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Titolo	ARM Assembly Language with Hardware Experiments / / by Ata Elahi, Trevor Arjeski
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ISBN	3-319-11704-1
Descrizione fisica	1 online resource (144 pages) : illustrations
Disciplina	004.6 620 621.3815 621.382
Soggetti	Assembly languages (Electronic computers) Microprocessors - Programming Electronic circuits Computer communication systems Electrical engineering Circuits and Systems Computer Communication Networks Communications Engineering, Networks
Lingua di pubblicazione	Inglese
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Number Systems and Data Communication -- Logic Gates and Introduction to Computer Architecture -- ARM Instructions Part I -- ARM Instructions Part II -- ARM Assembly Language Programming Using Keil Development Tools -- ARM Cortex-M3 Processor and MBED NXP LPC1768 -- Lab Experiments. .
Sommario/riassunto	This book provides a hands-on approach to learning ARM assembly language with the use of a TI microcontroller. The book starts with an introduction to computer architecture and then discusses number systems and digital logic. The text covers ARM Assembly Language, ARM Cortex Architecture and its components, and Hardware Experiments using TILM3S1968. Written for those interested in learning

embedded programming using an ARM Microcontroller.
· Introduces number systems and signal transmission methods · Reviews logic gates, registers, multiplexers, decoders and memory · Provides an overview and examples of ARM instruction set · Uses using Keil development tools for writing and debugging ARM assembly language Programs · Hardware experiments using a Mbed NXP LPC1768 microcontroller; including General Purpose Input/Output (GPIO) configuration, real time clock configuration, binary input to 7-segment display, creating a voltmeter with an analog-to-digital converter, and using a digital-to-analog converter.