

Typical Applications

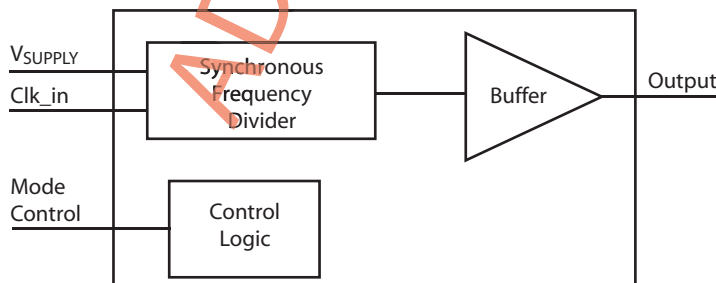
The TRFS-253 is a WCDMA reference divider core circuit, designed for use in such applications as:

- Frequency synthesizers
- General-purpose applications
- WCDMA, UMTS, CDMA, GSM, PCS, WLAN, GPS, AMPS systems

Product Overview

The TRFS-253 is a WCDMA reference divider used in frequency synthesizers for wireless communications applications. The circuit divides the nominal input frequency of 30MHz over a divide range between 1 to 8 using synchronous dividers. This core circuitry can be easily integrated with other circuits as well as packaged individually in a leadless chip carrier.

Block Diagram



Key Features

- Reference divider for frequency synthesizers with divide range from 1 to 8
- Synchronous dividers to avoid harmonic suppression
- Low phase noise of -153dBc/Hz @10kHz offset

Performance Summary

| Item | Unit | Min | Typical | Max |
|------------------------------|--------|-----|---------|------|
| Input Frequency | MHz | 1 | 30 | 40 |
| Phase Noise @10kHz offset | dBc/Hz | | | -161 |
| Noise Floor @100kHz | dBc/Hz | | | -163 |
| Divider Range (R) | | 1 | 4 | 8 |
| Input Signal Level | mVp-p | 200 | | 1000 |
| Buffer Amp Output | Vp-p | | 2 | |
| Phase Difference | Degree | | 180 | |
| Supply Voltage Digital (VDD) | V | 1.8 | 2.0 | 2.2 |
| Supply Voltage Analog (VCC) | V | 2.7 | 2.85 | 3.3 |
| Total Supply Current | mA | | | |

ADVANCE INFORMATION

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