



Practical programmable circuits [a guide to PLDs, state machines, and microcontrollers /

Broesch, James D.

Academic Press,
c1991

Electronic books

Monografía

This is a practical guide to programmable logic devices. It covers all devices related to PLD: PALs, PGAs, state machines, and microcontrollers. Usefulness is evaluated; support needed in order to effectively use the devices is discussed. All examples are based on real-world circuits

<https://rebiunoda.pro.baratznet.cloud:28443/OpacDiscovery/public/catalog/detail/b2FpOmNlbGVicmF0aW9uOmVzLmJhcmF0ei5yZW4vMjYzNjk5MzA>

Título: Practical programmable circuits electronic resource] a guide to PLDs, state machines, and microcontrollers
James D. Broesch

Editorial: San Diego Academic Press c1991

Descripción física: 1 online resource (303 p.)

Nota general: Description based upon print version of record

Bibliografía: Includes bibliographical references (p. 276-277) and index

Contenido: Front Cover; Practical Programmable Circuits: A Guide to PLDs, State Machines, and Microcontrollers; Copyright Page; Table of Contents; Preface; Acknowledgments; Chapter 1. An Introduction to Programmable Logic; 1.1 The Programmable Logic Design Environment; 1.2 The Programmable Logic Development Cycle; 1.3 Some Special Concerns with Programmable Logic; 1.4 Getting Started; 1.5 Chapter Summary; Chapter 2. Basic Logic Design; 2.1 Logic Design; 2.2 Selected Topics in Basic Logic; 2.3 Chapter Summary; Chapter 3. Combinatorial PLDs; 3.1 Programmable Logic and the PROM 3.2 Programmable Array Logic3.3 Programmable Logic Arrays; 3.4 A Typical PLD Application; 3.5 PROM, PAL, and PLA Comparisons; 3.6 Chapter Summary; Chapter 4. State Machines; 4.1 An Introduction to State Machines; 4.2 Classic State Machines; 4.3 Chapter Summary; Chapter 5. Software Development; 5.1 Introduction to PLD Software; 5.2 Specific Software Packages; 5.3 The proLogic Compiler; 5.4 Miscellaneous Comments on Software; 5.5 Chapter Summary; Chapter 6. Advanced Forms of PLDs; 6.1 The PAL22V10; 6.2 PSG-506/507; 6.3 ASICs and Third Generation PLDs; 6.4 Altera; 6.5 Xilinx 6.6 PLDs as Competition for Gate Arrays6.7 GALs; 6.8 Chapter

Summary; Chapter 7. General PLD Design Issues; 7.1 Philosophy of Programmable Device Design; 7.2 Design for Testability; 7.3 Metastability; 7.4 High-Speed Circuit Design; 7.5 Security; 7.6 Chapter Summary; Chapter 8. Variations on the Theme; 8.1 Microsequencers; 8.2 RISC versus CISC; 8.3 Writable Control Stores; 8.4 Chapter Summary; Chapter 9. Introduction to Microcontrollers; Chapter 10. Hardware Architecture of Microcontrollers; 10.1 Basic Features; 10.2 Common Optional Features; 10.3 Exotic Optional Features; 10.4 Four Bit Units 10.5 Eight Bit Units10.6 Sixteen Bit Units; 10.7 I/O Interfacing; 10.8 Chapter Summary; Chapter 11. Microcontrollers and Software; 11.1 Patterns, Microcode, and Object Code; 11.2 Elementary Instructions; 11.3 Simple Program Structure; 11.4 Subroutines and Program Structure; 11.5 Interrupts; 11.6 Real Time Multi-Tasking; 11.7 Chapter Summary; Chapter 12. Additional Tools of the Trade; 12.1 Basic Tools; 12.2 Logic Analyzers; 12.3 Monitors; 12.4 Simulators; 12.5 In-Circuit Emulators; 12.6 Chapter Summary; Chapter 13. A Guide to Choosing Programmable Circuits; 13.1 Proof-of-Concept Phase 13.2 Preproduction Units13.3 Production Systems; 13.4 Chapter Summary; Chapter 14. Conclusion; A An Arcane History of a Few Acronyms; B Data Sheets; C References and Sources; Glossary; Index

Lengua: English

ISBN: 0-323-13926-4 1-299-19494-X

Materia: Dispositivos lógicos programables Logic design

Enlace a formato físico adicional: 0-12-134885-7

Baratz Innovación Documental

- Gran Vía, 59 28013 Madrid
- (+34) 91 456 03 60
- informa@baratz.es