

DESCRIPTION

The PT4330 is a low power 315/433/868/915MHz FM/FSK receiver IC which is suitable for use in the North American 315/915MHz and the European 433/868MHz ISM bands. The PT4330 chip consists of a low-noise amplifier (LNA), a down-conversion mixer, a 10.7MHz intermediate frequency limiting amplifier stage with received-signal-strength indicator (RSSI), a quadrature demodulator, and a selectable audio amplifier/slicing comparator. It also integrates a VCO with fixed + 64 prescaler, phase/frequency detector, and reference oscillator forming complete phase-locked loop.

The PT4330 is available in 32-pin TQFP package, and is specified over the extended temperature range from -10°C to $+70^{\circ}\text{C}$.

FEATURES

- Supply voltage range from 2.4V to 3.6V
- Low power consumption of 7.5mA for fully operation at 915MHz
- Excellent FSK sensitivity of the order of -100dBm (180KHz channel bandwidth and 0.1% BER)
- Reduced peripheral components
- Fixed RSSI response with 64dB dynamic range in both FM and FSK modes
- Receiver enable pin for power saving ($1\mu\text{A}$ current consumption in stand-by mode)
- TQFP 32L package (5mm x 5mm)

APPLICATIONS

- Wireless mouse / joystick
- Wireless voice transmission
- Wireless car alarm system

BLOCK DIAGRAM

