

2008 Digest of Technical Papers International Conference on Consumer Electronics

**Las Vegas, NV
9-13 January 2008**



IEEE Catalog Number:
ISBN 13:

**CFP08CCE-PRT
978-1-4244-1458-1**

Table of Contents

Preserving Our Digital Heritage	1
<i>Barry M. Lunt, Daniel Hyatt, Feng Zhang, Gaurav Saini, Matthew R. Linford</i>	
Providing Entertainment by Content-based Filtering and Reasoning in Intelligent Recommender Systems	3
<i>Y. Blanco-Fernández, J. J. Pazos-Arias, A. Gil-Solla, M. Ramos-Cabrer, M. López-Nores</i>	
Multi-Standard Video Decoder Using Configurable Microprocessor Technology	5
<i>Tomonari Tohara, Gubin A. Ezer</i>	
Conditional Access in Blu-ray D disc MPEG-2 Transport Streams	7
<i>Kousik Sankar Ramasubramaniam</i>	
Error Sector Inventory on Optical Disc for Defect Avoidance during Recording / Playback	9
<i>Srinivas Kudavelly</i>	
Quality Enhancement of Compressed Video Signals	11
<i>Ihor Kirenko, Ling Shao, Adrian Nakonechny</i>	
A Distortion Reducing Subband Limiter Implementation for Conference Phones	13
<i>Christian Schuldt, Fredric Lindstrom, Ingvar Claesson</i>	
A Bayesian Network-Based Deinterlacing Scheme	15
<i>Gwanggil Jeon, Hyojoon Choi, Donghyung Kim, Joohyun Lee, Jechang Jeong</i>	
The Multimedia Engine MME - a Flexible Middleware for Automotive Infotainment Systems	17
<i>Elmar Cochlovius, Dan Dodge, Shrikant Acharya</i>	
Real-time Embedded Panorama Mosaic System for Digital Camera	19
<i>Seong Jong Ha, Hyung Il Koo, Sang Hwa Lee, Nam Ik Cho, Soo Kyun Kim</i>	
A Display-mounted High-quality Stereo Microphone Array for High-definition Videophone System	21
<i>Yusuke HIOKA, Manabu OKAMOTO, Kazunori KOBAYASHI, Yoichi HANEDA, Akitoshi KATAOKA</i>	
A Non-Invasive Arterial Stiffness Assessment Instrument for Homecare	23
<i>Hsien-Tsai Wu, Cheng-Tso Yao, Tsang-Chih Wu, Ming-Ting Sun</i>	
Estimating Inter-Frame Parametric Dominant Motion at 1000fps Rate	25
<i>Alexander Sibiryakov</i>	
Low-Complexity Mobile Video Error Concealment Using OBMA	27
<i>Tanaphol Thaipanich, Ping-Hao Wu, C.-C. Jay Kuo</i>	
Frame Boundary Detection for Full-Band Support in MultiBand-OFDM System	29
<i>Yun Young Kim</i>	
Design Method of UI of AV Remote Controller Based on AHP	31
<i>Morimasa Matsuda, Yuta Uesugi, Tomohiro Hase</i>	
An Inexpensive Impulse Detector and Finite State Timing System	33
<i>Douglas Rocha Ferraz, Yaro Burian</i>	
A Hands-Free Unit with Noise Reduction by Using Adaptive Beamformer	35
<i>Kazunori Kobayashi, Yoichi Haneda, Ken'ichi Furuya, Akitoshi Kataoka</i>	
Image Rendering for Reducing Carsickness in Watching Onboard Video Display	37
<i>Akihiro Morimoto, Naoki Isu, Tomohiro Okumura, Yusuke Araki, Atsuo Kawai, Fumito Masui</i>	
4GOOD - Technology and Prototype for a 4th- Generation Omni-Purpose Optical Disc System	39
<i>Dietmar Hepper, Hartmut Richter, Stephan Knappmann, Rudolf Eyberg, Joachim Knittel Thomson, Michael Frerichs, Axel Franke, Christoph Gahn, Bérangère Hyot, Jean- Michel Bruneau, Alfred Lell, Martin Behringer, Michael Först, Karl Wolter, Matthias Wuttig, W</i>	
TV-program Selection with Performer Representative Faces for Personal Video Recorders	41
<i>Masumi ISHIKAWA, Ryoma OAMI, Kyoji HIRATA</i>	

Table of Contents

Beamformer-based Acquisition in MIMO-CDMA Communication Systems	43
<i>Sangchoon Kim, Sunyoung Baek, Jinyoung An, Kyoungsoo Son</i>	
Increasing the Number of Disc Overwrites on Recordable Disc	45
<i>Srinivas Kudavelly, Robert Brondijk</i>	
ENHANCEMENT OF 3D SHAPE IN 2D NATURAL IMAGES USING A NON-PHOTOREALISTIC SHADING APPROACH	47
<i>Tatsumi Watanabe, Shuichi Ojima</i>	
Personal Mobile A/V Control Point for Home-to-Home Media Streaming	49
<i>Taein Hwang, Hojin Park, Jin Wook Chung</i>	
A Study of MPEG-2 to H.264/AVC Transcoding with Half-Horizontal Resolution	51
<i>Jun Xin, Anthony Vetro, Shun-ichi Sekiguchi</i>	
New Full-Reference Visual Quality Assessment Based on Human Visual Perception	53
<i>Seon-Oh Lee, Dong-Gyu Sim</i>	
A Dynamic Multi-mode Switching (DMS) Error Concealment Algorithm for Video Device Applications	55
<i>Xiaoming Chen, Yuk Ying Chung, Changseok Bae, KwangHee Lee</i>	
Playback Signal Processing System Using Waveform Correction for High Density Optical Disc	57
<i>Satoshi Michihata, Mitsuru Ishizuka, Hideo Yoshida</i>	
Prefetching-Based Mobile Dictionary	59
<i>Yang-Sae Moon, Soon-Jung Hong, Jinho Kim</i>	
User Interface Using Quick Palm Motions with Integration of Input and Output	61
<i>Ryosuke Kokaji, Morimasa Matsuda, Tomohiro Hase</i>	
System Design of Advanced Video Navigation Reinforced with Audible Sound in Personal Video Recording	63
<i>O. Eerenberg, R.M. Aarts, P.H.N. de With</i>	
Directionally Filter Based Demosaicing with Integrated Antialiasing	65
<i>M. GUARNERA, G. MESSINA, V. TOMASELLI, A. BRUNA</i>	
Improved Blind Channel Estimation for OFDM Systems	67
<i>Bangwon Seo, Hyun Kyu Chung</i>	
The Design and Implementation of a Stereoscopic Microdisplay Television	69
<i>David C. HUTCHISON, Henry W. NEAL</i>	
Superresolution of a Region of Interest Using Feature-Based Affine Motion Estimation	71
<i>Sung Hyun Kim, Rae-Hong Park, Seungjoon Yang</i>	
New Bit Mapping for Hierarchically Modulated DAB and Terrestrial DMB	73
<i>Hyoungsoo LIM, Heung Mook KIM, Jong Soo LIM</i>	
Efficient Architecture for Full HD 120 Hz Frame Rate Conversion	75
<i>E.B. Bellers, J.G.W.M. Janssen, M. Penners</i>	
ANALYSIS OF FPGA SOLUTIONS FOR BASEBAND PROCESSING IN MULTI CARRIER COMMUNICATION STANDARDS FOR CONSUMER APPLICATIONS	77
<i>S. SAPONARA, F. TOSTI, L. FANUCCI, P. TERRENI</i>	
Square: 3x3 Keypad Mapped to Geometric Elements of a Square	79
<i>Youngwoo Yoon, Geehyuk Lee</i>	
A Novel Mobile Node Based on OFDM for Ubiquitous Networks*	81
<i>Sangchul Jung, Sekchin Chang</i>	
Cross-layer Design for Fast TCP ACK-Clocking over WiMedia UWB Networks	83
<i>Jihyun Lee, Wonjung Lee, Hyungyu Park, Kyungshik Lim, Kwangil Lee, Junhee Park, Kyeongdeok Moon</i>	

