

IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES

A PUBLICATION OF THE IEEE MICROWAVE THEORY AND TECHNIQUES SOCIETY



AUGUST 2013

VOLUME 61

NUMBER 8

IETMAB

(ISSN 0018-9480)

PART II OF TWO PARTS

SPECIAL ISSUE ON PHASED-ARRAY TECHNOLOGY

Guest Editorial	G. M. Rebeiz, M. G. Sarcione, F. van Vliet	3021
PAPERS		
Hybrid and Monolithic RF Integrated Circuits		
Design and Analysis of a Wideband 15–35-GHz Quadrature Phase Shifter With Inductive Loading	S. P. Sah, X. Yu, and D. Heo	3024
A 58-dBm S-Band Limiter in Standard 0.25- μ m BiCMOS Technology	M. van Wanum and F. E. van Vliet	3034
Ultra-Wideband GaN MMIC Chip Set and High Power Amplifier Module for Multi-Function Defense AESA Applications	U. Schmid,	
H. Sledzik, P. Schuh, J. Schroth, M. Oppermann, P. Brückner, F. van Raay, R. Quay, and M. Seelmann-Eggebert		3043
A C–Ku-Band RF Module Transmitter Including an RF Signal Generator for a Flexible Phased-Array System	K. Kawakami, H. Nakamizo,	
K. Tajima, E. Taniguchi, T. Akiyama, M. Hieda, K. Sakai, R. Hayashi, M. Nakayama, Y. Hirano, and I. Chiba		3052
A High-Power Packaged Four-Element X-Band Phased-Array Transmitter in 0.13- μ m CMOS for Radar and Communication Systems	D. Shin, C.-Y. Kim, D.-W. Kang, and G. M. Rebeiz	3060
True-Time-Delay-Based Multi-Beam Arrays	T.-S. Chu and H. Hashemi	3072
A 76–84-GHz 16-Element Phased-Array Receiver With a Chip-Level Built-In Self-Test System	S. Y. Kim, O. Inac, C.-Y. Kim, D. Shin, and G. M. Rebeiz	3083
A 90–100-GHz 4 \times 4 SiGe BiCMOS Polarimetric Transmit/Receive Phased Array With Simultaneous Receive-Beams Capabilities	F. Golcuk, T. Kanar, and G. M. Rebeiz	3099
220–250-GHz Phased-Array Circuits in 0.13- μ m SiGe BiCMOS Technology	M. Elkhoudly, S. Glisic, C. Meliani, F. Ellinger, and J. C. Scheytt	3115

(Contents Continued on Back Cover)

RF Applications and Systems

Heterogeneous Integrated Beam-Switching/Retrodirective Array Using Synthesized Transmission Lines	J.-Y. Zou, C.-H. Wu, and T.-G. Ma	3128
A Novel Millimeter-Wave Dual-Fed Phased Array for Beam Steering	E. Topak, J. Hasch, C. Wagner, and T. Zwick	3140
Frequency-Scanning Phased-Array Feed Network Based on Composite Right/Left-Handed Transmission Lines	J. H. Choi, J. S. Sun, and T. Itoh	3148

Information for Authors	3158
-------------------------------	------

Special Issue on Wireless Power Transfer	3159
--	------
