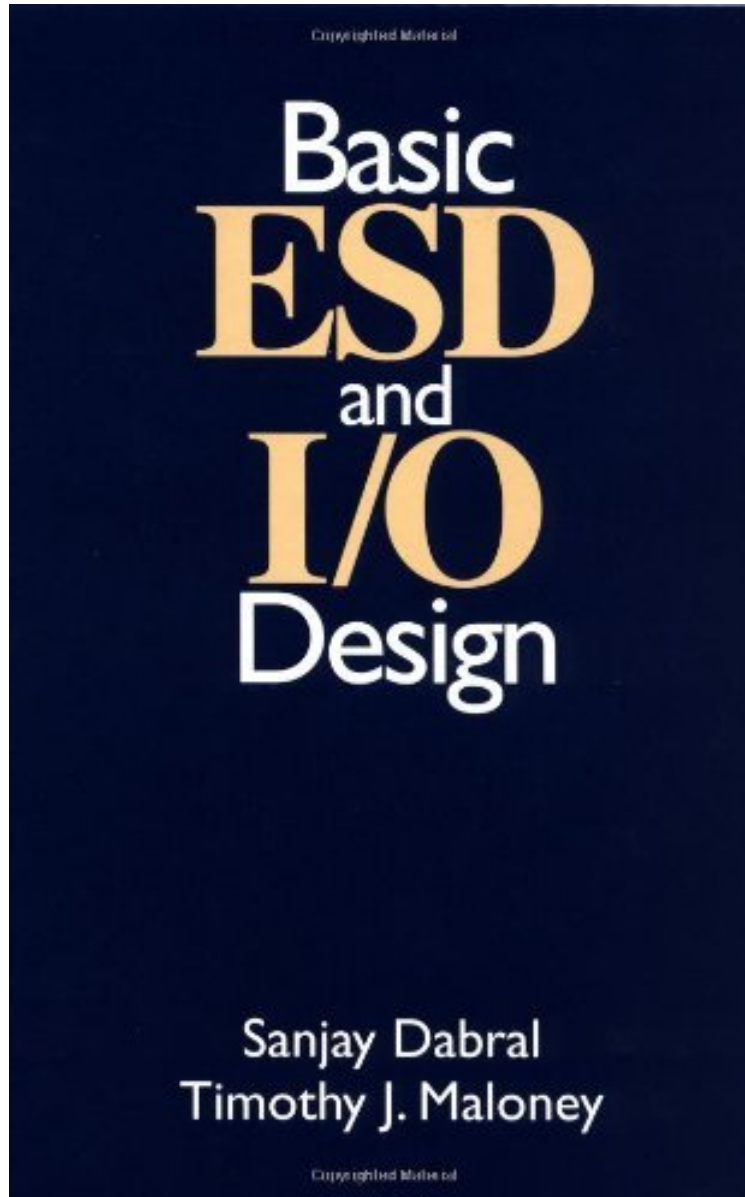


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Basic ESD and I/O Design

Von Sanjay Dabral, Timothy Maloney

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Von Sanjay Dabral, Timothy Maloney : Basic ESD and I/O Design before purchasing it in order to gauge whether or not it would be worth my time, and all praised Basic ESD and I/O Design:

Kundenrezensionen Hilfreichste Kundenrezensionen 0 von 0 Kunden fanden die folgende Rezension hilfreich. A good book on I/O design! Von RFAnalog Today it is hard to find a book dealing with ESD and IO design comprehensively,

and this book is a make-up. It covers ESD theories, prevention techniques and layout, basic IO transceiver design, mixed-voltage IO cell design and etc. Unfortunately, the authors did not address some of the designs in depth, as its title is "Basic ESD and I/O Design". 0 von 0 Kunden fanden die folgende Rezension hilfreich. review Basic ESD and I/O Design Von ANNI SEN If you are designing i/o design this is the book that you want to have. After reviewing basic concepts provided by the book, you can improve your esd io sturcture by a few 1kv. It has excellent design examples for ESD I/O from grounded gate MOS devices to SCR. This book however needs to address low capacitance ESD I/O sturcture for RF application.

Kurzbeschreibung The first comprehensive guide to ESD protection and I/O design Basic ESD and I/O Design is the first book devoted to ESD (electrostatic discharge) protection and input/output design. Addressing the growing demand in industry for high-speed I/O designs, it bridges the gap between ESD research and current VLSI design practices and provides a much-needed reference for practicing engineers who are frequently called upon to learn the subject on the job. This volume presents an integrated treatment of ESD, I/O, and process parameter interactions that both I/O designers and process designers can use. It examines key factors in I/O and ESD design and testing, and helps the reader consider ESD and reliability issues up front when making I/O choices. Emphasizing clarity and simplicity, this book focuses on design principles that can be applied widely as this dynamic field continues to evolve. Basic ESD and I/O Design: * Describes strategies for design-oriented ESD protection * Explains layout methods that enhance ESD protection designs * Addresses basic I/O designs, including new problems such as mixed voltage interfaces * Discusses fabrication aspects affecting ESD and I/O protection * Illustrates concepts using numerous figures and examples * Expresses device physics in terms of simple electrical circuit models * Cross-references the material to standard texts in the field Essential for engineers in industry and anyone designing circuits, systems, or devices for future technologies, Basic ESD and I/O Design is also a useful reference for researchers and graduate students involved in core VLSI design or computer architecture.

Kurzbeschreibung The first comprehensive guide to ESD protection and I/O design Basic ESD and I/O Design is the first book devoted to ESD (electrostatic discharge) protection and input/output design. Addressing the growing demand in industry for high-speed I/O designs, it bridges the gap between ESD research and current VLSI design practices and provides a much-needed reference for practicing engineers who are frequently called upon to learn the subject on the job. This volume presents an integrated treatment of ESD, I/O, and process parameter interactions that both I/O designers and process designers can use. It examines key factors in I/O and ESD design and testing, and helps the reader consider ESD and reliability issues up front when making I/O choices. Emphasizing clarity and simplicity, this book focuses on design principles that can be applied widely as this dynamic field continues to evolve. Basic ESD and I/O Design: * Describes strategies for design-oriented ESD protection * Explains layout methods that enhance ESD protection designs * Addresses basic I/O designs, including new problems such as mixed voltage interfaces * Discusses fabrication aspects affecting ESD and I/O protection * Illustrates concepts using numerous figures and examples * Expresses device physics in terms of simple electrical circuit models * Cross-references the material to standard texts in the field Essential for engineers in industry and anyone designing circuits, systems, or devices for future technologies, Basic ESD and I/O Design is also a useful reference for researchers and graduate students involved in core VLSI design or computer architecture.

Synopsis This book addresses the large gap between the fragmented research ESD (Electrostatic Discharge) and design practices used in VLSI design. It brings a simplified design perspective to IO (Input/Output) and ESD design, and presents a common understanding for the IO designer about ESD constraints and for the ESD Process designer about IO requirements.