Table of Contents

Efficient RGB Video Coding Using Adaptive Inter-Plane Residual Prediction.....	85
<i>Yong-Hwan Kim, Ji-Ho Park, Je-Woo Kim, Byeongho Choi, Joonki Paik</i>	
A Musical Onset Detection System with Scalable Complexity	87
<i>Wan-Chi Lee, Yu Shiu, C.-C. Jay Kuo</i>	
Accessing of Digital Media Contents with DLNA Protocol in Conjunction with DSI WSTP Protocol.....	89
<i>Teo Chang Sheng, Law Sie Yong, Kim Han Jong, Chong Nyok Boon, Foong Foo Kong</i>	
A Front-end Signal Processing L SI for HD DVD/DVD/CD with Dual-Adaptive PRML.....	91
<i>Hideyuki YAMAKAWA, Koichi OTAKE, Yukiyasu TATSUZAWA, Norikatsu CHIBA, Kazuteru SAGINAO</i>	
A Fast Algorithm for 3D Camera Using Pixel-Intensities as a Model for Depth Measurement.....	93
<i>Mannan S. M., Aamir S. Malik, Tae-Sun Choi</i>	
Context-Aware Vertical Handoff for Streaming Service over Heterogeneous Network.....	95
<i>Jae-Young Pyun, Ho-Jin Choi</i>	
A New Transactional Flash Translation Layer for Embedded Database Systems Based on MLC NAND Flash Memory	97
<i>Hyojun Kim, Ki Yong Lee, JaeGyu Jung, Kyoungil Bahng</i>	
Development of Multichannel Sound Scene Visualization Tool with MPEG Surround Multichannel Decoder	99
<i>Jeongil Seo, Seungkwon Beack, Inseon Jang, Daeyoung Jang</i>	
High Quality Directional Audio System.....	101
<i>Xiaobing SUN, Kanzo OKADA</i>	
Implementation of Transmitter Identification Signal Analyzer in Single Frequency Network.....	103
<i>Jae-young Lee, Sung Ik Park, Heung Mook Kim, Jong Soo Lim</i>	
Vision-based Virtual Touch Screen Interface	105
<i>Eunjin Koh, Jongho Won, Changseok Bae</i>	
Development of Gateway-Sink Node for Wireless Sensor Network Using ZigBee	107
<i>Dong Won Kim, Jae Hong Ryu, Bong Soo Kim, Chol Sic Pyo</i>	
Hardware Efficient Skip Mode Detection for H.264/AVC.....	109
<i>Chia-Chun Lin, Yu-Kun Lin, Tian-Sheuan Chang</i>	
A Phone for Human Activity Recognition Using Triaxial Acceleration Sensor.....	111
<i>Sa-kwang Song, Jaewon Jang, Soojun Park</i>	
A REVERSIBLE FACE DE-IDENTIFICATION METHOD BASED ON ROBUST HASHING.....	113
<i>Jin S. Seo, Seong Oun Hwang, Young-Ho Suh</i>	
ML Estimation of Time and Frequency Offset Using Antenna Diversity in OFDM Systems.....	115
<i>Hee Wook Kim, Kunseok Kang, Do-Seob Ahn</i>	
Intelligent Wireless Sensor Network for Surveillance Systems	117
<i>Yao-Chung Chang, Jiann-Liang Chen, Frank Shih, Yi-Ta Wu</i>	
Real-Time Local Contrast Enhancement Algorithm for Video Cameras with Built-in Noise and Artifact Suppression	119
<i>Sascha D. Cvetkovic, Johan Schirris, Peter H.N. de With</i>	
Real-Time Prototype of a Zero-Reference Video Quality Algorithm	121
<i>Nitin Suresh, Pravin Mane, Nikil Jayant</i>	
Adaptive Tone-Mapping Transfer Functions for High Dynamic Range Video Cameras.....	123
<i>Sascha D. Cvetkovic, Jan Klijn, Peter H.N. de With</i>	
A Digital Television Based Solution for Remote Health Care of Rural People.....	125
<i>Ennio GAMBI, Giorgio RASCIONI, Damiano FALCONE, Susanna SPINSANTE</i>	

