

EMX at ISSCC 2013

13.2 A Digitally Modulated mm-Wave Cartesian Beamforming Transmitter with Quadrature Spatial Combining

Jiashu Chen¹, Lu Ye¹, Diane Titz², Fred Gianesello³, Romain Pilard³, Andrea Cathelin³, Fabien Ferrero², Cyril Luxey², Ali M Niknejad¹

¹University of California, Berkeley, CA,

²University of Nice, Nice, France,

³STMicroelectronics, Crolles, France

2.2 A 66Gb/s 46mW 3-Tap Decision-Feedback Equalizer in 65nm CMOS

Yue Lu, Elad Alon

University of California, Berkeley, CA

25.3 A Self-Duty-Cycled and Synchronized UWB Receiver SoC Consuming 375pJ/b for -76.5dBm Sensitivity at 2Mb/s

Baradwaj Vignanam, Peter Kinget

Columbia University, New York, NY

13.4 A Low-Power Radio Chipset in 40nm LP CMOS with Beamforming for 60GHz High-Data-Rate Wireless Communication

Vojkan Vidojkovic¹, Viki Szortyka^{1,2}, Khaled Khalaf^{1,2}, Giovanni Mangraviti^{1,2}, Steven Brebels¹, Wim van Thillo¹, Kristof Vaesen¹, Bertrand Parvais¹, Vadim Issakov¹, Mike Libois¹, Michiaki Matsuo³, John Long⁴, Charlotte Soens¹, Piet Wambacq^{1,2}

¹imec, Leuven, Belgium, ²Vrije Universiteit, Brussels, Belgium,

³Panasonic, Yokohama, Japan,

⁴Delft University of Technology, Delft, The Netherlands

20.4 A 56.4-to-63.4GHz Spurious-Free All-Digital Fractional-N PLL in 65nm CMOS

Wanghua Wu¹, Xuefei Bai^{1,2}, Robert Bogdan Staszewski¹, John R. Long¹

¹Delft University of Technology, Delft, The Netherlands,

²University of Science and Technology of China, Hefei, China

13.3 A 50mW-TX 65mW-RX 60GHz 4-Element Phased-Array Transceiver with Integrated Antennas in 65nm CMOS

Lingkai Kong, Dongjin Seo, Elad Alon

University of California, Berkeley, CA

19.2 A Digitally Modulated 2.4GHz WLAN Transmitter with Integrated Phase Path and Dynamic Load Modulation in 65nm CMOS

Lu Ye¹, Jiashu Chen¹, Lingkai Kong¹, Philippe Cathelin², Elad Alon¹, Ali Niknejad¹

¹University of California, Berkeley, CA, ²ST-Ericsson, Grenoble, France