Record Nr. UNINA9910139239003321 Autore Mahout Vincent Titolo Assembly language programming [[electronic resource]]: ARM Cortex-M3 / / Vincent Mahout Pubbl/distr/stampa London, : ISTE Ltd. Hoboken, N.J., : John Wiley & Sons, c2012 **ISBN** 1-118-56212-7 1-299-31584-4 1-118-56597-5 Descrizione fisica 1 online resource (258 p.) Collana ISTE 005.2 Disciplina Soggetti Embedded computer systems Microprocessors Assembler language (Computer program language) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references (p. 239) and index. Nota di contenuto Overview of Cortex-M3 architecture -- The core of Cortex-M3 -- The proper use of assembly directives -- Operands of instructions --Instruction set -- Algorithmic and data structures -- Internal modularity -- managing exceptions -- From listing to executable: external modularity. Sommario/riassunto ARM designs the cores of microcontrollers which equip most "embedded systems" based on 32-bit processors. Cortex M3 is one of these designs, recently developed by ARM with microcontroller applications in mind. To conceive a particularly optimized piece of software (as is often the case in the world of embedded systems) it is often necessary to know how to program in an assembly language. This book explains the basics of programming in an assembly language, while being based on the architecture of Cortex M3 in detail and

developing many examples. It is written for people who have never pr