Table of Contents

An Efficient CAVLD Algorithm for H.264 Decoder	127
<i>Tsun-Han Tsai, De-Lung Fang</i>	
New Medium Idle Time Via Industry Protocol Type	129
<i>Seong-hee Lee, Il-soon Jang, Seong-hee Park, Sang-sung Choi</i>	
A Practical Calibration Method for Top View Image Generation	131
<i>Yohei Ishii, Keisuke Asari, Hitoshi Hongo, Hiroshi Kano</i>	
On-line Music Beat Tracking with Kalman Filtering and Probability Data Association (KF-PDA)	133
<i>Yu Shiu, C.-C. Jay Kuo</i>	
Initial Acquisition for Next Generation MB-OFDM UWB Transmission	135
<i>Kyu-Min Kang, Sang-In Cho, Sang-Sung Choi</i>	
Middleware Architecture of Hybrid Digital Cable Receiver for Cable Broadcast and IPTV Service based on OCAP	137
<i>Keumyong Oh, Youngmin Park, Sungjin Park</i>	
Secure Framework of Audiovisual Content based on Bi-directional Authentication for Hard Disk Drive	139
<i>Yoshihiro Hori, Kenji Taima, Tatsuya Hirai</i>	
A Transceiver Design for Electronic Control Unit (ECU) Nodes in FlexRay-based Automotive Communication Systems	141
<i>Chua-Chin Wang, Gang-Neng Sung, Po-Cheng Chen</i>	
Design and Implementation of Control Mechanism for Standby Power Reduction	143
<i>Joon Heo, Choong Seon Hong, Seok Bong Kang, Sang Soo Jeon</i>	
PROGRESSIVE DIFFERENTIAL PUSH-PULL METHOD FOR DUAL LAYER BLU-RAY DISC RECORDING	145
<i>H. Nakahara, K. Nakai, T. Matozaki, N. Takeshita</i>	
A Circular Buffering Algorithm for Hiding Channel Zapping Delay in a Digital Television	147
<i>Yoon-Hee Choi, Yeong Kyeong Seong</i>	
Highly Efficient Transmission System for Digital Broadcasting Redistribution Services over IP Multicast Networks	149
<i>Tetsuya Yamaguchi, Tomoyuki Kanekiyo, Motoyuki Horii, Katsuhiko Kawazoe, Fumio Kishino</i>	
Ubiquitous Health-assistant System based on Accessory-type Physiological Signal Sensing Device	151
<i>Kyuchang Kang, Youngsung Kim, Jeunwoo Lee, Hoon Choi</i>	
A Cellular Neural Network for Zooming Digital Colour Images	153
<i>S. Battiato, E. U. Giuffrida, F. Rundo</i>	
Device Control with Scriptable-API Using Web Based Framework	155
<i>YoungChul Sohn, Ho Jin, JongWook Park</i>	
Statistical Analysis and Derivation of Intra MB Mode Decision Rules for MPEG-2 to H.264/AVC Transcoding	157
<i>Xingang Liu, Kook-Yeol Yoo</i>	
A Network Level Power Management for Home Network Devices	159
<i>Youn-Kwae Jeong, Intark Han, Kwang-Roh Park</i>	
Efficient Decoding Algorithm for Raptor Codes for Multimedia Broadcast Services	161
<i>J. Heo, S. W. Kim, J. Y. Kim</i>	
Low Complexity Global Motion Estimation Techniques for Image Stabilization	163
<i>Felix Albu, Corneliu Florea, Adrian Zamfir, Alexandru Drimbarean</i>	
A New Transmission System for the Advanced Satellite Broadcast	165
<i>Akinori HASHIMOTO, Yoichi SUZUKI</i>	

Table of Contents

A Hierarchical Mode Decision Method for The Fast H.264/AVC Intraframe Coding.....	167
<i>Jiantan Liu, Jung-Young Choi, Kook-yeol Yoo</i>	
A Temporal Error Concealment Method for H.264/AVC Using Motion Vector Recovery	169
<i>Jun Wu, Xingang Liu, Kook-Yeol Yoo</i>	
Enhanced Transform Domain Intra Prediction for MPEG-2 to H.264/AVC Transcoding	171
<i>Sang-Jun Yu, Jin-Su Myung, Dong-Gyu Sim, Seoung-Jun Oh</i>	
iSCSI Protocol Adaptation with NAS System via Wireless Environment.....	173
<i>Shaikh Muhammad Allayear, Sung Soon Park, Jaechun No</i>	
Asymmetric Bi-Directional Optical Fiber Module for High-Definition Video Transmission	175
<i>Masahisa SAKAI, Takayoshi SASAO, Tadashi AIZAWA, Satoru TOGUCHI, Takashi IWAMOTO</i>	
Image Orientation Detection Based on Camera-subject Distances by Adaptive Control of Conditional Probability	177
<i>Yusuke Takahashi, Kyoji Hirata</i>	
An Integrated Scheme for Authentication And Access Control in a Digital TV Environment	179
<i>Min Gyo Chung, Yong Kim</i>	
Photographing for On-line Mobile Panoramas.....	181
<i>Kyoungju Park</i>	
3D Recursive Search Block Matching on Graphics Processing Unit	183
<i>M. Zhao, H. van der Heijden</i>	
Applying Data Carousel to Improve Search Efficiency in P2P System	185
<i>Wu Guobin, Ni Hong, Wu Gang, Pan Liang</i>	
User-Configurable Personalized Mosaic Electronic Program Guide.....	187
<i>Jinsoo Han, Intark Han, Kwang-Roh Park</i>	
A Novel Performance Measure for Picture Rate Conversion Methods	189
<i>Adrienne Heinrich, Gerard de Haan, Claus Nico Cordes</i>	
Detection of De-interlacing for Scaled Video	191
<i>Dmitri N. Znamenski, Claus Nico Cordes</i>	
Architecture of a Consumer Lab-on-Chip for Pharmacogenomics	193
<i>George Kornaros, D.Meidanis, Y.Papaeystathiou, S.Chantzandroulis, S.Blionas</i>	
Noise-Robust Reduction Scheme over Pervasive Home Network Systems Environment for Internet Telephony Service.....	195
<i>Jinsul Kim, Hyun-Woo Lee, Seungho Han, Won Ryu, Minsoo Hahn</i>	
Architecture of a low-complexity non-binary LDPC decoder	197
<i>Adrian Voicila,David Declercq, François Verdier, Marc Fossonier, Pascal Urard</i>	
Performance Analysis of Forward Error Correcting Codes in IPTV.....	199
<i>S. W. Kim, S. J. Kim, J. Heo</i>	
A Reference Monitor Model for Improving User Comfort and Privacy of Home Gateway in OSGi Service Platform.....	201
<i>Eun-Ae Cho, Chang-Joo Moon, Doo-Kwon Baik</i>	
An Efficient Region of Interest Generation Technique for Far-Infrared Pedestrian Detection.....	203
<i>Ronan O'Malley, Martin Glavin, Edward Jones</i>	
RFID Connectivity with STB for Viewer Identification in IPTV.....	205
<i>Hamid Jabbar, Taikyeong Jeong, Jun Hwang, Humor Hwang, Gyungleen Park</i>	
Design of a Personal Cardiovascular Monitoring System with ECG and Stethoscopic Analysis.....	207
<i>Seán Finn, Edward Jones, Martin Glavin</i>	

