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Titolo	Algebraic Circuits / / by Antonio Lloris Ruiz, Encarnación Castillo Morales, Luis Parrilla Roure, Antonio García Ríos
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Descrizione fisica	1 online resource (413 p.)
Collana	Intelligent Systems Reference Library, , 1868-4408 ; ; 66
Disciplina	512.3
Soggetti	Electronic circuits Universal algebra Data structures (Computer science) Information theory Signal processing Electronic Circuits and Systems General Algebraic Systems Data Structures and Information Theory Signal, Speech and Image Processing
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 at the end of each chapters and index.
Nota di contenuto	Number Systems -- Basic Arithmetic Circuits -- Residue Number Systems -- Basic algebraic circuits -- Galois Fields GF(2 ^m) -- Galois Fields GF(p ⁿ) -- Two Galois fields cryptographic applications.
Sommario/riassunto	This book presents a complete and accurate study of algebraic circuits, digital circuits whose performance can be associated with any algebraic structure. The authors distinguish between basic algebraic circuits, such as Linear Feedback Shift Registers (LFSRs) and cellular automata, and algebraic circuits, such as finite fields or Galois fields. The book includes a comprehensive review of representation systems, of arithmetic circuits implementing basic and more complex operations, and of the residue number systems (RNS). It presents a study of basic algebraic circuits such as LFSRs and cellular automata as well as a study of circuits related to Galois fields, including two real cryptographic

applications of Galois fields.
