

IEICE TRANSACTIONS

on Electronics

0-19-13
月 v. E92C
刊 n. 6

LILY 刊碼: N54-0164S
雜誌名稱: IEICE trans. on electronics

刊別: M
年代: 2009

NO. 6

ISSN: 0916-8524
VOL.: V.E92C

架號: O-119-1-3

■ Special Section on Analog Circuits and Related SoC Integration Technologies

Special Section on Analog Circuits and Related SoC Integration Technologies

745 FOREWORD Haruo KOBAYASHI

PAPERS

- 747 Smart Front-Ends, from Vision to Design (*INVITED*)
..... Arthur H. M. van ROERMUND, Peter BALTUS, André van BEZOOIJEN, Johannes A. (Hans) HEGT,
Emanuele LOPELLI, Reza MAHMOUDI, Georgi I. RADULOV, and Maja VIDOJKOVIC
- 757 Evolutional Trend of Mixed Analog and Digital RF Circuits (*INVITED*) Satoshi TANAKA
- 769 A 100 Mbps, 4.1 pJ/bit Threshold Detection-Based Impulse Radio UWB Transceiver in 90 nm CMOS
..... Lechang LIU, Yoshio MIYAMOTO, Zhiwei ZHOU, Kosuke SAKAIDA, Jisun RYU, Koichi ISHIDA,
Makoto TAKAMIYA, and Takayasu SAKURAI
- 777 Degraded Frequency-Tuning Range and Oscillation Amplitude of LC-VCOs due to the Nonquasi-Static
Effect in MOS Varactors
..... Masataka MIYAKE, Daisuke HORI, Norio SADACHIKA, Uwe FELDMANN, Mitiko MIURA-MATTAUSCH,
Hans Jürgen MATTAUSCH, Tatsuya OHGURO, Takahiro IIZUKA,
Masahiko TAGUCHI, and Shunsuke MIYAMOTO
- 785 A 60-GHz Phase-Locked Loop with Inductor-Less Wide Operation Range Prescaler in 90-nm CMOS
..... Hiroaki HOSHINO, Ryoichi TACHIBANA, Toshiya MITOMO, Naoko ONO,
Yoshiaki YOSHIHARA, and Ryuichi FUJIMOTO
- 792 High-Attenuation Power Line for Wideband Decoupling
..... Yasuo MANZAWA, Masato SASAKI, and Minoru FUJISHIMA
- 798 Dual Imager Core Chip with 24.8 Rangemaps/s 3-D and 58 fps 2-D Simultaneous Capture Capability
..... Shingo MANDAI, Toru NAKURA, Makoto IKEDA, and Kunihiro ASADA
- 806 A Highly Linear and Wide Input Range Four-Quadrant CMOS Analog Multiplier Using Active Feedback
..... Zhangcai HUANG, Minglu JIANG, and Yasuaki INOUE
- 815 A 433-MHz Rail-to-Rail Voltage Amplifier with Carrier Sensing Function for Wireless Sensor Networks
..... Takashi TAKEUCHI, Shinji MIKAMI, Hyeokjong LEE, Hiroshi KAWAGUCHI,
Chikara OHTA, and Masahiko YOSHIMOTO
- 822 Design of 1 V Operating Fully Differential OTA Using NMOS Inverters in 0.18 μ m CMOS Technology
..... Atsushi TANAKA and Hiroshi TANIMOTO
- 828 A 2.0 Vpp Input, 0.5 V Supply Delta Amplifier with A-to-D Conversion
..... Yoshihiro MASUI, Takeshi YOSHIDA, and Atsushi IWATA
- 835 1-GHz Input Bandwidth Under-Sampling A/D Converter with Dynamic Current Reduction Comparator
for UWB-IR Receiver
..... Tatsuo NAKAGAWA, Tatsuji MATSUURA, Eiki IMAIZUMI, Junya KUDOH,
Goichi ONO, and Masayuki MIYAZAKI