Table of Contents

Emerging eHealthcare Consumer Electronic Device Systems	209
<i>Tsong-Ho Wu</i>	
Four-way Video Conference and its Session Control Based on Distributed Mini-MCU in Home Server	211
<i>Intark Han, Hong-Shik Park, Young-Woo Choi, Kwang-Ro Park</i>	
Inter Mode Conversion of H .264 to MPEG-2 Video with Reduced Complexity	213
<i>Sandro Moiron, Sergio Faria, Pedro Assuncao, Vitor Silva, Antonio Navarro</i>	
Seamlessly Interconnecting Legacy IEEE 1394 Devices over UWB Network: The Mirroring Bridge	215
<i>Jonghun Yoo, Jiyong Park, Seongsoo Hong, Yeongbae Yeo, Hyunchin Kim</i>	
RFIPv6 - A Novel IPv6- EPC Bridge Mechanism	217
<i>Yao-Chung Chang, Jiann-Liang Chen, Yu-Shan Lin, Shi-Ming Wang</i>	
Statistical Approaches to Quality Assessment for Image Restoration	219
<i>Hiroyuki Takeda, Hae Jong Seo, Peyman Milanfar</i>	
Test Video Selection for Video Processing Research and Development	221
<i>Chin Chye Koh, Jorge E. Caviedes, Sanjit K.Mitra</i>	
Video Segmentation-aided VCR Support for P2P VoD Systems	223
<i>Xin Wang, Changyi Zheng, Zhenyuan Zhang, Hong Lu, Xiangyang Xue</i>	
Wavelet Based Multiscale Edge Preserving Segmentation Algorithm for Object Recognition and Object Tracking	225
<i>Tomaž ROMIH, Žarko CUCEJ, Peter PLANINŠIČ</i>	
A Platform Independent Digital Story Authoring and Distribution Tool for Mobile Handhelds	227
<i>D.S.Wickramanayake, E.A.Edirisinghe</i>	
A Clustered Flash Translation Layer for Mass Storage CompactFlash Systems	229
<i>Kwanghee Park, Deok-Hwan Kim</i>	
Fast Mode Decision in H.264 /AVC Based on Fuzzy Logic	231
<i>Han-Kui Chang, Pei-Jun Lee, Effendi Shu, Wen-June Wang</i>	
Speech Enhancement for Distributed Speech Recognition in Mobile Devices	233
<i>Ronan Flynn, Edward Jones</i>	
Opportunities for 3D on Blu-ray Disc	235
<i>Philip Newton, Francesco Scalori, Fons Bruls</i>	
Motion-blur-free Camera System Using Multi-exposed Images	237
<i>Seung-Won Jung, Byeong-Doo Choi, Hyun-Hwa Oh, Sung-Jea Ko</i>	
Design Considerations for a 3D- TV Video Coding Architecture	239
<i>Yannick Morvan, Dirk Farin, Peter H. N. de With</i>	
Adaptive Path-loss Model-based Indoor Localization	241
<i>SangYoung Park, Hyo-Sung Ahn, Wonpil Yu</i>	
Performance Evaluation of the Emerging Scalable Video Coding	243
<i>Haechul Choi, Kyung Il Lee, Seong-Jun Bae, Jung Won Kang, Jeong-Ju Yoo</i>	
A System Prototype for Portable Wireless Medical Devices*	245
<i>Chua-Chin Wang, Chi-Chun Huang</i>	
User Interaction And Random Accessibility Analysis For Multiview Video System	247
<i>You Yang, Gangyi Jiang, Peng Zhu, Mei Yu</i>	
A Novel Audio/Video Decoder for Video Recorders	249
<i>Daniel Ogilvie</i>	
Flat hex Pattern for Large Range Fast Motion Estimation	251
<i>Cheng-Ling Tseng, Nam Ling</i>	

Table of Contents

Ultra-short Throw Distance Front Projector with Mirror-Lens Hybrid Projection Optical System	253
<i>Shinya Matsumoto, Ryuhei Amano, Michihiro Okuda, Takaharu Adachi, Shinichi Okuno</i>	
Real-time H.264 Encoder with Deblocking Filter Parallelization	255
<i>Tatsuji Moriyoshi, Shigeki Miura</i>	
A Low Cost and Fast Handoff Solution in IPv6 Networks.....	257
<i>Jae-Kwon Seo, Sung-Hyun Nam, Woon-Young Yeo, Sang Yep Nam, Kyung-Geun Lee</i>	
A Study on Cooperative Reception of One Segment ISDB-T	259
<i>Takashi Okubo, Makoto Itami</i>	
IGN2IP: Internetworking Intelligent Gadget Network based on 802.15.4 with IP Network.....	261
<i>KwangHee Lee, JongHo Won, ChangSeok Bae</i>	
A Reduced Complexity Double Correlation Algorithm for Frame Synchronization	263
<i>Kyungchan Shin, Se Bin Im, Hyung-Jin Choi, So-Ra Park</i>	
A Study on Adaptive Modulation of Pre-coded OFDM combined with Error Correcting Code.....	265
<i>Takahiro Tsugi, Makoto Itami</i>	
Watermarking for Content Aware Intelligent Toys	267
<i>Aweke Lemma, Mehmet Celik, Stefan Katzenbeisser, Michiel van der Veen</i>	
Grass Field Detection for TV Picture Quality Enhancement	269
<i>Bahman Zafarifar, Peter H. N. de With</i>	
Enhanced Mitigation Scheme for High Power and Long Duration Interference in DVB-T/H Systems.....	271
<i>A. Hazmi, J. Rinne, M. Renfors</i>	
Context Representation of Intelligent Gadgets for Event-driven Services	273
<i>Hyeju Jang, Kugsang Jeong, Jongho Won, Changseok Bae</i>	
Low-Complexity Linear-Feedback Equalization for ATSC DTV	275
<i>Thomas G. B. WILSON</i>	
Frame Error Concealment Technique Using Adaptive Inter-Mode Estimation for H.264/AVC.....	277
<i>Jun-Hyung Kim, Min-Cheol Hwang, Hae-Yong Yang, Sung-Jea Ko, Aldo W. Morales</i>	
3D Camera Calibration Using Gray Code Patterns	279
<i>Shinichiro Hirooka, Norihiko Nakano, Masato Kazui</i>	
An FPGA-based Smart Camera for Gesture Analysis for Healthcare Applications.....	281
<i>Timothy Tsui, Yu Shi</i>	
Audio DRM Conversion between Different DRM Content Formats	283
<i>Yeonjeong Jeong, Junghyun Kim, Kisong Yoon</i>	
An Intra-panel Interface for Large Size FPDs with High Resolution And Definition.....	285
<i>Youngkwon Jo, Sungha Kim, Suki Kim</i>	
A NEW EDGE-BASED INTRA-FIELD INTERPOLATION METHOD FOR DEINTERLACING USING LOCALLY ADAPTIVE-THRESHOLDED BINARY IMAGE	287
<i>Dong-Ho Lee</i>	
Region-based Overlay Multicast in Mobile Ad Hoc Networks.....	289
<i>Yujin Lim, Sanghyun Ahn, Hyun Yu</i>	
Error Tracking Based Error Concealment Strategy for Scalable Video Coding.....	291
<i>Chun-Su Park, Min-Seok Yoon, Seon-Tae Kim, Hae-Chul Choi, Sung-Jea Ko</i>	
A Power Reduction Method for LCD Backlight Based on Human Visual Characteristics	293
<i>Sang-Jin Lee, Kyu-Hoi Um, Byung-Sun Choi</i>	
Implementation of Smart Headband for the Wearable Healthcare.....	295
<i>Sanghyun Kim, Dongwan Ryoo, Changseok Bae</i>	

