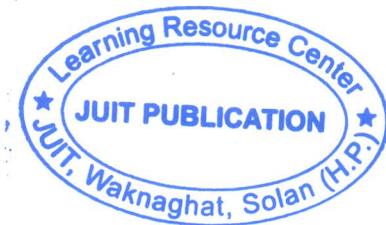


Viranjay M. Srivastava  
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# MOSFET Technologies for Double-Pole Four- Throw Radio- Frequency Switch

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## **MOSFET Technologies for Double-Pole Four-Throw Radio-Frequency Switch**

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<sub>2</sub> (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 HFO<sub>2</sub> based MOSFET;
- Explains the design of RF switches using the technologies presented and simulates switches;
- Verifies parameters and discusses feasibility of devices and switches.

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