

1. Record Nr.	UNINA9910632467203321
Autore	Keller Reto B
Titolo	Design for Electromagnetic Compatibility--In a Nutshell [[electronic resource]] : Theory and Practice // by Reto B. Keller
Pubbl/distr/stampa	Cham, : Springer Nature, 2023 Cham : , : Springer International Publishing : , : Imprint : Springer, , 2023
ISBN	3-031-14186-5
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (XXVIII, 416 p. 273 illus., 221 illus. in color.)
Disciplina	621.3815
Soggetti	Electronic circuits Telecommunication Electronics Electronic Circuits and Systems Microwaves, RF Engineering and Optical Communications Electronics and Microelectronics, Instrumentation
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	1-Introduction -- 2-Regulations And Standards -- 3-Decibel -- 4-Frequency And Wavelength -- 5-Time-Domain And Frequency-Domain -- 6-RF Parameters -- 7-Transmission Lines -- 8-Electromagnetic Fields -- 9-Antennas -- 10-Skin Effect -- 11-Components -- 12-Noise Coupling -- 13-Shielding -- 14-Grounding -- 15-Filtering -- 16-EMC Design Guidelines.
Sommario/riassunto	This open access book provides practicing electrical engineers and students a practical – and mathematically sound – introduction to the topic of electromagnetic compatibility (EMC). The author enables readers to understand better how to overcome commonly failed EMC tests for radiated emission, radiated immunity, and electrostatic discharge (ESD), while providing concrete EMC design guidelines. The book also presents an overview of EMC standards and regulations and how to test for a global market access. Provides a state-of-the-art introduction to EMC for students and practicing engineers Covers the essential theoretical topics for mastering EMC Gives general practical

advice on how to design EMC compliant electronics.