(continued on back cover)



A PUBLICATION OF THE ELECTRONICS SOCIETY
The Institute of Electronics, Information and Communication Engineers
Kikai-Shinko-Kaikan Bldg., 5-8, Shibakoen 3 chome, Minato-ku, TOKYO, 105-0011 JAPAN
URL: <http://search.ieice.org/es/>

VOL.E92-C NO.6
JUNE 2009

IEICE TRANSACTIONS ON ELECTRONICS
第九十二巻 第六号(二〇〇九年五月十四日)発行
編集長 土橋 啓一
発行所 社団法人電子情報技術学会
印刷所 株式会社インフォマテックセンター
発行所 社団法人電子情報技術学会
印刷所 株式会社インフォマテックセンター
電話 03-5561-5500
FAX 03-5561-5501
E-MAIL ieice@ieice.org

- 843 Architectural Exploration and Design of Time-Interleaved SAR Arrays for Low-Power and High Speed A/D Converters Sergio SAPONARA, Pierluigi NUZZO, Claudio NANI, Geert VAN DER PLAS, and Luca FANUCCI
- 852 A Low-Power Second-Order Two-Channel Time-Interleaved $\Sigma\Delta$ Modulator for Broadband Applications Xiao YANG, Hong ZHANG, and Guican CHEN

LETTERS

- 860 Sensor Signal Digitization Utilizing a Band-Pass Sigma-Delta Modulator Lukas FUJCIK, Linus MICHAELI, Jiri HAZE, and Radimir VRBA
- 864 Duty Cycle Corrector for Pipelined ADC with Low Added Jitter Zhengchang DU, Jianhui WU, Shanli LONG, Meng ZHANG, and Xincun JI

Regular Section PAPERS

■ Electronic Circuits

- 867 High-Throughput Bit-Serial LDPC Decoder LSI Based on Multiple-Valued Asynchronous Interleaving Naoya ONIZAWA, Takahiro HANYU, and Vincent C. GAUDET

■ Integrated Electronics

- 875 Temperature-Aware NBTI Modeling Techniques in Digital Circuits Hong LUO, Yu WANG, Rong LUO, Huazhong YANG, and Yuan XIE

BRIEF PAPER

■ Optoelectronics

- 887 Simple Model for Estimating Birefringence of LPFG Using Photoelastic Effect Tetsuro YABU, Hidenori TANAKA, and Masaharu OHASHI

LETTERS

■ Electronic Circuits

- 890 High-Speed and Ultra-Low-Voltage Divide-by-4/5 Counter for Frequency Synthesizer Yu-Lung LO, Wei-Bin YANG, Ting-Sheng CHAO, and Kuo-Hsing CHENG

■ Semiconductor Materials and Devices

- 894 Ultrahigh-Sensitivity Pickup Tube Using 35- μm -Thick HARP Photoconductive Film Yuji OHKAWA, Kazunori MIYAKAWA, Tomoki MATSUBARA, Kenji KIKUCHI, Shirou SUZUKI, Misao KUBOTA, Norifumi EGAMI, and Akira KOBAYASHI

■ Electronic Displays

- 898 ICCD Observation on Discharge Characteristics in AC Plasma Display Panel Prepared by Vacuum Sealing Process Choon-Sang PARK and Heung-Sik TAE

902 ABSTRACTS (IEICE Trans. Electron. (Japanese Edition), Vol. J92-C, No. 6)

Original Contributions in English

Copyright © 2009 by The Institute of Electronics, Information and Communication Engineers

The IEICE Transactions on Electronics has been selected for coverage in the following ISI (Institute for Scientific Information) products/services.

- Science Citation Index Expanded (included in "Web of Science")
- Current Contents (Edition: Engineering, Computing and Technology)
- ISI Alerting Services

定価四、二〇〇円 [本体四、〇〇〇円]