna	582
Integrated Optical Magnetic Field Sensor with a Doubly-Loaded Loop Antenna	586
ISI Mitigation Using Bit-Edge Equalization in High-Speed Backplane Data Transmission Lei Zhang and Tadeusz Kwasniewski	589
Decision-Feedback-Equalizer for 10-Gb/s Backplane Transceivers for Highly Lossy 56-inch Channels	594
A Low-Complexity Reed-Solomon Decoder for PON	599
Numerical Study of Short Pulse Propagation and Switching in Active Two-Core Nonlinear Fiber Couplers  Xie Yu-yong, Li Qi-liang	602
Theoretical Analysis of the Wavelength-dependent Gain for Fiber Optical Parametric Amplifier Driven by One Pump Wave	607
High Coupling Scheme of an Elliptical Gaussian Pattern Laser-to-SMF Microlens	611
Design of Wavelength Demultiplexer Based on Photonic Crystal Filter Structures	614
Transient and Frequency Characteristics of Photodetectors and Their Effects on Data Receivers in Fiber-Linked Communication Systems	618
Determination and Analysis of the Optical Parameters of Polymer Thin Film based on Spectrum	623
Development of Fiber Based Micro Wavelength-Division Multiplexers	628
Fabrication of Micro/Nano Optical Wires with Modified Fiber-Drawing Process	630
Fractional Chaos Based Communication Systems -An Introduction  Juebang Yu	633
A New Study in Encryption Base on Fractional Order Chaotic System	637
Chaos in the Fractional Order Mackey-Glass System	641
Chaos in the Fractional Order Logistic Delay System	646
Synchronization in Time-Delayed Fractional Order Chaotic Rossler Systems	652
Numerical Solution for Fractional-order Differential Systems with Time Domain and Frequency Domain Methods	655
Observer Based Projective Synchronization Mehod for a Class of Chaotic System -Part I: Linear Synchronization Subsystem	660

Synchronization and Fractional Order Chaotic Masking Scheme	663
General Projective Synchronization and Fractional Order Chaotic Masking Scheme	666
Secure and Robust Audio Watermarking Scheme Based on Discrete Fractional Transform	670
A High Performance and Low Cost Entropy Encoder for H.264 AVC Baseline Entropy Coding	675
High Efficient NTSS-Based Parallel Architecture for Motion Estimation in H.264	679
SSD-Based Testing Scheme for Error Tolerance Analysis in H.264/AVC Encoder	684
Adaptive Motion Search Algorithms for Fast H.264 Inter Prediction	689
An Improvement to Quality Layer Assignation in the Scalable Extension of H.264/AVC Li-Chuan Chang, Chih-Huan Kuo, Bin-Da Liu	693
Adaptive GOP Structure Determination in Hierarchical B Picture Coding for the Extension of H.264/AVC	697
A Projected WRLA Super-Resolution Algorithm for PMMW Imaging	702
Image Registration Based on Feature Extraction and Voting Strategy	706
Multiscale Pursuit Scheme for Image Approximation	710
A Fast and Automatic Video Object Segmentation Technique	714
Research in Global Motion Estimation for Target Segmention	718
Error Concealment for Video Sequences Based on Sobel Edge Detector	723
ZP-OFDM Broadcasting Systems with Insufficient Guard Interval	727
A Hierarchical QoS Framework for Wireless Multimedia Network	732
Platform-based Design for Videotext Regions Filter System	737
Adaptive Video Coding Control for H.264/AVC	742
Quality Improvement for Adaptive Deblocking Filter in H.264/AVC System	746
A Chaos-based Steganography Algorithm for H.264 Standard Video Sequences	750
Implementation and Optimization of I-frame in AVS1-P2 Decoder Based on DSP  Ban Wang, Jianyang Zhou, Meifen Chen	754

