

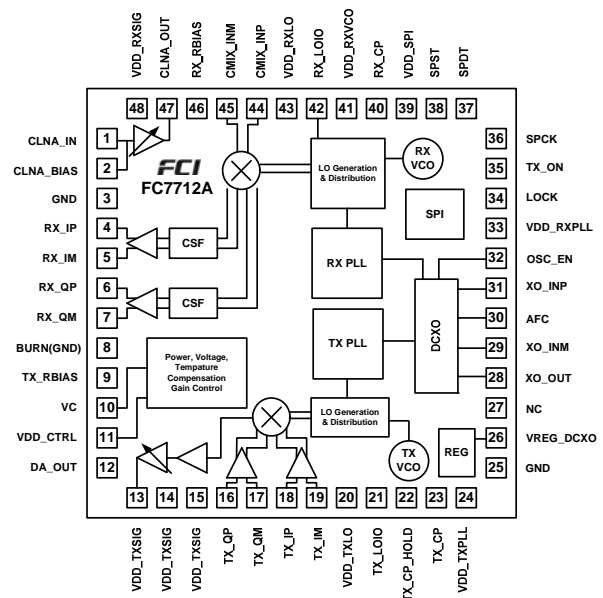
DESCRIPTION

FC7712A is a cellular-band CDMA RF-to-baseband transceiver IC of FCI's zipRF™ family. It is a highly integrated chip working with a single power supply. Because zero-IF architecture is used for FC7712A, additional components such as bulky IF SAW filters and other IF matching components are no longer required. 3-wired serial-to-parallel interface (SPI) protocol enables FC7712A operate in various modes. FC7712A contains complete single-band receiver path such as LNA, down-conversion mixer, channel selection filter (CSF), Rx VCO, Rx PLL, and LO distribution block. FC7712A also integrates VCXO (voltage controlled crystal oscillator) and only requires low-cost external crystal oscillator. FC7712A integrated varactor for VCXO operation with external 19.2MHz crystal with low current consumption. FC7712A also contains complete transmitter path such as baseband amplifier, up-converter, RF variable-gain block, drive amplifier, Tx VCO, Tx PLL, and LO distribution block. FC7712A is available in 6 x 6mm 48-pin QFN package.

FEATURES

- Complete transceiver for Cellular CDMA for EVDO applications with VCXO
- Low noise and highly linear LNA, mixer, and CSF for cellular CDMA
- Low noise, highly linear, wide dynamic range transmitter with baseband amplifier, up-converter, drive amplifier
- Automatic DC-offset calibration, filter calibration, VCO calibration
- Fully integrated low phase noise Rx, and Tx VCO and Fractional-N PLL with fine frequency resolution
- Fully integrated low-phase noise VCXO which requires external low-cost crystal and offers 32kHz clock to the modem
- Support 3-wired serial interface protocol
- 6 x 6mm, 48pin, QFN package

BLOCK DIAGRAM



APPLICATIONS

- Single-band CDMA EVDO mobile phone

REVISION HISTORY

- Preliminary version: Jan, 21, 2011
- Preliminary version: Feb, 01, 2011
- Preliminary version: Feb, 28, 2011
- Preliminary version: Apr, 05, 2011
- Preliminary version: June, 29, 2012
- Preliminary version: July, 06, 2012
- Preliminary version: Jan, 14, 2013

For latest specifications, technical questions and additional product information, visit website or e-mail

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