



Image

RFID 射频基础

The RF in RFID

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自定义：信息

特别声明

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第 1 章 概述

1.1 What,When and Where, Wirelessly

1.2 Why would you read this book

1.3 What comes next

Acknowledgement

Further Reading

第 2 章 RFID 历史与实践

2.1 It all started with IFF

2.2 Making it cheap

2.3 Making and Selling: Tracking Big Stuff

2.4 Tracking Small Stuff: AutoIP and the Web of Things

2.5 RFID System and Terminology

We have alluded to key aspects of RFID systems in our discussion of the history of the technology in sections above. RFID systems are crucially distinguished by the frequency of the radio waves they employ, by the means used to provide power to the tags, and by the protocols employed to communicate between tag and reader. The choice of frequency, power source, and protocol has important implications for range, cost, and features available to the user.

2.6 Types of RFID

2.6.1 Frequency Bands for RFID

LF MF HF VHF UHF

$$\lambda = \frac{c}{f} \quad (2.1)$$

2.6.2 无源、半无源和有源标签

2.7 The Internet of Things and UHF RFID

Further Reading

第 2 章 练习

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第 3 章 超高频 RFID 射频基础

3.1 Electromagnetic Waves

3.2 信号电压和能量

3.3 Information, Modulation and Multiplexing

3.4 反向散射链路

3.5 Link Budget

3.6 Effect of Antenna Gain and Polarization on Range

3.7 加一块电池

3.8 Propagation in the Real World

3.9 Capsule Summary:Chapter3

Further Reading

📖 第 3 章 练习 📖

1. RFID