

JUNYU SHEN

Kings Ct 3067B, Raleigh, NC,
27606 | 919-987-
0450 | whsjyboy@gmail.com

SUMMARY

Specialized in wireless communication sub-circuits design. 3 years of experience in RF/microwave components design on PCB board, including branch-line coupler, power divider, power amplifier (PA). Developed the first mini arbitrary power division ratios and phase microstrip branchline coupler module.

EDUCATION

06/2014 to now EE, PhD Program, *North Carolina State University*, GPA 3.7/4
Working on C-band GaN High output Power Amplifier module.
Research Assistant, Advisor: Dr. David Ricketts

07/2011 to EE, Master Degree, *Beijing University of Posts and Telecommunications*
03/2014 Worked on microstrip components design. Developed two novel microstrip
branchline module. One characterizes arbitrary power division ratios and phase
tuning, the other characterizes internal complex impedance matching function.
Advisor: Dr. Yongle Wu

PUBLICATION

J. Shen, Q. Liu, Y. Wu, Y. Liu, S. Li, C. Yu and G. Lin, "High-directivity single-and dual-band directional couplers based on substrate integrated coaxial line technology," 2013 IEEE MTT-S International Microwave Symposium Digest (IMS), pp. 1-4 2013.

Y. Wu, J. Shen, Y. Liu, S. Leung and Q. Xue, "Miniaturized arbitrary phase-difference couplers for arbitrary coupling coefficients," *IEEE Transactions on Microwave Theory Tech.*, vol. 61, no. 6, pp. 2317-2324 2013.

Y. Wu, J. Shen and Y. Liu, "Comments on 'Quasi-arbitrary phase-difference hybrid coupler'," *IEEE Transactions on Microwave Theory Tech.*, vol. 61, no. 4, pp. 1725-1727 2013.

Q. Liu, J. Shen, H. Liu and Y. Liu, "Dual-band circularly-polarized unidirectional patch antenna for RFID reader applications," *IEEE Transactions on Antennas and Propagation*, vol. 62, no. 12, pp. 6428-6434 2014.

Y.L. Wu, J.Y. Shen, Q. Liu, L.M. Liang and Y. Liu, "An asymmetric arbitrary branch-line coupler terminated by one group of complex impedances," *Journal of Electromagnetic Waves and Applications*, vol. 26, no. 8-9, pp. 1125-1137 2012.

Q. Liu, Y. Liu, J. Shen, S. Li, C. Yu and Y. Lu, "Wideband single-layer 90 phase shifter using stepped impedance open stub and coupled-line with weak coupling," *IEEE Microwave and Wireless Components Letters*, vol. 24, no. 3, pp. 176-178 2014.

Q. Liu, Y. Liu, Y. Wu, M. Su and J. Shen, "Compact wideband circularly polarized patch antenna for CNSS applications," *IEEE Antennas and Wireless Propagation Letters*, vol. 12, pp. 1280-1283 2013.

Q. He, J. Shen, Q. Liu, J. Li and L. Liang, "A simplified dual-band rat-race hybrid for arbitrary power division ratio with only single shunt stub," *Journal of Electromagnetic Waves and Applications*, vol. 27, no. 16, pp. 2101-2109 2013.

J. Li, Y. Wu, Y. Liu, J. Shen, S. Li and C. Yu, "A generalized coupled-line dual-band wilkinson power divider with extended ports," *Progress In Electromagnetics Research*, vol. 129, pp. 197-214 2012.

Q. Liu, Y. Liu, Y. Wu, J. Shen, S. Li, C. Yu and M. Su, "A substrate integrated waveguide to substrate integrated coaxial line transition," *Progress In Electromagnetics Research C*, vol. 36, pp. 249-259 2013.

Q. Liu, Y. Liu, Y. Wu, J. Shen, S. Li, C. Yu and M. Su, "Generalized impedance-transforming dual-band branch-line couplers for arbitrary coupling levels," *Progress In Electromagnetics Research B*, vol. 53, pp. 399-415 2013.

Y. Wu, Q. Liu, J. Shen, and Y. Liu, "A novel wide-band hybrid coupler using coupled-line power divider and improved coupled-line phase shifter," *Journal of Electromagnetic Waves and Applications*, vol. 27, no. 3, pp. 374-384 2012.

Y. Wu, Q. Liu, J. Shen, and Y. Liu, "Compact wilkinson pass-band filtering power divider based on quarter-wavelength side-coupled ring," *J.Circuits, Syst., Comput.*, vol. 23, no. 10, pp. 1450135 2014.

Y. Wu, J. Shen, L. Liang, W. Wang and Y. Liu, "A novel compact tri-band wilkinson power divider based on coupled lines," *Electromagnetics*, vol. 33, no. 1, pp. 59-72 2013.

W. Zhang, Y. Liu, Y. Wu, J. Shen, S. Li, C. Yu and J. Gao, "A novel planar structure for implementing power divider or balun with variable power division," *Progress In Electromagnetics Research C*, vol. 48, pp. 111-123 2014.

PROFESSIONAL LESSONS

ECE 511 Analog Electronics Dr. Brian A. Floyd, *Project: Constant Gm Rail-to-Rail Fully-differential OTA Design*, Design environment: Cadence, Project Score: 96/100

ECE 549 RF Wireless Design Dr. Michael B. Steer, *Project: Design of a Third-Order Butterworth Compline Bandpass Filter*, Design environment: NI AWR, Project Score: 100/100

ECE 712 RF Wireless Design Dr. Brian A. Floyd, Attending course.

QUARTER-TIME JOB

Teaching Assistant ECE 301 Linear System with Dr. Griff Bilbro, 30 students,
Graded HW, quiz, and exams

Teaching Assistant ECE 331 Principles of Electrical Engineering with Dr. Gary Ybarra, 83 students,
Holding Office Hours, Grading HW