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Nota di contenuto	Cover; Title Page; Copyright Page; Contents; Preface; Acknowledgments; Chapter 1 - Microcomputer Systems; 1.1 - Introduction; 1.2 - Microcontroller Systems; 1.2.1 - RAM; 1.2.2 - ROM; 1.2.3 - PROM; 1.2.4 - EPROM; 1.2.5 - EEPROM; 1.2.6 - Flash EEPROM; 1.3 - Microcontroller Features; 1.3.1 - Supply Voltage; 1.3.2 - The Clock; 1.3.3 - Timers; 1.3.4 - Watchdog; 1.3.5 - Reset Input; 1.3.6 - Interrupts; 1.3.7 - Brown-Out Detector; 1.3.8 - Analogue-to-Digital Converter; 1.3.9 - Serial Input-Output; 1.3.10 - EEPROM Data Memory; 1.3.11 - LCD Drivers; 1.3.12 - Analogue Comparator 1.3.13 - Real-Time Clock1.3.14 - Sleep Mode; 1.3.15 - Power-On Reset; 1.3.16 - Low-Power Operation; 1.3.17 - Current Sink/Source Capability; 1.3.18 - USB Interface; 1.3.19 - Motor Control Interface; 1.3.20 - CAN Interface; 1.3.21 - Ethernet Interface; 1.3.22 - ZigBee Interface; 1.3.23 - Multiply and Divide Hardware; 1.3.24 - Operating Temperature; 1.3.25 - Pulse Width Modulated (PWM) Outputs; 1.3.26 - JTAG Interface; 1.3.27 - Package Size; 1.3.28 - DMA; 1.4 - Microcontroller Architectures; 1.4.1 - RISC and CISC; 1.5 - 8, 16, or 32 Bits?; 1.6 - Summary; 1.7 - Exercises Chapter 2 - PIC32 Microcontroller Series2.1 - The PIC32MX360F512L Architecture; 2.1.1 - The Memory; 2.1.2 - The Microcontroller Clock; Clock sources; Clock outputs; USB clock; CPU clock; Peripheral clock;

Sommario/riassunto	PIC32 Microcontrollers and the Digilent chipKIT: Introductory to Advanced Projects will teach you about the architecture of 32-bit processors and the hardware details of the chipKIT development boards, with a focus on the chipKIT MX3 microcontroller development board. Once the basics are covered, the book then moves on to describe the MPLAB and MPIDE packages using the C language for program development. The final part of the book is based on project development, with techniques learned in earlier chapters, using projects as examples. Each projectwill have a practical approach, with in-dept