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Nota di contenuto	Boolean algebra and combinational logic -- Combinational Network Design -- Numeral Systems and Binary Arithmetic -- Complements in Combinational Network Design -- Introduction to Sequential Networks -- Flip-op Based Synchronous Networks -- Sequential Networks as Finite State Machines -- The Finite State Machine as System Controller -- Introduction to FPGA and HDL design.
Sommario/riassunto	This book has been designed for a first course on digital design for engineering and computer science students. It offers an extensive introduction on fundamental theories, from Boolean algebra and binary arithmetic to sequential networks and finite state machines, together with the essential tools to design and simulate systems composed of a controller and a datapath. The numerous worked examples and solved exercises allow a better understanding and more effective learning. All of the examples and exercises can be run on the Deeds software, freely available online on a webpage developed and maintained by the authors. Thanks to the learning-by-doing approach and the plentiful examples, no prior knowledge in electronics of programming is required. Moreover, the book can be adapted to different level of

education, with different targets and depth, be used for self-study, and even independently from the simulator. The book draws on the authors' extensive experience in teaching and developing learning materials.