

1. Record Nr.	UNINA9910299471403321
Autore	Srivastava Viran Jay M
Titolo	MOSFET Technologies for Double-Pole Four-Throw Radio-Frequency Switch / by Viran Jay M. Srivastava, Ghanshyam Singh
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2014
ISBN	9783319011653 3319011650
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (xv, 199 pages) : illustrations (some color)
Collana	Analog Circuits and Signal Processing, , 2197-1854 ; ; 122
Disciplina	621.3815
Soggetti	Electronic circuits Telecommunication Semiconductors Electronic Circuits and Systems Communications Engineering, Networks
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	Introduction -- Design of Double-Pole Four-Throw RF Switch -- Design of Double-Gate MOSFET -- Double-Pole Four-Throw RF Switch Based on Double-Gate MOSFET -- Cylindrical Surrounding Double-Gate RF MOSFET -- Hafnium Dioxide Based Double-Pole Four-Throw Double-Gate RF CMOS Switch -- Testing of MOSFET Surfaces Using Image Acquisition -- Conclusions and Future Scope.
Sommario/riassunto	This book provides analysis and discusses the design of various MOSFET technologies which are used for the design of Double-Pole Four-Throw (DP4T) RF switches for next generation communication systems. The authors discuss the design of the (DP4T) RF switch by using the Double-Gate (DG) MOSFET, as well as the Cylindrical Surrounding double-gate (CSDG) MOSFET. The effect of HFO ₂ (high dielectric material) in the design of DG MOSFET and CSDG MOSFET is also explored. Coverage includes comparison of Single-gate MOSFET and Double-gate MOSFET switching parameters, as well as testing of MOSFETs parameters using image acquisition. . Provides a single-source reference to the latest technologies for the design of Double-

gate MOSFET, Cylindrical Surrounding double-gate MOSFET and HFO2 based MOSFET; · Explains the design of RF switches using the technologies presented and simulates switches; · Verifies parameters and discusses feasibility of devices and switches.
