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Descrizione fisica	1 online resource (218 p.)
Collana	Analog circuits and signal processing
Altri autori (Persone)	SteyaertMichiel <1959->
Disciplina	621.3815
Soggetti	DC-to-DC converters Electric current converters
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Introduction -- Converter Topologies and Fundamentals -- Modeling and Design of Capacitive DC-DC Converters -- Noise Reduction by Multi-phase Interleaving and Fragmentation -- Control of Fully Integrated Capacitive Converters -- Monolithic Integration of DC-DC Converters in CMOS -- DC-DC Converter Prototypes -- Conclusions. .
Sommario/riassunto	This book provides a detailed analysis of all aspects of capacitive DC-DC converter design: topology selection, control loop design and noise mitigation. Readers will benefit from the authors' systematic overview that starts from the ground up, in-depth circuit analysis and a thorough review of recently proposed techniques and design methodologies. Not only design techniques are discussed, but also implementation in CMOS is shown, by pinpointing the technological opportunities of CMOS and demonstrating the implementation based on four state-of-the-art prototypes. Provides a detailed analysis of all aspects of capacitive DC-DC converter design; Analyzes the potential of this type of DC-DC converter and introduces a number of techniques to unleash their full potential; Combines system theory with practical implementation techniques; Includes unique analysis of CMOS

technology for this application; Provides in-depth analysis of four fabricated prototypes.
