River Publishers

Smart Embedded Systems and Applications

Editor: Saad Motahhir, École Nationale des Sciences Appliquées, Sidi Mohamed Ben Abdellah University, Morocco

This book covers a wide range of challenges, technologies and state-of-the-art for the design, development and realization of smart and complex embedded systems and their applications; i.e., software and hardware development, with the use of digital technologies, and quality assurance for critical applications.

This book starts with automotive safety systems which is one of the major functional domains. It discusses the importance of software in automotive systems followed by an insight into Automotive Software Standards, ISO26262, and Autosar. The book further discusses the use of Processor in the loop test for an adaptive trajectory tracking control for quadrotor UAVs. It also illustrates the role of embedded systems in medical engineering. Various innovative applications involving the concept of image processing and Internet of Things are also presented in this book. The SoC Power Estimation is also investigated. Finally, a Review of the Hardware/Software Partitioning Algorithms with some future works have been presented. this book is intended for academicians, researchers, and industrialists.



River Publishers Series in Electronic Materials, Circuits and Devices

ISBN: 9788770227728
e-ISBN: 9788770227711
Available From: February 2023
Price: € 121.00 $ 150.00

KEYWORDS:
ISO26262, Autosar, V cycle, UAV, SOC, Co-Design, Labview, IOT, Image processing, Raspberry Pi

www.riverpublishers.com
marketing@riverpublishers.com