

Typical Applications

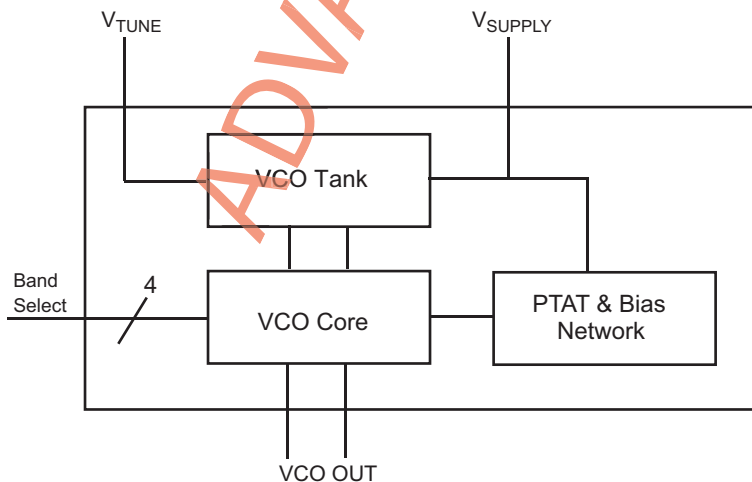
The TRFS-204 is a VCO for use in such applications as:

- CDMA2000, AMPS, US PCS High Band, US PCS Low Band, Korean PCS, JTACS, TACS Systems
- Dual-mode and multi-band applications
- Voice and data applications

Product Overview

The TRFS-204 is a fully integrated CMOS voltage-controlled oscillator operating over the frequency range of 2.62-3.2GHz for multi-band transceiver applications. The differential architecture of the oscillator, along with a local dedicated voltage regulator, improves the rejection to common-mode interference. The low phase noise of the circuit over a nominal tuning range of 2.62 - 3.26GHz makes it suitable for transceiver applications. The digital band select allows selection of 16 frequency bands within the operating frequency range. This core circuitry can be easily integrated with other circuits as well as packaged individually in a leadless chip carrier.

Block Diagram



Key Features

- CMOS VCO for the frequency band 2.62-3.2GHz
- Fully differential design
- Low phase noise of -119dBc/Hz @1MHz offset
- Tuning sensitivity of 100MHz/V

Performance Summary

Item	Unit	Min	Typical	Max	Notes
Supply Voltage	V	2.7	3.0	3.3	Separate supply line
Frequency Tuning Range	MHz	2620		3200	
Tuning Sensitivity	MHz/V	50	90	170	@2620MHz
	MHz/V	50	100	200	@3200MHz
SSB Phase Noise	dBc/Hz		-103		At 100kHz offset
	dBc/Hz		-121		At 1MHz offset
	dBc/Hz		-131		At 3MHz offset
Coarse Bands	Digital Control		16		

ADVANCE INFORMATION

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