

Silicon UTSi(R) CMOS RFIC for CDMA wireless communications systems

P. Rodgers, M. Megahed, C. Page, J. Wu and D. Staab. "Silicon UTSi(R) CMOS RFIC for CDMA wireless communications systems." 1999 Radio Frequency Integrated Circuits (RFIC) Symposium 99. (1999 [RFIC]): 181-184.

The design and performance of a UTSi CMOS down converter RFIC for CDMA applications is presented. The down converter consists of a two stage LNA, RF switch, and mixer integrated with passive matching components. The performance of the building blocks has been evaluated. The results show that the stringent requirements for linearity at low power consumption required for CDMA can be achieved using UTSi CMOS technology. By integrating the down converter with a PLL fabricated in the same process, it will be possible to realize a single chip transceiver IC. The results show that Silicon CMOS UTSi has the on-chip RF performance required for the high level integration of future wireless communications systems.

 [Return to main document.](#)