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	Sommario/riassunto	This textbook offers a comprehensive introduction to the methodological and technical knowledge necessary for the development of embedded systems. At first, the foundations of embedded systems from the fields of electronics, systems theory and control theory are introduced for computer scientists and engineers without extensive knowledge of electrical engineering. Subsequently, system components as well as digital communication between embedded system nodes are discussed. The book ends with procedures for the analysis of embedded systems and for real-time processing. It is aimed at students and users of computer science as well as engineers, physicists and mathematicians who are interested in the basics of developing embedded systems.