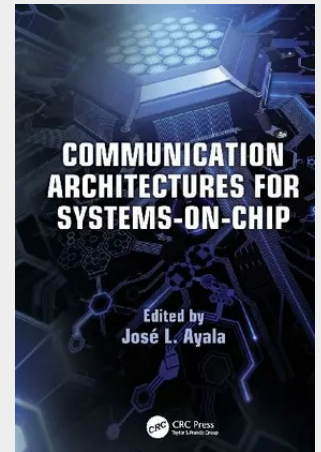


Communication Architectures for Systems-on-Chip

A presentation of state-of-the-art approaches from an industrial applications perspective, Communication Architectures for Systems-on-Chip shows professionals, researchers, and students how to attack the problem of data communication in the manufacture of SoC architectures. With its lucid illustration of current trends and research improving the performance, quality, and reliability of transactions, this is an essential reference for anyone dealing with communication mechanisms for embedded systems, systems-on-chip, and multiprocessor architectures—or trying to overcome existing limitations. Exploring architectures currently implemented in manufactured SoCs—and those being proposed—this book analyzes a wide range of applications, including: - Well-established communication buses - Less common networks-on-chip - Modern technologies that include the use of carbon nanotubes (CNTs) - Optical links used to speed up data transfer and boost both security and quality of service (QoS) The book's contributors pay special attention to newer problems, including how to protect transactions of critical on-chip information (personal data, security keys, etc.) from an external attack. They examine mechanisms, revise communication protocols involved, and analyze overall impact on system performance.

This book covers the current communication architectures that are implemented in manufactured systems-on-chip, as well as those that are being proposed to overcome the existing limitations. The text addresses well-established communication buses and less-common networks on chip, along with modern technologies that propose the use of carbon nano tubes and optical links to speed up data transfer and increase both security levels and quality of service. Contributors address on-chip transaction security involving critical information and the mechanisms to protect from an external attack, examining different communication protocols and their impact on system performance.



108,90 €

108,90 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9781138117945

Medium: Buch

ISBN: 978-1-138-11794-5

Verlag: CRC Press

Erscheinungstermin: 28.06.2017

Sprache(n): Englisch

Auflage: 1. Auflage 2017

Serie: Embedded Systems

Produktform: Kartoniert

Gewicht: 682 g

Seiten: 450

Format (B x H): 156 x 234 mm