Table of Contents

Low Complexity H.264 Intra MB Coding	297
<i>Hari Kalva, Philip Kunzelmann, Rashad Jillani, Abhi Pandya</i>	
Content Rebroadcasting from DVB-H to Home Network	299
<i>Igor CURCIO, Kalervo KONTOLA, Carol RUS, Irek DEFEE</i>	
Implementing OpenGL ES 1.1 over OpenGL ES 2.0	301
<i>Steve HILL, Mathieu ROBART, Emmanuel TANGUY</i>	
Global Illumination for Advanced Computer Graphics	303
<i>Mathieu ROBART, Steve HILL, Emmanuel TANGUY</i>	
Fast Deblocking Algorithm Apt to Video Streaming Application in Mobile Devices	305
<i>Sang-Hee Park, Kwang-Wook Lee, Aldo W. Morales, Sung-Jea Ko</i>	
A Latency Analysis on H.264 Video Transmission Systems.....	307
<i>Ralf M. Schreier, Albrecht Rothermel</i>	
Determining Unique Fingerprint Features for Biometric Encoding of Data	309
<i>Catalin Cucu, Alex Cucos, Peter Corcoran</i>	
HARDWARE DEDICATED INTEGER-PEL MOTION ESTIMATOR FOR HIGH DEFINITION H.264/AVC VIDEO ENCODER.....	311
<i>Jae Hun Lee, Ki Won Yoo</i>	
WPAN Platform Architecture and Application Design for Handset	313
<i>In-Hwan Kim, Hoo-Jong Kim, Jong-Tae Ihm, Gu-Min Jeong, Ki-Dong Chung</i>	
A fast and efficient highlight detector for soccer	315
<i>Bas Zoetekouw, Pedro Fonseca, Ralf Funken</i>	
Architecture for a Home Media Network Based on PTP-IP Connectivity Techniques.....	317
<i>Peter Corcoran</i>	
On De-Embedding Phase for High Speed Connectors	319
<i>Aldo Morales, Sedig Agili, Shilpa Gaddala</i>	
Write System of Blu-ray Disc Drive for Video Camera	321
<i>Takuma Tsukuda, Tatsuya Ishitobi, Koichi Watanabe, Hisataka Sugiyama</i>	
Trick Play Method for HD H.264 Set-Top Box.....	323
<i>Jin-Hwan Jeong, Ok-Gee Min, Yong-Ju Lee, Choon-Seo Park, Hag-Young Kim, Myung-Joon Kim</i>	
Architecture of PRML Decoder for BD/HD DVD Compatible System	325
<i>Yusuke Nakamura, Junya Iizuka, Koichiro Nishimura, Masakazu Ikeda, Yukinobu Tada</i>	
Autonomic System Management for the PDA	327
<i>Yong-Duck You, Hoon Choi, Dongwon Han</i>	
Protection of Window Media Video by Faked FourCC	329
<i>Jihyun Park, Yeonjeong Jeong, Jaecheol Ryou</i>	
A wearable health context aware system	331
<i>Youngsung Kim, Jeunwoo Lee</i>	
The Wearable Wrist-Type Gadget for HealthCare based on Physiological Signals.....	333
<i>Dong-Wan Ryoo, Chang-Seok Bae, Jeun-Woo Lee</i>	
Efficient Discrete-Time Bandpass Sigma-Delta Modulator for Multistandard Wireless Applications	335
<i>Chanyong Jeong, Yonghwan Kim, Soowon Kim</i>	
Development of Recognition System Using Fusion of Natural Gesture/Speech	337
<i>Young-Giu Jung, Mun-Sung Han, Jun Seok Park, Sang Jo Lee</i>	
Development of Optical Disc Servo Simulation Based on Actual Waveform Data.....	339
<i>Shinsuke Onoe, Yoshinori Ishikawa, Motoyuki Suzuki, Akio Fukushima</i>	

