

River Publishers Series in Circuits and Systems

Enabling Technologies for the Internet of Things: Wireless Circuits, Systems and Networks

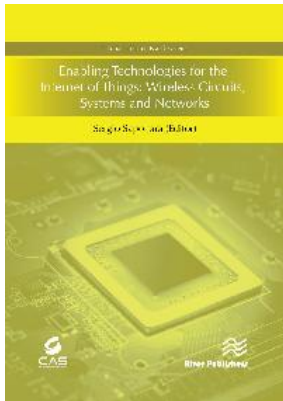
Editor: Sergio Saponara, University of Pisa, Italy

ISBN: 9788793609747

e-ISBN: 9788793609730

Available From: July 2018

Price: € 90.00



Description:

Enabling Technologies for the Internet of Things: Wireless Circuits, Systems and Networks collects slides and notes from the lectures given in the 2017 Seasonal School Enabling Technologies for the Internet-of-Things, supported by IEEE CAS Society and by INTEL funding, and organized by Prof. Sergio Saponara, and Prof. Giuliano Manara.

The book discusses new trends in Internet-of-Things (IoT) technologies, considering technological and training aspects, with special focus on electronic and electromagnetic circuits and systems. IoT involves research and design activities both in analog and in digital circuit/signal domains, including focus on sensors interfacing and conditioning, energy harvesting, low-power signal processing, wireless connectivity and networking, functional safety (FuSa). FuSa is one of the emerging key issues in IoT applications in safety critical domain like industry 4.0, autonomous and connected vehicles and e-health. Our world is becoming more and more interconnected. Currently it is estimated that two hundred billion smart objects will be part of the IoT by 2020. This new scenario will pave the way to innovative business models and will bring new experiences in everyday life. The challenge is offering products, services and comprehensive solutions for the IoT, from technology to intelligent and connected objects and devices to connectivity and data centers, enhancing smart home, smart factory, autonomous driving cars and much more, while at the same time ensuring the highest safety standards. In safety-critical contexts, where a fault could jeopardize the human life, safety becomes a key aspect.

Keywords: Internet of Things (IoT); Radio Frequency Identification (RFID); Wireless Power Transfer; Wireless Sensor Networks; Integrated circuits; Electronics; Applied Electromagnetics; VLSI; RF/mm-wave Transceivers; Functional Safety; Remote Sensing; SW-defined Autonomous IoT; Ultra-low-power devices; Near-field Focused Antennas; mm-wave Antennas; Telecommunications

Denmark Head Office

Alsbjergvej 10
9260 Gistrup
Denmark
www.riverpublishers.com
Email: info@riverpublishers.com

The Netherlands Office

Lange Geer 44,
2611 PW Delft
The Netherlands
Tel.: +31-(0)6-46573673
Email: mark.dejongh@riverpublishers.com

USA Office

Indianapolis, IN
USA
Tel.: +1-3176899634
Email: rajeev.prasad@riverpublishers.com