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Environments?; Is There Anything Else I Need to Know?; Summary;
Chapter 3: ARM Architecture; Understanding the Basics; Register; Stack;
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Presenting the Processor Registers; Presenting the CPSR; Calculation
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Exceptions; Modes of Operation; Vector Table; Memory Management;
Presenting Different Technologies; JTAG Debug (D)
Enhanced DSP (E)Vector Floating Point (F); EmbeddedICE (I); Jazelle (J);
Long Multiply (M); Thumb (T); Synthesizable (S); TrustZone; NEON; big.
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Science through Assembly; Shouldn't You Just Write in Assembly?; Uses
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5: First Steps; Hello World!; Taking the World Apart; Hello World, for
Real This Time!; Software Implementation; Memory Mapping; Real
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D20 Xplained Pro; Case Study: U-Boot; Machine Study: Raspberry Pi;
Boot Procedure; Compiling Programs for the Raspberry Pi; What's Next?;
Summary; Chapter 6: Thumb Instruction Set; Thumb; Thumb-2
Technology; How Thumb Is Executed; Advantages of Using Thumb
Cores Using Thumb

Sommario/riassunto

A practical Wrox guide to ARM programming for mobile devices With more than 90 percent of mobile phones sold in recent years using ARM-based processors, developers are eager to master this embedded technology. If you know the basics of C programming, this guide will ease you into the world of embedded ARM technology. With clear explanations of the systems common to all ARM processors and step-by-step instructions for creating an embedded application, it prepares you for this popular specialty. While ARM technology is not new, existing books on the topic predate the current e
