

1. Record Nr.	UNINA9910454371303321
Autore	Caverly Robert
Titolo	CMOS RFIC design principles // Robert Caverly
Pubbl/distr/stampa	Boston [Mass.] : , : Artech House, , ©2007 [Piscataway, New Jersey] : , : IEEE Xplore, , [2007]
ISBN	1-59693-133-7
Descrizione fisica	1 online resource (455 p.)
Collana	Artech House microwave library
Disciplina	621.3815 621.39732
Soggetti	Electronic circuits Integrated circuits Electronic books.
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 -- CMOS integrated circuit fundamentals -- The passive components -- Small-signal MOS amplifiers for RF -- Ancillary CMOS circuits and measurements -- CMOS oscillator circuits -- CMOS mixer circuits -- CMOS PLLs and frequency synthesizers -- CMOS power amplifiers -- Appendix: A. Sample SPICE-3 parameters -- B. Sample SPICE BSIM parameters -- C. Y-parameters or the MOSFET model -- D. Parameter conversion equations for two-port networks -- E. Constants and some properties of silicon and CMOS- related materials.
Sommario/riassunto	Turn to this practical resource for comprehensive, expert guidance on designing CMOS RF integrated circuits. You get complete design details on elemental and advanced CMOS RF circuits, from low noise amplifiers, general gain amplifiers, mixers, and oscillators, to voltage controlled oscillators, phase lock loops, frequency synthesizers, and power amplifier architectures. The book discusses ideal circuit topologies and then looks at non-ideal CMOS circuit elements to provide insight into circuit modifications needed to achieve design specifications. You also find a review of RF system fundament.