A Platform-based SoC Design for a Multi- Standard Audio Decoder	758
A Data Hiding Method for Improving the Self-security of Iris Recognition	762
Image Watermarking via Sequencing Wavelet Filters	767
An Improved NSSK Protocol and Its Security Analysis Based on Logic Approach	772
Linear Phase FIR Filter for Narrow-Band Filtering	776
An Order Estimator for Magnitude Constrained FIR Nyquist Filters	<b>780</b>
WLS IIR Digial Filter Design Using SOCP	784
Modified Projected Landweber Super-resolution Algorithms for Passive Millimeter Wave Imaging	<b>789</b>
Research of Weak GPS Signal Acquisition Algorithm	793
Novel Digital Spectrum Anaysis for Broadband Spread Spectrum Communication Signal	797
Algorithms for the Measurement of Liquid Metal Coolant Flow Velocity with Correlated Thermal Signals	802
The Bidirectional-Based SRMC for Hierarchical B Frame in Scalable Video Coding	807
Reducing The Complexity of LD-CELP Speech Coding Algorithm Using Direct Vector Quantization	811
Wavelet Analysis of DNA Sequences	816
A Novel Threshold Method for 3-Band Wavelet De-noising	821
Wavelet-Based Super-resolution Algorithms for Passive Millimeter Wave Imaging	826
An Improved Watershed Transformation for Image Segmentation	830
The Diffusion Performance Analysis of Variational PDE Based Neural Network Restoration Models	834
Text Localization in Spam Image Using Edge Features	838
DSO-Based Signal Reconstruction of Time-Interleaved	843
A Study of Robust JDL Adaptive Processing Based on Transformation Matrix	847
A Novel Evolutionary Programming for Adaptive Filter Based on Learning Mutation	851

Robust Adaptive Beamforming with Ellipsoidal Steering Vector Uncertainty Set	854
Blind Extraction of Chaotic Signals with Different Variances by Using the FastICA Algorithm	859
Angle Estimation with Adaptive Arrays in Strong Mainbeam Interference Fields	862
Amplitude Statistical Analysis of Ku-Band SAR Ground Clutter Data	866
A Whole Scheme for Aircraft Target Identification in HRRP	871
The Parameter Setting Problem of Signal OFDM-LFM for MIMO Radar	876
Study on Non-linear Stepped Chirp Radar System	881
Compact Resampling Algorithm and Hardware Architecture for Paticle Filters	886
A Modified Gardner Detector for Multilevel PAM/QAM System	891
Detection Performance of PMMW Image	896
On the Maximum Likelihood Method for Target Localization Using MIMO Radars	900
Two Novel Algorithms For Blind Equalization of Cross-QAM Signals	905
An Image Inpainting Technique Based on Nonparametric Kernel Estimation	910
Automatic Pair-Matching Method for Estimating 2-D Angle of Arrival	914
Direction of Arrival Estimation and Identification of Mixed Circular and Non-circularity Sources	918
A Novel Method of Identifying Moving Status of Bird Based on Waveform Entropy VarianceZHU Feng, FENG Youqian, LUO Ying, ZHANG Qun,	922
Modification of Frequency Estimation Algorithms for Sinusoidal Signals Based on Phase Difference of Overlap FFT	927
A GEF-based Algorithm for Blind Estimation of PN Sequence in Lower SNR DSSS Signals	930
Time-Delay Estimation for Single-Frequency Pulse Signals Based on Differential Maximum Likelihood Estimation Method and DTFT	934
A Novel Carrier Frequency Offset Tracking Algorithm for OFDM Systems Using LS-ICA and Fractional Sampling	937
Improved Wideband Beamforming Algorithm Based on Microphone Arrays	942

Use Fractional Calculus in Iris Localization	946
A Reduced-Complexity Implementation of Differential Detection for Continuous Phase Modulation in FPGAs	950
Xiaodong Li Songbai He and Mingyu Li	
Time Delay Estimation for Parallel Sampling Systems	954
Noise FM Jamming Suppression Via Logarithm Transform	957
An Effective AS-FIFO Design for Multiple Asynchronous Clock Data Transmission	960
Network on Chip Architecture for BP Neural Network	964
Hopfield Neural Network Based Color Image Restoration	969
A Computer-Assisted Verification of Chaos in a Hopfield Neural Network	974
Robust Designs of a Kind of Uncoupled CNNs with Nonlinear Templates	978
Implementation of Fuzzy Cellular Neural Network with Image Sensor in CMOS Technology	982
Impulsive Control for T-S Fuzzy Model Based Time-Delay Chaotic Systems	987
An Image Encryption Scheme Based on Generalized Synchronization Theorem for Discrete Array Systems	991
A Proposed GM-GRNN Model for Prediction of Behavior in Complex System	996
3D Object Recognition Using Multi-moment and Neural Network	1000
Novel Exponential Stability Criteria for Neural Networks of Neutral Type with Time-Varying Delay Huanhuan Mai, Xiaofeng Liao, Chuandong Li, Weiwei Zhang	1005
Passivity and Passification of Uncertain Discrete-time Fuzzy Systems	1010
Ant Colony Optimization with Local Search Applied to the Flexible Job Shop Scheduling Problems	1015
A Rule Acquisition Method for Civil Aircraft Maintenance Task based on Similarity Rough Set Theory	1021
Least Squares Support Vector Machine Based Analog- Circuit Fault Diagnosis Using Wavelet Transform as Preprocessor	1026
The Study of Alarm Association Rules Mining in Telecommunication Networks	1030

