

IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS

II: EXPRESS BRIEFS

A PUBLICATION OF THE IEEE CIRCUITS AND SYSTEMS SOCIETY



WWW.IEEE-CAS.ORG

JUNE 2016

VOLUME 63

NUMBER 6

ITCSFK

(ISSN 1549-7747)

Analog and Mixed Mode Circuits and Systems

A Simplified Model for Passive-Switched-Capacitor Filters With Complex Poles	S. Z. Lulec, D. A. Johns, and A. Liscidini	513
A Sign-Equality-Based Background Timing-Mismatch Calibration Algorithm for Time-Interleaved ADCs	H.-W. Kang, H.-K. Hong, S. Park, K.-J. Kim, K.-H. Ahn, and S.-T. Ryu	518
A 0.5-V 1.3- μ W Analog Front-End CMOS Circuit	Z. Zhu and W. Bai	523
A 64-Channel 965- μ W Neural Recording SoC With UWB Wireless Transmission in 130-nm CMOS	S. Brenna, F. Padovan, A. Neviani, A. Bevilacqua, A. Bonfanti, and A. L. Lacaita	528
A Two-Stage Broadband Fully Integrated CMOS Linear Power Amplifier for LTE Applications	K. Kim, J. Ko, S. Lee, and S. Nam	533
Still More on the $1/f^2$ Phase Noise Performance of Harmonic Oscillators	F. Pepe and P. Andreani	538
Quadruply Split Cross-Driven Doubly Recycled g_m -Doubling Recycled Folded Cascode for Microsensor Instrumentation Amplifiers	A. D. Sundararajan and S. M. Rezaul Hasan	543
A Low-Voltage PLL With a Supply-Noise Compensated Feedforward Ring VCO	S.-G. Kim, J. Rhim, D.-H. Kwon, M.-H. Kim, and W.-Y. Choi	548
A Sub-1.0-V On-Chip CMOS Thermometer With a Folded Temperature Sensor for Low-Power Mobile DRAM	H. Lee, D. Shim, C. Rhee, M. Kim, and S. Kim	553
A Memristive Pascaline	Y. V. Pershin, L. K. Castelano, F. Hartmann, V. Lopez-Richard, and M. Di Ventra	558

Control Theory Topics in Circuits and Systems

Finite-Time Consensus Tracking of Perturbed High-Order Agents With Relative Information by Integral Sliding Mode	S. Yu and X. Long	563
----------------------------------------------------------------------------------------------------------------------------	-------------------	-----

Digital Circuits and Systems (and VLSI)

An Efficient Radix-4 Scalable Architecture for Montgomery Modular Multiplication	S.-R. Kuang, C.-Y. Liang, and C.-C. Chen	568
A Low-Power Two-Tap Voltage-Mode Transmitter With Precisely Matched Output Impedance Using an Embedded Calibration Circuit	K.-S. Kwak, J.-H. Ra, H.-S. Moon, S.-K. Hong, and O.-K. Kwon	573
Read Disturbance Reduction Technique for Offset-Canceling Dual-Stage Sensing Circuits in Deep Submicrometer STT-RAM	T. Na, J. P. Kim, S. H. Kang, and S.-O. Jung	578
OFDM Multitone Signal Generation Technique for Analog Circuitry Test Characterization	N. L'Esperance, T. Platt, M. Slamani, and T. Xia	583

(Contents Continued on Back Cover)



<i>Signal Processing</i>	
Improved-Variable-Forgetting-Factor Recursive Algorithm Based on the Logarithmic Cost for Volterra System Identification	L. Lu, H. Zhao, and B. Chen 588
<i>Computer Aided Design and Electronic Design Automation</i>	
Quantization Noise Power Estimation for Floating-Point DSP Circuits	G. Caffarena and D. Menard 593
<i>Circuits and Systems for Communications</i>	
Monolithic Low-Power 6-Gb/s Optical Transmitter for a Silicon HBT-Based Carrier Injection Electroabsorption Modulator	E. Fu, P. Wu, Z. R. Huang, and V. J. Koomson 598
<i>Nonlinear Circuits and Systems</i>	
A Novel Hardware-Efficient Asynchronous Cellular Automaton Model of Spike-Timing-Dependent Synaptic Plasticity	K. Isobe and H. Torikai 603
A Low-Cost Low-Power Ring Oscillator-Based Truly Random Number Generator for Encryption on Smart Cards	D. Liu, Z. Liu, L. Li, and X. Zou 608
