1.	Record Nr.	UNINA9910153093903321
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	Titolo	The 8051 microcontroller : a systems approach / / Muhammad Ali Mazidi, Rolin D. Mckinlay, Janice Gillispie Mazidi
	Pubbl/distr/stampa	Harlow, England : , : Pearson, , [2014] Â©2014
	ISBN	1-292-05432-8
	Edizione	[First edition, Pearson new international edition.]
	Descrizione fisica	1 online resource (572 pages) : illustrations
	Collana	Pearson Custom Library
	Disciplina	629.89
	Soggetti	Programmable controllers Microcontrollers
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
	Note generali	Includes index.
	Nota di contenuto	Cover -- Table of Contents -- 1. The 8051 Microcontrollers -- 2. 8051 Assembly Language Programming -- 3. Jump, Loop, and Call Instructions -- 4. I/O Port Programming -- 5. 8051 Addressing Modes -- 6. Arithmetic, Logic, Instructions, and Programs -- 7. 8051 Programming in C -- 8. 8051 Hardware Connection and Intel Hex File -- 9. 8051 Timer Programming in Assembly and C -- 10. 8051 Serial Port Programming In Assembly and C -- 11. Interrupts Programming in Assembly and C -- 12. LCD and Keyboard Interfacing -- 13. ADC, DAC, and Sensor Interfacing -- 14. 8051 Interfacing to External Memory -- 15. Relay, Optoisolator, and Stepper Motor -- 16. DS12887 RTC Interfacing and Programming -- 17. DC Motor Control and PWM -- 18. SPI and 12C Protocols -- Appendix: 8051 Instructions, Timing, and Registers -- Appendix: Basics of Wire Wrapping -- Appendix: IC Technology and System Design Issues -- Appendix: Flowcharts and Pseudocode -- Appendix: 8051 Primer for X86 Programmers -- Appendix: ASCII Codes -- Index.
	Sommario/riassunto	For courses in 8051 Microcontrollers and Embedded Systems The 8051 Microprocessor: A Systems Approach emphasizes the programming and interfacing of the 8051. Using a systematic, step-by-step approach, the text covers various aspects of 8051, including C and Assembly language programming and interfacing. Throughout each chapter, examples, sample programs, and sectional reviews clarify

the concepts and offer students an opportunity to learn by doing.
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