DESCRIPTION

Written by an antenna engineer turned professor who has worked at Apple, Nokia and Amphenol, *Antenna Design for Mobile Devices* is a comprehensive guide for fresh and intermediate engineers involved in antenna design. The book instructs readers through all aspects of real world antenna designs, which includes how to make a stable antenna fixture, designing various types of antennas, designing an antenna with good manufacturability, using various matching technique to improve antenna performance, setting up production measurement for mass manufacturing, and making antenna SAR and HAC compliant. Most popular antenna categories, such as internal PIFA, integral IFA, internal folded monopole, ceramic antennas, stubby antennas and whip stubby antennas, are introduced in the book. The book focuses on the basic principle of each kind of antenna and emphasizes on key parameters of antenna optimization. Complimentary matching software, which accompanies the book, is provided so readers can practice various antenna matching technique and design matching circuits for real projects.

- A one-stop design reference containing all an engineer needs when designing antennas
- Accessible to readers of many levels, from introductory to specialist
- Presents shortcuts for engineers who lack antenna knowledge but need no-hassle techniques for designing simple antennas
- Contains hands-on knowledge not available in other books
- Written by a practicing expert who has hired and trained numerous engineers
• Incorporates the various techniques used by pure-play antenna firms, established mobile device brands, and new entrants to the mobile space

• Comes with antenna matching software written by the author, which can be used for practice and real-world projects

• Presentation slides with lecture notes available for instructor use

This book is targeted at practicing antenna engineers, particularly those focusing on mobile devices, as well as researchers and academics looking to keep up with this quick-changing field. Engineering managers will find it to be a helpful guide for teaching new hires, while new hires, by using the book themselves, will be able to quickly gain expert-level proficiencies. The book is also suitable for wireless network equipment engineers, who desire a stronger sense of antenna principles, as well as electronic engineering students studying electromagnetics. Readers should possess a basic undergraduate-level understanding of electromagnetic theory. Companion website for the book: http://www.wiley.com/go/zhangantenna

ABOUT THE AUTHOR

Zhijun Zhang is a Professor of Electronic Engineering at Tsinghua University in Beijing, China. He holds rich industry experience, with senior positions as an antenna development engineer at Amphenol T&M Antennas, Nokia, and Apple, giving him a perspective of design practices at a number different players in the mobile segment. Prior to Tsinghua, his academic career included a postdoctoral fellowship and research professorship at the University of Utah, and a position as Assistant Researcher at the University of Hawaii, where he continues to serve as Adjunct Professor. Zhang earned a B.S. in Microwave Engineering and an M.S. in Applied Physics at the University of Electronic Science and Technology of China, Chengdu. He holds a PhD in Electronic Engineering from Tsinghua University.

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