

1. Record Nr.	UNINA9910438053403321
Autore	Ma Dongsheng
Titolo	Reconfigurable switched-capacitor power converters : principles and designs for self-powered microsystems // Dongsheng Ma, Rajdeep Bondade
Pubbl/distr/stampa	New York, NY, : Springer, 2012, c2013
ISBN	1-283-53180-1 9786613844255 1-4614-4187-0
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (181 p.)
Altri autori (Persone)	BondadeRajdeep
Disciplina	621.3132
Soggetti	Switching power supplies - Design Microprocessors
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Fundamental Concepts -- Power Semiconductor Devices -- Fundamental Charge Pump Topologies and Design Principles -- Power Loss in Switched-Capacitor Power Converters: Causes and Analysis -- Reconfigurable Switched-Capacitor Power Converters -- Configuring Switched-Capacitor Power Converters Using Interleaving Regulation Techniques -- Switched-Capacitor Power Converter Design and Modeling in z-Domain.
Sommario/riassunto	This book provides readers specializing in ultra-low power supply design for self-powered applications, an invaluable reference on reconfigurable switched capacitor power converters. Readers will benefit from a comprehensive introduction to the design of robust power supplies for energy harvesting and self-power applications, focusing on the use of reconfigurable switched capacitor based DC-DC converters, which is ideal for such applications. Coverage includes all aspects of switched capacitor power supply designs, from fundamentals, to reconfigurable power stages, and sophisticated controller designs. Provides a comprehensive introduction to the fundamentals of switched capacitor power supply design for novices, as well as advanced design and implementation techniques for advanced

readers; Includes discussion of all aspects of switched capacitor power supply designs, from fundamentals, to reconfigurable power stages, and sophisticated controller designs; Covers most state-of-art power supply designs for emerging applications such as energy harvesting for wireless sensor nodes. Provides a comprehensive introduction to the fundamentals of switched capacitor power supply design for novices, as well as advanced design and implementation techniques for advanced readers; Includes discussion of all aspects of switched capacitor power supply designs, from fundamentals, to reconfigurable power stages, and sophisticated controller designs; Covers most state-of-art power supply designs for emerging applications such as energy harvesting for wireless sensor nodes.
