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| 1. | Record Nr. | UNINA9910783136003321 |
| | Autore | Maxfield Clive <1957-> |
| | Titolo | The design warrior's guide to FPGAs [[electronic resource] ] : devices, tools, and flows / / Clive "Max" Maxfield |
| | Pubbl/distr/stampa | Amsterdam ; ; London, : Newnes, c2004 |
| | ISBN | 1-280-74598-3 |
| | | 9786610745982 |
| | | 0-08-047713-5 |
| | Edizione | [1st edition] |
| | Descrizione fisica | 1 online resource (561 p.) |
| | Disciplina | 621.395 |
| | Soggetti | Field programmable gate arrays |
| | | Gate array circuits |
| | Lingua di pubblicazione | Inglese |
| | Formato | Materiale a stampa |
| | Livello bibliografico | Monografia |
| | Note generali | One CD-ROM in pocket attached to inside back cover. |
| | | Includes index. |
| | Nota di contenuto | Front Cover; Copyright; Table of Contents; Preface; Acknowledgments; 1. Introduction; 2. Fundamental Concepts; 3. The Origin of FPGAs; 4. Alternative FPGA Architectures; 5. Programming SConfiguringw an FPGA; 6. Who Are All the Players?; 7. FPGA Versus ASIC Design Styles; 8. Schematic-Based Design Flows; 9. HDL-Based Design Flows; 10. Silicon Virtual Prototyping for FPGAs; 11. C/Cbb etc.-Based Design Flows; 12. DSPIBased Design Flows; 13. Embedded Processor-Based Design Flows; 14. Modular and Incremental Design; 15. High-Speed Design and Other PCB Considerations |
| | | 16. Observing Internal Nodes in an FPGA17. Intellectual Property; 18. Migrating ASIC Designs to FPGAs and Vice Versa; 19. SimulationI SynthesisI VerificationI etcB Design Tools; 20. Choosing the Right Device; 21. Gigabit Transceivers; 22. Reconfigurable Computing; 23. Field-Programmable Node Arrays; 24. Independent Design Tools; 25. Creating an Open-Source-Based Design Flow; 26. Future FPGA Developments; Appendix A: Signal Integrity 101; Appendix B: Deep-Submicron Delay Effects 101; Appendix C: Linear Feedback Shift Registers 101; Glossary; About the Author; Index |
| | Sommario/riassunto | Field Programmable Gate Arrays (FPGAs) are devices that provide a fast, |

low-cost way for embedded system designers to customize products and deliver new versions with upgraded features, because they can handle very complicated functions, and be reconfigured an infinite number of times. In addition to introducing the various architectural features available in the latest generation of FPGAs, The Design Warrior's Guide to FPGAs also covers different design tools and flows. This book covers information ranging from schematic-driven entry, through traditional HDL/RTL-based simulation and lo