Record Nr. UNINA9910457671703321 Autore Ozenbaugh Richard Lee. Titolo EMI filter design / / Richard Lee Ozenbaugh, Timothy M. Pullen Boca Raton, Fla.:,: CRC Press,, 2012 Pubbl/distr/stampa **ISBN** 1-315-21711-2 1-283-35056-4 9786613350565 1-4398-6322-9 Edizione [3rd ed.] Descrizione fisica 1 online resource (264 p.) Altri autori (Persone) PullenTimothy M Disciplina 621.3815/324 Soggetti Electric filters - Design and construction Electromagnetic interference Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Includes bibliographical references. Nota di bibliografia Nota di contenuto Front Cover; Contents; Preface; Acknowledgments; Authors; Terms and Abbreviations; Organization of the Book; Chapter 1: EMI Filters; Chapter 2: Why Call EMI Filters Black Magic?; Chapter 3: Common Mode and Differential Mode: Definition. Cause. and Elimination: Chapter 4: EMI Filter Source Impedance of Various Power Lines; Chapter 5: Various AC Load Impedances; Chapter 10: Common-Mode Components; Chapter 12: Electromagnetic Pulse and Voltage Transients; Chapter 13: What Will Compromise the Filter?; Chapter 14: Waves as Noise Sources; Chapter 15: Initial Filter Design Requirements Chapter 16: Matrices, Transfer Functions, and Insertion LossChapter 18: Network Analysis of Passive LC Structures; Chapter 19: Filter Design Techniques and Design Examples; Chapter 20: Packaging Information; Appendix A: K Values of Different Topologies; Appendix B: LC Passive Filter Design; Appendix C: Conversion Factors; References; Back Cover Sommario/riassunto With today's electrical and electronics systems requiring increased levels of performance and reliability, the design of robust EMI filters plays a critical role in EMC compliance. Using a mix of practical

methods and theoretical analysis, EMI Filter Design, Third Edition presents both a hands-on and academic approach to the design of EMI

filters and the selection of components values. The design approaches covered include matrix methods using table data and the use of Fourier analysis, Laplace transforms, and transfer function realization of LC structures. This edition has