1. Record Nr. UNISALENTO991002949829707536

Autore	Hencl, Stanislav
Titolo	Lectures on mappings of finite distortion / Stanislav Hencl, Pekka Koskela
Pubbl/distr/stampa	Cham [Switzerland] : Springer, c2014
ISBN	9783319031729
Descrizione fisica	xi, 176 p. : ill. ; 24 cm
Collana	Lecture notes in mathematics, 0075-8434 ; 2096
Classificazione	AMS 30C65 AMS 46E35 AMS 74B20 LC QA360.H46
Altri autori (Persone)	Koskela, Pekkaauthor
Disciplina	515.9
Soggetti	Quasiconformal mappings Sobolev spaces
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references (pages 169-173) and index
Nota di contenuto	Introduction ; Continuity ; Openness and discreteness ; Images and preimages of null sets ; Homeomorphisms of finite distortion ; Integrability of Jf and 1/Jf ; Final comments ; Appendix ; References
Sommario/riassunto	In this book we introduce the class of mappings of finite distortion as a generalization of the class of mappings of bounded distortion. Connections with models of nonlinear elasticity are also discussed. We study continuity properties, behavior of our mappings on null sets, topological properties like openness and discreteness, regularity of the potential inverse mappings and many other aspects

2. Record Nr. UNINA9910797582903321

Autore	Zhang Hanqiao
Titolo	High speed digital design : design of high speed interconnects and signaling / / Hanqiao Zhang, Steve Krooswyk, Jeff Ou
Pubbl/distr/stampa	Waltham, MA : , : Elsevier, , [2015] ©2015
ISBN	0-12-418667-X 0-12-418663-7
Edizione	[First edition.]
Descrizione fisica	1 online resource (268 p.)
Disciplina	621.398
Soggetti	Digital electronics Logic design
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Front Cover; High Speed Digital Design; Copyright Page; Contents; About the Authors/Contributors; 1 Transmission line fundamentals; Basic Electromagnetics; Electromagnetics Field Theory; Maxwell's equations; Ampere's law; Faraday's law; Gauss's law; Gauss's law for magnetism; Propagation of Plane Waves; Uniform plane wave; Uniform plane wave in conductive media; Power flow and the Poynting vector; Transmission Line Theory; Wave Equations on Lossless Transmission Lines; Lossless transmission line; Wave propagation on a lossless transmission line; Incident waves and reflected waves Impedance, Reflection Coefficient, and Power Flow on a Lossless Transmission LineInput impedance and reflection coefficient; Power flow on a lossless transmission line; Traveling and Standing Waves on a Transmission Line; Traveling waves; Standing waves; Transmission Line Structures; Stripline; Microstrip; Coplanar Waveguides; Novel Transmission Lines; References; 2 PCB design for signal integrity; Differential Signaling; Impedance; Time Domain Analysis; Eye Diagram; Jitter; Jitter components and budget; Jitter amplification example; Frequency Domain Analysis; Spectral Content; Insertion Loss Integrated Insertion Loss NoiseReturn Loss; S11 nulls; Crosstalk; Crosstalk sum; Integrated Crosstalk; Signal-to-Noise Ratio; Stack-Up Design; Impedance Target (Routing Impedance); Optimal routing

impedance; PCB Losses; Dielectric Loss; Lower loss dielectrics; Hybrid stackups; Conductor Loss; Surface roughness; Crosstalk Mitigation through StackUp; Stripline dielectric; Solder mask; Dual Stripline; PCB stackup; Angled routing; Parallelism; Densely Broadside Coupled Dual Stripline; Via Stub Mitigation; Impedance optimization; U-turn via; Back-drilling; Blind and buried via
PCB Layout OptimizationLength Matching; Fiber Weave Effect; Crosstalk Reduction; Interleaving; Guard trace; Signal-to-ground ratio; Ground placement; Orthogonal placement; Component (vertical to horizontal) cancellation; Non-Ideal Return Path; Power Integrity; Repeaters; Introduction to re-timers; Introduction to re-drivers; Modeling and simulation; PCIe considerations; References; 3 Channel modeling and simulation; Transmission Lines; Causality; Checking for Model Causality; Causal Frequency-Dependent Model; Copper Surface Roughness; Modified Hammerstad model; Huray model; Conductivity Environmental ImpactHumidity; Conductivity; Temperature; Model and simulation; Model Geometries; Stripline structures; Microstrip structures; Corner Models; Iterative corner model; Monte Carlo corner model; Ideal Assumptions: Homogeneous Impedance; Ideal Assumptions: Crosstalk Aggressors; Transmitters; IBIS Models; Spice Voltage Source Model; Linearity test; 3D Modeling; Ports/Terminals; Wave ports; Lumped ports; Model Analysis Settings; Discrete or interpolating solutions; Frequency range and step size; Port order; Normalize result to 50ohms; Plated-Through-Hole Via; Model Techniques
Pre-Layout Approximation

Sommario/riassunto

High Speed Digital Design discusses the major factors to consider in designing a high speed digital system and how design concepts affect the functionality of the system as a whole. It will help you understand why signals act so differently on a high speed digital system, identify the various problems that may occur in the design, and research solutions to minimize their impact and address their root causes. The authors offer a strong foundation that will help you get high speed digital system designs right the first time. Taking a systems design approach, High Speed Digital Design offers a