INCLUDES

FREE
NEWNES ONLINE
MEMBERSHIP

ZIGBEE WIRELESS NETWORKS AND TRANSCEIVERS

- Step-by-step instructions for implementing ZigBee networks
- Explores techniques for ZigBee coexistence with other wireless technologies such as 802.11 and Bluetooth
- Covers the latest ZigBee Pro specifications

Shahin Farahani

ZigBee Wireless Networks and Transceivers

Shahin Farahani

ELSEVIER

AMSTERDAM • BOSTON • HEIDELBERG • LONDON
NEW YORK • OXFORD • PARIS • SAN DIEGO
SAN FRANCISCO • SINGAPORE • SYDNEY • TOKYO

Newnes is an imprint of Elsevier

Contents

ZIGBEE WIRELESS NETWORKS AND TRANSCEIVERS

Shahin Farahani

From the Foreword: "I recommend this book to system designers, technical managers, wireless engineers, and researchers who are interested in gaining a comprehensive understanding of the principals and applications of ZigBee for low-power, low-data-rate wireless networking."
—Dr. Robert F. Heile, Chairman of IEEE 802.15 and ZigBee Alliance

"This book provides a one stop reference for the 802.15.4 PHY and MAC Layers and the ZigBee Networking Layer including the practical challenges in the deployment of these wireless networks."
—Clinton Powell, Freescale Wireless Connectivity Operations Global Platform Systems Chief Architect, Chair of IEEE 802.15.4 Task Group C and Secretary of ZigBee Alliance ZigBee Qualification Group.

"*ZigBee Wireless Networks and Transceivers* provides a handy reference for developers of ZigBee and 802.15.4 based networks."
—Phil Beecher, Software Team Leader, Integration UK Ltd, Chair of IEEE 802.15.4 Task Group D and Vice Chair/ Secretary of IEEE 802.15.4 Task Group E.

Key Features

- **Compare and Assess ZigBee**
  ZigBee versus Bluetooth and IEEE 802.11
- **Understand with Examples**
  Examples include home automation, remote control, and industrial technology
- **Examine Transceiver Requirements**
  Sensitivity, symbol timing, crystal selection consideration
- **Analyze Battery Life**
  Recognize discharge characteristics and discover monitoring techniques
- **Location Estimation**
  Grasp the algorithms that optimize your signals
- **ZigBee Coexistence**
  Learn about mechanisms for dealing with interference such as signal spreading, mesh networking, and adaptive packet length selection

INCLUDES FREE ONLINE MEMBERSHIP

Your FREE Newnes online membership gives you access to 4 downloadable selections from leading experts on the cutting edge!

Extra content can be found at the companion Web site: www.elsevierdirect.com/companions/9780750683937

ELSEVIER

Newnes
An Imprint of Elsevier
www.newnespress.com

ISBN-13: 978-0-7506-8393-7
90000
9 780750 683937