

LMX3111

2.0 GHz Up/Down Converter for RF Personal Communications

General Description

The LMX3111 Up/Down Converter is a monolithic, integrated radio transceiver suitable for use in Personal Handy Phone System (PHS)(RCR-28) as well as other mobile telephony and wireless communications applications. It is fabricated using National's Silicon ABIC V 0.5 μ m BiCMOS process. The LMX3111 Up/Down Converter contains both transmit and receive functions, as well as frequency synthesis. The receiver consists of a 2.0 GHz low noise amplifier and mixer. The transmitter includes a 2.0 GHz upconverting mixer, preamplifier and gain control circuitry. A 2.0 GHz phase locked loop (PLL) from National's PLLatinum™ family of PLLs is also integrated for low noise frequency synthesis. The LMX3111 Up/Down Converter is available in a 28-pin TSSOP surface mount plastic package.

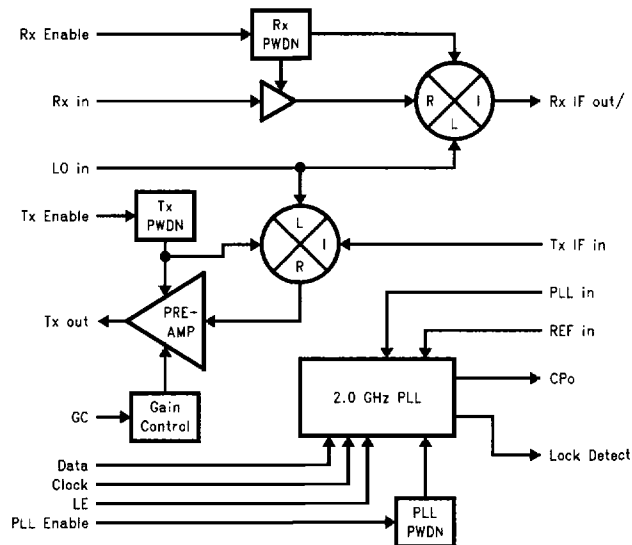
Features

- All 2.0 GHz I/O pins matched to 50 Ω
- Low current consumption
- Low Noise RF up and down converters
- 2.0 GHz PLLatinum™ PLL on chip
- Transmitter gain control circuit
- Power down mode for increased current savings

Applications

- Personal Handy Phone System (PHS)(RCR-28)
- Portable wireless communications (PCS/PCN, cordless)
- Wireless local area networks (WLANs)
- Other wireless communications systems

Functional Block Diagram



TL/W/12875-1

This is a proposed product specification and is subject to change at any time. No commitment to produce this product is implied.