香港城市大學 City University of Hong Kong

Department of Electronic Engineering

毫米波 State Key Laboratory of Millimeter Waves 國家重點實驗室（香港）

IEEE (HK) Section AP/MTT

Seminar on

Highly Efficient Dual-band Power Amplifier Based on Cascaded CMRCs

by

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Abstract
This work reports a dual-band power amplifier (PA) with extended class-F configurations for two distinct frequency bands at 2.4 and 3.5 GHz for WiFi and Wimax signals. Multi-harmonic control circuit (M-HCC) is realized by incorporating two cascaded compact microstrip resonant cell (CMRC) and an open stub. The overall size of the M-HCC is greatly reduced compared with the conventional approaches. The implemented PA prototype based on Cree's GaN HEMT CGH40010 demonstrates 71% and 63% power-added efficiency (PAE) values with 41.6 and 40.8 dBm saturation power for the two non-harmonic frequencies, respectively.

Biography
Shichang Chen received the B.S. degree in electronic engineering from Nanjing University of Science and Technology, Nanjing, China, in 2009. He is currently working toward the Ph.D. degree in City University of Hong Kong. His research interest focuses on high-efficiency amplifiers and integrated circuit (IC) design.

Date : 18 Dec., 2012 (Tuesday)
Time : 10:00am – 10:20am
Venue : G6302, Academic 1,
City University of Hong Kong

***** ALL ARE WELCOME *****

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