A Decision Tree Approach for Predicting Smokers' Quit Intentions	1035
Modeling Non-idealities of Sigma Delta ADC in Simulink	1040
A Power-Efficient 0.8 V, 9-bit, 20-MS/s Pipelined ADC with Opamp-Shared Loading-Free Architecture	1044
A 13-bit CMOS Pipeline Analog-to-Digital Converter with Improved Sampling Circuits  Dandan Guo, Fule Li, Jingbo Duan, Chun Zhang, Zhihua Wang	1048
A 10-b Low-Voltage CMOS Pipelined Analog-to-Digital Converter	1053
A New CCII-Based Current Mode Pipelined A/D Converter	1057
An Integrated DCM Buck Converter with Peak-current mode Control	1061
Research on A Fast Edge Generaion Technology of the Digital Pulse	1066
A Novel SRAM Structure for Leakage Power Suppression in 45nm Technology	1070
Selectively Multiple-Valued Memory Design Using Negative Differential Resistance Circuits Implemented by Standard SiGe BiCMOS Process	1075
A Novel Area-Efficient and Full Current-Mode Dual-Port SRAM	1079
High Efficiency Four-phase All PMOS Charge Pump without Body Effects	1083
An Advanced Model for Calculating the Effective Capacitance Considering Input Waveform Effect	1088
Design of an Asynchronous Pipelined Processor	1093
A Mapping Algorithm for Embedded Coarse-grained Reconfigurable Processor	1097
A Distributed Remote Monitoring System Based on ARM for Production Lines	1102
Stability Analysis and Design for Amplifier-Based CMOS Analog Signal Processing Cells	1105
Impulsive Modeling and Control of a New Chaotic System	1111
A New Chaotic System and Its Analog Implementation	1118
Estimate the Largest Lyapunov Exponent of Fractional-order Systems	1121
Discrete Iterative Mapping for the Analysis of Bifurcation and Chaos in Forward Converter	1125

Numerical Solution for Fractional-order Differential Systems with Time Domain and Frequency Domain Methods	1130
Constrained Control of Delayed Discrete-Time Positive Systems	1135
Xingwen Liu	
A Note on the Robust Stability of Lur'e Systems with Time Delay	1140
Passivity Analysis of T-S Fuzzy-Model-Based Uncertain Switched Systems with Delays  Xingwen Liu	1143
Impulsive Control of Time-delayed Chua's Oscillators	1148
Impulsive Modeling of Nonlinear Delay System and its Stability	1154
Impulsive Control of a Class of Uncertain Systems with Small Time Delay	1159
Further Results on Stability of Discrete-Time Systems with Time-Varying Delays	1163
Necessary and Sufficient Conditions for Bounded Control of Positive Systems	1167
Configuration of Floorplan and Placement Algorithm Using Horizontal and Vertical Contour Based on Single Sequence	11 <b>7</b> 1
Constraints Partitioning for RTL Satis ability Solving by YICES	1175
Traffic Scheduling for Application Specific Networks-on-Chip	1179
Analog Circuit Fault Diagnosis Using Ada Boost and SVM	1184
Design-for-Testability Techniques forMotion Estimation Computing Arrays	1188
An Apprach to Analong and Mixed-signal BIST Based-on Pseudorandom Testing	1192
Dual-encoding BIST Design with Low Power Consumption Based on Clock Gating  Enmin Tan, Jianjun Liu	1196
A New Method for IDDT Test of CMOS Circuits	1200
A Novel Clock-fault Detection and Self-recovery Circuit Based on Time-to-voltage Converter	1204
Electrochemical Enzyme-electrode Biosensor for Glucose Detection	1208
Design of a Wide Stop-Band LPF Using Microstrip/CPW Composite Structure	1213
Design of a Novel Dual-Band Bandpass Filter Using Microstrip/CPW Structure	1216