Table of Contents

MPEG-21 enabled SVC Adaptation for Multi-User QoS Adaptive Streaming	341
<i>Truong Cong Thang, Jung Won Kang, Haechul Choi, Jeong-Ju Yoo</i>	
A Scheme for Location Transparent Access to Networked Consumer Electronics	343
<i>Hidekazu KUROKI, Hiroyuki INOUE, Tsukasa OGINO, Susumu ISHIHARA</i>	
Dynamic Scan Initiation for Resource Efficient Operation in a 802.16e Network.....	345
<i>Jaesung Park, Yujin Lim, Sanghyun Ahn</i>	
Bidirectional Interactive Contents Player for Terrestrial Digital Multimedia Broadcasting (T-DMB)	347
<i>Won-Sik Cheong, Jihun Cha, MyungSeok Ki, Kyung Ae Moon</i>	
Clear Focused Image from Macro and Infinite Images.....	349
<i>Chih-Wei Chen, Chiou-Shann Fuh</i>	
Efficient Retransmission Architecture of Digital Broadcast Services over IPTV Networks.....	351
<i>Bong-Jin Oh, Yu-Seok Bae, Kyeong-Deok Moon, Kwan-Jong Yoo</i>	
Development of HDD/D VD Hybrid Camcorder	353
<i>Tsutomu Usui, Shimpei Usui, Nozomu Shimoda, Hiroyuki Marumori, Masahiro Fujimoto</i>	
A DSP Based H.264 Decoder for a Multi-Format IP Set-Top Box.....	355
<i>F. Pescador, M. J. Garrido, C. Sanz, E. Juárez, D. Samper</i>	
A BD Camera with One-Hour HD Video Recording.....	357
<i>Toshihiro Kato, Hiroyuki Marumori, Akinobu Watanabe, Nozomu Shimoda, Takeo Okochi</i>	
Simulation and Implementation of Voice-Over-IEEE 802.15.4 LR-WPAN.....	359
<i>Eunchang Choi, YunKang Hur, Jaedoo Huh, Yoonseok Nam, DaeHun Yoo, WoongChul Choi</i>	
Development of advanced PVR based on TV-Anytime	361
<i>Hyun-Cheol Kim, Seong Yong Lim, Joo Myoung Seok, Ji Hoon Choi, Han-kyu Lee, Jin-Woo Hong</i>	
Secure Deletion of Confidential Data in Consumer Electronics	363
<i>Kyoungmoon Sun, Jongmoo Choi, Donghee Lee, Sam H. Noh</i>	
A Channel Equalization Method Using Spline Interpolation for Mobile Reception in Digital Television Terrestrial Broadcasting	365
<i>Takashi Iida, Kouji Matsumura, Atsushi Suyama, Takuya Koujiya, Atsushi Shimizu</i>	
Context-Aware Middle ware for Mobile Phone Based on Operational Logs	367
<i>Ryoza Kiyohara, Mitsuhiro Matsumoto, Naoki Shimizu, Satoshi Mii, Masayuki Numao, Satoshi Kurihara</i>	
Global Timed-Release Encryption	369
<i>Maki Yoshida, Toru Fujiwara</i>	
An End-to-end QoS Architecture for Ensuring The Reliable Delivery of Broadband Applications.....	371
<i>Nikos Koutsouris, Teodor Buburuzan, Krzysztof Loziak, Efsthios Sykas</i>	
A Novel Wind Noise Reduction for Digital Video Camera	373
<i>Masahiro Yoshida, Tomoki Oku, Makoto Yamanaka, Haruhiko Murata</i>	
Blu-ray Disc/DVD Compatible Optical Slim Pickup for Video Camera Drives	375
<i>K. Yamazaki, H. Mori, T. Kawamura, Y. Kitada, T. Kamisada</i>	
Personal Interactive Bipedal Symmetry Re-education System to Aid the Recovery of Stroke Victims	377
<i>Martin O'Halloran, Martin Glavin, Edward Jones, Manigandon Chockalingam, Rochelle O'Hara</i>	
Metrics to Evaluate The Quality of Motion Compensation Systems in De-interlacing And Up-conversion Applications.....	380
<i>Marina NICOLAS, Jerome ROUSSEL, Frederique CRETE</i>	
A Hybrid System That Supports Pull-type And Push-type AV Content Streaming Based on DLNA Technologies	382
<i>Haoming SHEN, Yoshinori HATAYAMA</i>	

Table of Contents

TWO-PHASED REGION INTEGRATION APPROACH FOR EFFECTIVE PEDESTRIAN DETECTION IN LOW CONTRAST IMAGES	384
<i>Miki Haseyama, Yosuke Kaga</i>	
HIGHLY EFFICIENT H.264/A VC CODEC TECHNOLOGY FOR HIGH DEFINITION CONSUMER APPLICATIONS	386
<i>Daisuke Yoshida, Masaru Takahashi, Hiroki Mizosoe, Taku Nakamura, Yusuke Yatabe</i>	
A User-friendly Video Camera Based on Ergonomic Studies.....	388
<i>Yasuhiro Iijima, Haruo Hatanaka, Hideto Fujita, Yoshihiro Shimomura, Tetsuo Katsuura</i>	
A Generic Approach for Digital Clock Synthesis Used for HDTV/PC-VGA Receiver	390
<i>Michael Pietrzyk, Andreas Koellmann, Sven Simons</i>	
Novel Bridge for networking IEEE 1394 clusters via UWB over Coaxial Cable for HANA & AV/C Digital Multimedia Networks.....	392
<i>Sergio Guillén, Michael Scholles, M.Duzynski, M.Förster, P.Nauber, U.Schelinski, J. Toledo</i>	
Seok-Han Lee, Sang-Won Um, Jong-Soo Choi	394
<i>REF!</i>	
High Precision Digital Image Stabilizing System Using Optical Device	396
<i>Jin-Hyung Kim, Keun-Yung Byun, Byeong-Doo Choi, Sung-Jea Ko</i>	
3.1 GHz to 6 GHz UWB Pulse Radio Transceiver Front-End Based on Super-regeneration Approach.....	398
<i>M. Anis, T. Ilseher, R. Tielert, N. Wehn</i>	
Development of a Packaging Storage Format for Electronic Comic Services with Metadata	400
<i>DaeKyu Jung, Hui Yong Kim, Han-Kyu Lee, JeHo Nam, Jin Woo Hong</i>	
HIGH QUALITY LOGO INSERTION ALGORITHM FOR H.264/AVC.....	402
<i>Tomohiro Tsuji, Akio Yoneyama, Hiromasa Yanagihara, Yasuhiro Takishima</i>	
An efficient training sequence for channel estimation in ATSC 8VSB system.....	404
<i>Soonchul Park, Jim Kim, Eunsu Kang, Dong Seog Han</i>	
Software Platform Concept for Interactive Video Handheld Devices.....	406
<i>Philipp Steckel</i>	
Real-Time Free Viewpoint Rendering System for Face-to-face Video Conference	408
<i>Chia-Ho Pan, Sheng-Chieh Huang, Yu-Lin Chang, Chung Lian, Liang-Gee Chen</i>	
A Novel Design Approach for H.264/AVC Motion Estimation Architectures	410
<i>Sebastián LÓPEZ, Gustavo M. CALLICÓ, Félix TOBAJAS, José F. LÓPEZ, Roberto SARMIENTO</i>	
Impact of Fast Motion Estimation Algorithms on Super- Resolved Video Sequences	412
<i>Gustavo M. CALLICO, Sebastian LOPEZ, Karlos TARAJANO, Jose LOPEZ, Roberto SARMIENTO</i>	
On the Willingness to Pay in Relation to Delivered Quality of Mobile Video Streaming.....	414
<i>Michal Ries, Olivia Nemethova, Markus Rupp</i>	
Content-adaptive Resolution Enhancement of Compressed Video with Encoder-Generated Side Information	416
<i>Fei Zuo, Stijn de Waele, Fons Bruls</i>	
An Efficient Architecture for Hardware Implementation of H.264/AVC Deblocking Filtering	418
<i>Félix TOBAJAS, Gustavo CALLICÓ, Pedro A. PÉREZ, Valentín DE ARMAS, Roberto SARMIENTO</i>	
Provision of the Multimedia Service Framework in the Ubiquitous Home Network.....	420
<i>Jung-Tae Kim, Sangwook Park, Jong-Hoon Lee, Eui-Hyun Paik, Kwang-Roh Park</i>	
Low-Cost Camera Motion Extraction in Compressed Videos.....	422
<i>Ying Weng, Jianmin Jiang</i>	

