1. Record Nr. UNISA996217503703316

Titolo	Advanced integrated communication microsystems / / Joy Laskar ... [et al.]
Pubbl/distr/stampa	Hoboken, New Jersey : , : IEEE Press, , c2009 [Piscataqay, New Jersey] : , : IEEE Xplore, , [2009]
ISBN	1-282-02210-5 9786612022104 0-470-40979-7 0-470-40978-9
Descrizione fisica	1 online resource (495 p.)
Collana	Wiley series in microwave and optical engineering ; ; 174
Altri autori (Persone)	LaskarJoy
Disciplina	621.382 621.384
Soggetti	Radio - Transmitters and transmission Radio - Receivers and reception Radio frequency integrated circuits Wireless communication systems - Equipment and supplies
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 and background -- Wireless communication system architectures -- System architecture for high-speed wired communications -- Mixed building blocks of signal communication systems -- Examples of integrated communication microsystems -- Low-voltage, low-power, and low-area designs -- Packaging for integrated communication microsystems -- Advanced SOP components and signal processing -- Simulation and characterization of integrated microsystems -- Appendix : A compendium of the TRL calibration algorithm.
Sommario/riassunto	Learn the fundamentals of integrated communication microsystems Advanced communication microsystems--the latest technology to emerge in the semiconductor sector after microprocessors--require integration of diverse signal processing blocks in a power-efficient and cost-effective manner. Typically, these systems include data

acquisition, data processing, telemetry, and power management. The overall development is a synergy among system, circuit, and component-level designs with a strong emphasis on integration. This book is targeted at students, researchers, and industry practitioners in the semiconductor area who require a thorough understanding of integrated communication microsystems from a developer's perspective. The book thoroughly and carefully explores: . Fundamental requirements of communication microsystems. System design and considerations for wired and wireless communication microsystems. Advanced block-level design techniques for communication microsystems. Integration of communication systems in a hybrid environment. Packaging considerations. Power and form factor trade-offs in building integrated microsystems Advanced Integrated Communication Microsystems is an ideal textbook for advanced undergraduate and graduate courses. It also serves as a valuable reference for researchers and practitioners in circuit design for telecommunications and related fields.