

IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS I: REGULAR PAPERS

A PUBLICATION OF THE IEEE CIRCUITS AND SYSTEMS SOCIETY



WWW.IEEE-CAS.ORG

JULY 2016

VOLUME 63

NUMBER 7

ITCSCH

(ISSN 1549-8328)

REGULAR PAPERS

Analog and Mixed Mode Circuits and Systems

A 12-bit 210-MS/s 2-Times Interleaved Pipelined-SAR ADC With a Passive Residue Transfer Technique	<i>C.-Y. Lin and T.-C. Lee</i>	929
A 70 mW 25 Gb/s Quarter-Rate SerDes Transmitter and Receiver Chipset With 40 dB of Equalization in 65 nm CMOS Technology	<i>S. Yuan, L. Wu, Z. Wang, X. Zheng, C. Zhang, and Z. Wang</i>	939
A 2.2 μ W, -12 dBm RF-Powered Wireless Current Sensing Readout Interface IC With Injection-Locking Clock Generation	<i>F.-T. Lin, S.-Y. Lu, and Y.-T. Liao</i>	950
72 dB SNR, 240 Hz Frame Rate Readout IC With Differential Continuous-Mode Parallel Architecture for Larger Touch-Screen Panel Applications	<i>S. Heo, H. Ma, J. Song, K. Park, E.-H. Choi, J. J. Kim, and F. Bien</i>	960
Micropower Mixed-Signal VLSI Independent Component Analysis for Gradient Flow Acoustic Source Separation	<i>M. Stanaćević, S. Li, and G. Cauwenberghs</i>	972
Frequency-Domain Optimization of Digital Switching Noise Based on Clock Scheduling	<i>X. Fan, M. B. Stegmann, O. Schrape, S. Zeidler, I. G. Jensen, J. Thorsen, T. Bjerregaard, and M. Krstić</i>	982
Exploiting Weak PUFs From Data Converter Nonlinearity—E.g., A Multibit CT $\Delta\Sigma$ Modulator	<i>A. Herkle, J. Becker, and M. Ortmanns</i>	994

Digital Circuits and Systems and VLSI

Area-Efficient Approach for Generating Quantized Gaussian Noise	<i>J. Choi, J. Jung, and I.-C. Park</i>	1005
Bitcell-Based Design of On-Chip Process Variability Monitors for Sub-28 nm Memories	<i>S. Gupta, C. Monzel, D. S. Reed, Y. Zhang, M. Winter, and M. Buer</i>	1014
Single Bit-Line 7T SRAM Cell for Near-Threshold Voltage Operation With Enhanced Performance and Energy in 14 nm FinFET Technology	<i>Y. Yang, H. Jeong, S. C. Song, J. Wang, G. Yeap, and S.-O. Jung</i>	1023
CMOS Based Gates for Blurring Power Information	<i>M. Avital, I. Levi, O. Keren, and A. Fish</i>	1033
Lightweight TRNG Based on Multiphase Timing of Bistables	<i>P. Z. Wieczorek</i>	1043

Nonlinear Circuits and Systems

Analysis of Mutually Injection-Locked Oscillators for Differential Resonant Sensing	<i>J. Juillard, P. Prache, and N. Barniol</i>	1055
---	---	------

(Contents Continued on Back Cover)



(Contents Continued from Front Cover)

<i>Computer Aided Design and Electronic Design Automation</i>	
Combined Parametric and Worst Case Circuit Analysis via Taylor Models	1067
. <i>R. Trinchero, P. Manfredi, T. Ding, and I. S. Stievano</i>	
<i>Control Theory and Systems</i>	
Synchronization of Coupled Harmonic Oscillators via Sampled Position Data Control.	1079
. <i>Q. Song, F. Liu, G. Wen, J. Cao, and Y. Tang</i>	
<i>Circuits and Systems for Communications</i>	
Stability Analysis and Hardware Resource Optimization in Channel Emulator Design	1089
. . . . <i>P. Huang, Y. Du, and Y. Li</i>	
