Record Nr. UNINA9910819781503321 Autore Bozzano Marco Titolo Design and safety assessment of critical systems / / Marco Bozzano, Adolfo Villafiorita Boca Raton,: Auerbach Publications, 2010 Pubbl/distr/stampa **ISBN** 9781040158562 1040158560 9780429070044 0429070047 9781439803325 1439803323 Edizione [1st ed.] Descrizione fisica 1 online resource (288 p.) Altri autori (Persone) VillafioritaAdolfo Disciplina 620.8/6 Soggetti Industrial safety System safety 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 and index. Nota di contenuto Front cover; Contents; Preface; Acknowledgments; About the Authors; Chapter 1: Introduction: Chapter 2: Dependability, Reliability, and Safety Assessment; Chapter 3: Techniques for Safety Assessment; Chapter 4: Development of Safety-Critical Applications; Chapter 5: Formal Methods for Safety Assessment; Chapter 6: Formal Methods for Certification; Appendix A: The NuSMV Model Checker; Appendix B: The FSAP Safety Analysis Platform; Appendix C: Some Regulatory Bodies and Regulations: Back cover Sommario/riassunto Safety-critical systems, by definition those systems whose failure can cause catastrophic results for people, the environment, and the economy, are becoming increasingly complex both in their functionality and their interactions with the environment. Unfortunately, safety assessments are still largely done manually, a time-consuming and error-prone process. The growing complexity of these systems requires an increase in the skill and efficacy of safety engineers and encourages

the adoption of formal and standardized techniques. An introduction to

the area of design and verifica