Table of Contents

Priority-Processing for Optimized Real-Time Performance with Limited Processing Resources	424
<i>Christian Hentschel, Stefan Schiemenz</i>	
Performance of Ad-Hoc Wireless Network on 2.4GHz Band in Real Fields	426
<i>Noriyuki Kushiro, Makoto Katsukura, Masanor. Nakata, Higuma Toshiyasu, Yoshiaki Ito, Kenji Ogaki</i>	
Reducing IPTV Channel Switching Time using H.264 Scalable Video Coding	428
<i>Yonghee Lee, Jonghun Lee, Inkwon Kim, Heonshik Shin</i>	
Channel-Aware Video Streaming for Mobile Devices over WiBro Network	430
<i>Jae-Yun Jeong, Soo-Hyung Kim, Seung-Jin Baek, Hye-Soo Kim, Sung-Jea Ko</i>	
Distributed Space-Time Coding and Equalization for Cooperative Cellular Communication System	432
<i>Jian Xu, JinYong Choi, Jong-Soo Seo</i>	
Improvement of Collision Detection Performance of Hierarchies by Using Classified Dynamic-Density of 3D Objects	434
<i>ChunHo Yi, GyuBeom Kim, TaeYong Kim</i>	
Digital On-Channel Repeater for Terrestrial Digital Multimedia Broadcasting (T-DMB)	436
<i>Jung Su Han, Kyungchan Shin, Hyung-Jin Choi</i>	
An Equalization Technique to Combat Strong Pre-Echoes in SFN with DOCR	438
<i>Young Ho Oh, Se Young Kim, Dae Jin Kim</i>	
MMSE Equalization with Weighted SNRs for DVB-T receivers	440
<i>You-Seok Lee, Hyun-Chool Shin, Hyoung-Nam Kim</i>	
ECG-based Biofeedback Chair for Self-emotion Management at Home	442
<i>Chung K. Lee, Sun K. Yoo</i>	
The Bridge Component for UPnP and Bluetooth for a Wearable Computing Environment	444
<i>Tae-Wook Jo, Yong-Duck You, Hoon Choi</i>	
Using TCP-feedback to Optimize Transcoding Performance	446
<i>Richard Verhoeven, Dmitri Jarnikov, Johan Lukkien</i>	
Multi-view Video Navigation Using Motion Sensing Remote Controllers	448
<i>Hari Kalva, Chris Holder</i>	
Low-power Digital Filter Using Optimized CSD and Pipelined AU for 24-bit Audio DAC	450
<i>S. Y. Lee, Y. S. Song, J. M. Cho, S. W. Kim</i>	
SYSTEM ARCHITECTURE OF H.264/AVC CODEC LSI FOR DIGITAL HD CAMCORDER	452
<i>Keisuke Inata, Manabu Sasamoto, Hironori Komi</i>	
Palmprint Alignment for Consumer Applications	454
<i>A.C.M. Fong, B. Fong</i>	
Text-Independent Speaker Identification using Soft Channel Selection in a Multi-Microphone Environment	456
<i>Mikyong Ji, Sungtak Kim, Hoirin Kim, Ho-Sub Yoon</i>	
An Effective Color Distortion and Noise Reduction for Unsharp Masking in LCD Display	458
<i>You-Sun Kim, Seung-Kyun Kim, Nam-Hyeong Kim, Chun-Su Park, Sung-Jea Ko</i>	
Development of the portable monitoring system based on Wireless Body Area Sensor Network for continuous acquisition and measurement of the vital sign	460
<i>Bong M. Jang, Yong K. Lee, Sun K. Yoo</i>	
Taking Images in Extremely High Dynamic Range Scenes by Fusing Multiple Exposed Images And Tone Reproduction	462
<i>Wen-Chung Kao, Wei-Chi Huang, Lien-Yang Chen, Hong-Shuo Tai, Hung-Hsin Wu</i>	

