Record Nr. UNINA9910823741903321 Autore Cofer R. C Titolo Rapid system prototyping with FPGAs / / by R.C. Cofer and Benjamin F. Harding Pubbl/distr/stampa Amsterdam;; Boston,: Elsevier/Newnes, c2006 **ISBN** 1-280-64257-2 9786610642571 0-08-045737-1 Edizione [1st edition] Descrizione fisica 1 online resource (321 p.) Collana Embedded technology series Altri autori (Persone) HardingBenjamin F 621.381 Disciplina Digital electronics - Computer-aided design Soggetti Field programmable gate arrays Rapid prototyping Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. Rapid System Prototyping with FPGAs; Contents; Acknowledgements; Nota di contenuto About the Authors; 1 Introduction; 2 FPGA Fundamentals; 3 Optimizing the Development Cycle; 4 System Engineering; 5 FPGA Device-Level Design Decisions; 6 Board-Level Design Decisions and Allocation; 7 Design Implementation; 8 Design Simulation; 9 Design Constraints and Optimization: 10 Configuration: 11 Board-Level Testing: 12 Advanced Topics Introduction: 13 Cores and Intellectual Property: 14 Embedded Processing Cores; 15 Digital Signal Processing; 16 Advanced Interconnect; 17 Bringing It All Together A Rapid System Prototyping Technical References B Design Phases; Abbreviations and Acronyms; Index The push to move products to market as quickly and cheaply as Sommario/riassunto possible is fiercer than ever, and accordingly, engineers are always looking for new ways to provide their companies with the edge over the competition. Field-Programmable Gate Arrays (FPGAs), which are faster, denser, and more cost-effective than traditional programmable logic devices (PLDs), are guickly becoming one of the most widespread tools that embedded engineers can utilize in order to gain that needed edge.

FPGAs are especially popular for prototyping designs, due to their