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Oscillators for High Data Rate Applications. 4.1. Oscillators for Broadband Systems. 4.2. Oscillators for RF Frequencies. 4.3. Conclusions -- 5: Design of an Upconverter for High-Speed Data Transmission. 5.1. Introduction: Market Perspective. 5.2. High-Speed Data Link Systems. 5.3. High-Level Design Considerations. 5.4. CMOS Implementation of a High-Bandwidth Upconverter. 5.5. Final Conclusion -- 6: Conclusions. 6.1. Realized Work. 6.2. Possibilities for Future Research. References.

Sommario/riassunto

High Data Rate Transmitter Circuits is a practical guide and introduction to the design of key RF building blocks used in high data rate transmitters. The emphasis lies on CMOS circuit techniques applicable to oscillators and upconvertors. Furthermore, a method for RF-specific design automation is exemplified by the CYCLONE tool for automated LC-VCO synthesis. Written in an easily accessible manner, High Data Rate Transmitter Circuits is essential reading for both students and practicing engineers interested in analog RF design and RF-specific design automation. The book has been praised for its pleasant and light style of writing, without losing detail on the technical side.
