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Autore	Chu Pong P. <1959->
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Nota di contenuto	FPGA PROTOTYPING BY VHDL EXAMPLES: Xilinx SpartanTM-3 Version; Contents; Preface; Acknowledgments; PART I BASIC DIGITAL CIRCUITS; 1 Gate-level combinational circuit; 2 Overview of FPGA and EDA software; 3 RT-level combinational circuit; 4 Regular Sequential Circuit; 5 FSM; 6 FSMD; PART II I/O MODULES; 7 UART; 8 PS2 Keyboard; 9 PS2 Mouse; 10 External SRAM; 11 Xilinx Spartan-3 Specific Memory; 12 VGA controller I: graphic; 13 VGA controller II: text; PART III PICOBLAZE MICROCONTROLLER XILINX SPECIFIC; 14 PicoBlaze Overview; 15 PicoBlaze Assembly Code Development; 16 PicoBlaze I/O Interface 17 PicoBlaze Interrupt InterfaceAppendix A: Sample VHDL templates; References; Topic Index
Sommario/riassunto	This book uses a ""learn by doing"" approach to introduce the concepts

and techniques of VHDL and FPGA to designers through a series of hands-on experiments. FPGA Prototyping by VHDL Examples provides a collection of clear, easy-to-follow templates for quick code development; a large number of practical examples to illustrate and reinforce the concepts and design techniques; realistic projects that can be implemented and tested on a Xilinx prototyping board; and a thorough exploration of the Xilinx PicoBlaze soft-core microcontroller.