Table of Contents

A Low Power SOC Architecture for The V2.0+EDR Bluetooth.....	464
<i>Jeonghun Kim, Kyongtae Moon, Jungwon Jeong, Yunjeong Kim, Suki Kim</i>	
An Assistive Home Automation and Monitoring System.....	466
<i>F. Grossi, V. Bianchi, G. Matrella, I. De Munari, P. Ciampolini</i>	
Power-Grid Load Balancing by Using Smart Home Appliances.....	468
<i>A. RICCI, B. VNERBA, E. SMARGIASSI, I. DE MUNARI, V. AISA, P. CIAMPOLINI</i>	
Managing a Media Server Content Directory in Absence of Reliable Metadata	470
<i>Fernando M. MATSUBARA, Takehiko HANADA, Shigeru IMAI, Shin MIURA, Shinji AKATSU</i>	
A Proposal on Video Editing System Coping with Rights Inheritance Management for Secondary Content	472
<i>Yuan-Kang Wang, Akiko Seki, Wataru Kameyama</i>	
Detection of Hierarchically-Modulated Data for Advanced T-DMB Receivers.....	474
<i>Sangdo Ha, Wan-Jin Kim, Ji-Hyun Kim, Hyoungsoo Lim, Hyoung-Nam Kim</i>	
A Study of Healthcare System for Patient Location Data Based on LBS.....	476
<i>Jinsoo Ahn, Jungil Heo, Suyoung Lim, Jungho Seo, Wooshik Kim</i>	
Low Power Continuous-time Equalizer Adopting a Clock Loss Tracking Technique for Digital Display Interface (DDI).....	478
<i>K.-Y. Kim, G.-S. Kim, S.-W. Kim</i>	
An Object Removal Method Based on Improved Texture Synthesis on Photographs	480
<i>Fei Wang, Nanning Zheng, Jizhong Zhao, Jishang Wei, Yangjun Zhang</i>	
A Recursive Trellis Decoder to Approach The Shannon Capacity in ATSC DTV Receivers.....	482
<i>Young Ho Oh, Kyoung Won Lee, Dae Jin Kim</i>	
Efficient and Secure Remote Authenticated Key Agreement Scheme for Multi-server Using Mobile Equipment	484
<i>Jun Ho Lee, Dong Hoon Lee</i>	
A Robust Symbol Synchronization Method for Terrestrial-DMB Receivers in Hierarchical Modulation Mode	486
<i>Joon Tae Kim, Jong Kyu Oh, Yang Soo Kim, Jong Soo Lim</i>	
On the performance of VoIP and IPTV over a Wireless Mesh Network in an Outdoor Environment	488
<i>J. Ekling, M. Gidlund</i>	
Wearable Accelerometer for Numerical Diagnosis of Human Walk Using DCT	490
<i>Shigeyoshi Nakajima, Hiroyoshi Iwaki, Mitsuhiro Ikebuchi, Ryoichi Kato, Takashi Toriu</i>	
Intelligent 1-Dimensional Channel Estimation Methods and Its Application to DVB-T System	492
<i>Chang Yeon Cho, Do Huy Wang, Joon Tae Kim</i>	
Combinational Spreading and Modulation Technique for Mobile Satellite DMB Services	494
<i>Sang-Jin Lee, Sangwoon LEE, Jong-Soo Seo</i>	
Implementation of the ISO/IEC 18000-6 Type C Prototype Reader.....	496
<i>Ki-Hwan Suh, Yong-Gu Jo, Young-Gon Hong, Kyung Sik Son, Hyoung-Nam Kim</i>	
A Fast and Memory Efficient Huffman Decoding Method for the MPEG-4 AAC Standard.....	498
<i>Gutemberg G. S. Júnior, Mateus A. M. Lima, Walter O. G. Filho, Angelo Perkusich, Marcos R. A. Morais, Antonio Marcus N. Lima</i>	
Eye-View: A Retinal Image Acquisition System	500
<i>Harinarayanan S., Prabhakar T. V., Shyam Vasudeva Rao, Chalapathi Rao N. V., Venkatakrishnan S.</i>	
DVB-H Key Management System for UMTS Capable Devices.....	502
<i>Daniel Díaz-Sánchez, Andrés Marín, Florina Alménarez, Alberto Cortés</i>	

Table of Contents

Proxy-based Multimedia Signaling Scheme Using RTSP for Seamless Service Mobility in Home Network	504
<i>Jong Min Lee, Myungju Yu, Seong Gon Choi, Yeong-Ro Lee, Sun-Moo Kang</i>	
Volumetric Display Based on Inclined-Image Scanning and Its Application for Three-Dimensional Image Transmission	506
<i>D. MIYAZAKI, T. HONDA, K. OHNO, T. MUKAI</i>	
A Statistical Modeling based System for Blink Detection in Digital Cameras	508
<i>Peter Corcoran, Ioana Bacivarov, Mircea C. Ionita</i>	
BRisa UPnP A/V Framework	510
<i>Adrian L. V. Guedes, Danilo F. S. Santos, Jose L. do Nascimento, Leandro M. Sales, Angelo Perkusich, Hyggo O. Almeida</i>	
Application Profiling in a Dual-Core Platform	512
<i>Uian S. GORGÔNIO, Henza R. B. CUNHA, Erivaldo X. de L. FILHO, Saulo O. D. LUIZ, Angelo PERKUSICH, Marcos R. A. MORAIS</i>	
Simple Bass Equalizer for Closed-Box Loudspeaker Subwoofers	514
<i>Vladimir E. Filevski</i>	
Remote Control Generating Dynamic User Interface Corresponding to Audio Visual System Configuration	516
<i>Shuya Kimura, Tomohiro Hase</i>	
A Multi-Standards HDTV Video Decoder for Blu-Ray Disc Standard	518
<i>Noriyuki Minegishi, Hidenori Sato, Anthony Vetro, Fumitaka Izumihara, Masayuki Koyama</i>	
A DVB-MHP to Blu-ray transcoding scheme for interactive data	520
<i>Sergio INFANTE, Panos NASIOPOULOS</i>	
Software Defined Automotive Receiver for Broadcasting Services	522
<i>Maja Sliskovic</i>	
A Model for Privacy Preserving Metering Service	524
<i>Bo Gyeong Kang, Je Hong Park, Seung Chul Chae, Seonman Kim</i>	
Integrating Flexible Electrophoretic Display And One-Time Password Generator in Smart Cards	526
<i>Wen-Chung Kao, Chao-Yi Fang, Ying-Yung Chen, Ming-Hung Shen, Jialock Wong</i>	
Behaviors-based User Profiling and Classification-based Content Rating for Personalized Digital TV	528
<i>Hyoseop Shin, Na Yeon Kim, Eunu Yi Kim, Minsoo Lee</i>	
Intelligent wheelchair using face and mouth shape recognition	530
<i>Jin Sun Ju, Yun Hee Shin, Eun Yi Kim., Se Hyun Park</i>	
Interference to DTV Reception due to Non-Linearity of Receiver Front-Ends.	532
<i>Charles W. Rhodes</i>	
Color Image Assessment Using Spatial Extension to CIE DE2000	534
<i>Shaohua Chen, Azeddine Beghdadi, Aladine Chetouani</i>	
DSL FORUM'S FOCUS: QUALITY DELIVERY AND MANAGEMENT OF IPTV	536
<i>Robin Mersh</i>	
A Wavelet Interlaced Video Coding Framework	538
<i>L. M. Mei, H. R. Wu, D. M. Tan</i>	
Multi-scale and Scalable Video Quality Assessment	540
<i>Kalpana Seshadrinathan, Alan C. Bovik</i>	
Consumer Electronics Opportunities in Remote and Home Healthcare	542
<i>David P.L. SIMONS</i>	

Table of Contents

The History and Future of DSPs in Consumer Audio Equipment-Part I: History and Current Conditions.....	544
<i>Tomlinson Holman</i>	
The History and Future of DSPs in Consumer Audio Equipment-Part II: Emerging Areas and the Future.....	546
<i>Tomlinson Holman</i>	
Variable-Octave Complex Smoothing for Loudspeaker-Room Response Equalization	548
<i>Sunil Bharitkar, Chris Kyriakakis, Tom Holman</i>	
Bandlets for HDTV Video Processing.....	550
<i>Stephane Mallat, Joan Bruna</i>	