1. Record Nr. UNINA9910808607203321 Autore Schauffele Jorg Titolo Automotive software engineering: principles, processes, methods, and tools // by Jorg Schauffele and Thomas Zurawka; translated by Roger Carev Warrendale, Pa. (400 Commonwealth Dr., Warrendale PA USA):,: Pubbl/distr/stampa Society of Automotive Engineers, , [2016] **ISBN** 0-7680-8850-X 0-7680-8334-6 1-5231-0851-7 Edizione [Second edition.] Descrizione fisica 1 online resource (1 PDF (xv, 370 pages)): illustrations Society of Automotive Engineers. Electronic publications Collana Disciplina 629.272028552 Soggetti Automotive computers Software engineering COMPUTERS / Software Development & Engineering / General **TECHNOLOGY & ENGINEERING / Automotive** Computer programming / software engineering Automotive technology and trades Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali "SAE Order No. R-432." Translation of: Automotive Software Engineering: Grundlagen, Prozesse, Methoden und Werkzeuge eff izient einsetzen. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Foreword: The role of software in the automobile -- Preface to the second English edition -- Acknowledgments -- Chapter 1: Introduction and overview -- Chapter 2. Essential system basics -- Chapter 3. Support processes for electronic systems and software development --Chapter 4. Core process for electronic systems and software engineering -- Chapter 5. Methods and tools for development --Chapter 6. Methods and tools for production and service -- Chapter 7. Summary and outlook -- References -- Illustration credits -- List of acronyms -- Index -- About the authors. Sommario/riassunto The software-based implementation of vehicle functions provides for unparalleled freedoms of concept and design. However, automobile

development calls for the accommodation of contrasting prerequisites

- such as higher demands on safety and reliability vs. lower cost ceilings, longer product life cycles vs. shorter development times - along with growing proliferation of model variants. Automotive Software Engineering has established its position at the center of these seemingly conflicting opposites. This book provides background basics as well as numerous suggestions, rare insights, and cases in point concerning those processes, methods, and tools that contribute to the surefooted mastery of the use of electronic systems and software in the contemporary automobile.