The Chaotic Disturbance of UAV System's Communication and Coping Strategy	1219
Performance of Improved FM-DCSK system Based on Differential-coding Method	1224
A Dual-polarity SCR for RF IC ESD Protection	1228
Area & Delay driven Binding Algorithm of RTL Tech. Mapping for Heterogeneous FPGAs	1231
Encoder Design and Its Hardware Implementation for Q-ary LDPC Codes	1236
High-Throughput LDPC Decoding Architecture	1240
High Throughput VLSI Architecture of a Fast Mode Decision Algorithm for H.264/AVC Intra Prediction	1245
Design and Analysis of Location Management for Multi-beam GEO Mobile Satellite System	1250
0.13μm 1.0V-1.5V Supply Digital Blocks for 40-Gb/s Optical Communication Systems	1255
Low-Complexity Digital Bandwidth-Configurable Modulator	1260
Optimization of FPGA Design and Implementation of Timing Recovery in DVB-S2	1265
1000 V Breakdown Voltage LDMOS with Thin Drift Layer	1270
Quantificational Dependence of Vertical Breakdown Voltage on Top Silicon and Dielectric Layer Thicknesses for SOI High Voltage Devices	1274
Analysis of Thermal Characteristics of Current Gain for BJT-BSIT Compound Device	1278
A New Membrane SOI Power Device	1282
Exploiting Thermal-Area Tradeoffs in High-level Synthesis through Resources Number Selection	1286
Simulation of Improved 3D tri-gate 4H-SiC MESFETs with Recessed Drift Region	1291
A Mathematical Model of the Dynamics for anti-HBV Infection Treatment with Peginterferon Alfa-2a Lequan Min Weidong Li Yongmei Su, Yang Kuang	1295
Power Dissipation Impacted by Stochastic Characteristics of Signals	1299
Study of Bifurcation Rules of PSM Converter in DCM Based on Energy Balance Model	1304
Improved Digital Average Current Control of Buck Converter with Dual-edge Modulation	1309
Elimination of Sub-harmonic Oscillation of Digital Average Current Control Buck Converter	1314

Global Sliding Mode Controller for Buck Converter Based on Reaching Law	19
An Integrated GUI Design Tool for Digitally Controlled Switching DC-DC Converter	24
Integrated Current-Sensing Circuit with Offset-Current Cancellation for Boost Converters	28
A Dual-Mode Step-Up DC/DC Converter IC with Current-Limiting and EMI Reduction Techniques	32
Experimental Investigations and Behavior Modeling for Monolithic Quasi-Class E SiGe PA Linearization	37
Performance Study of a Subclass Class E Power Amplifier in Comparison with the Typical One	12
An Memory Polynomial Model for Power Amplifiers	<b>16</b>
A Novel Method of Single Fault Diagnosis in Linear Resistive Circuit based on Slope	50
Routability Between Two Modules by Dummy Modules Insertion Based on B-Trees	54
The High-speed ADC Based on the Adjustable Digital Trimming Technique	<b>58</b>
The Radiation Characteristics of Partial SOI VDMOS	51
A New Separation Method for Micro-Doppler Information of A Target with Rotating Parts	55
An Efficient 2n RNS Scaler and Its VLSI Implementation	70
A Graph Covering Method for Template Based System Partition	74
A Parallel Implementation of MP3 Decoding Algorithm on Reconfigurable Computing Systems	<b>78</b>
Design and Implementation of Reconfigurable Stream Processor in Multimedia Applications	32
Testbench Generation for Reconfigurable Media Processor	37
A template mapping algorithm for Reconfigurable computing	<del>)</del> 2
Automatic Contexts Switch in Loop Pipeline for Embedded Coarse-grained Reconfigurable Processor	<b>)</b> 7