

RF Synthesizer 32-Pin QFN EP T/R**Manufacturer:** [Qorvo, Inc](#)**Package/Case:** QFN**Product Type:** RF Integrated Circuits**RoHS:** RoHS Compliant/Lead free **Lifecycle:** Unconfirmed

Images are for reference only

[Inquiry](#)**General Description**

Qorvo's RF2051 is a very wideband RF frequency conversion chip with integrated local oscillator (LO) generation and a pair of RF mixers. The RF synthesizer includes an integrated fractional-N phase locked loop with voltage controlled oscillators (VCOs) and dividers to produce a low-phase noise LO signal with a very fine frequency resolution. The LO output drives the built-in RF mixers which convert the signal into the required frequency band. The bias current can be programmed to optimize the supply current/performance trade-off. The LO generation blocks have been designed to continuously cover the frequency range from 300MHz to 2400MHz. The RF mixers are very broad band and operate from 100MHz to 2500MHz at the RF ports of the device. An external crystal of between 10MHz and 52MHz or an external reference source of between 10MHz and 104MHz can be used with the RF2051 to accommodate a variety of reference frequency options. The device is programmed using a true three-wire serial interface. The RF2051 is designed for 2.7V to 3.6V operation for compatibility with portable battery powered devices. It is available in a plastic 32-pin 5mm x 5mm QFN package.

Key Features

30MHz to 2.5GHz Frequency Range

Fractional-N Synthesizer

Very Fine Frequency Resolution 1.5Hz for 26MHz Reference

Low Phase Noise VCO

On-Chip Crystal-Sustaining Circuit With Programmable Loading Capacitors

Two High-Linearity RF Mixers

Integrated LO Buffers

Mixer Input IP3 +18dBm

Mixer Bias Adjustable for Low Power Operation

Full Duplex Mode

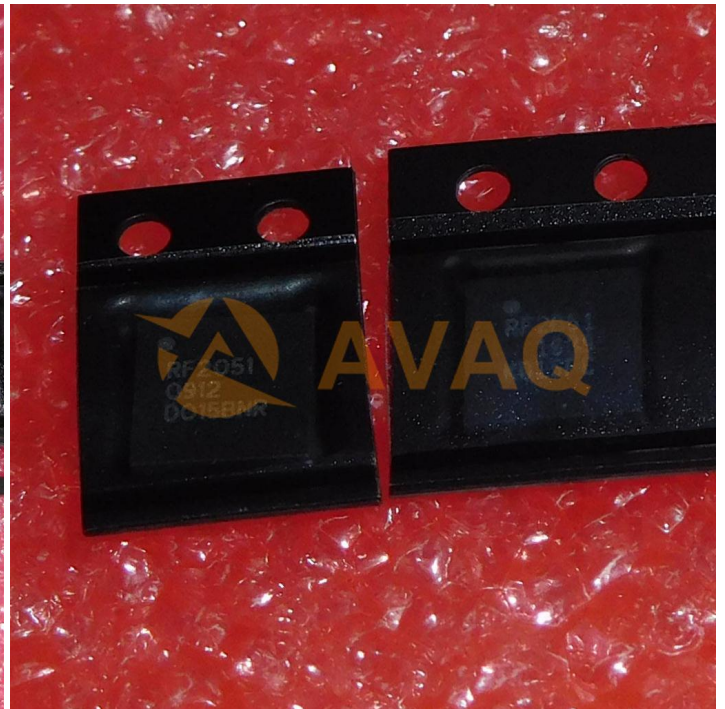
2.7V to 3.6V Power Supply

Low Current Consumption 55mA to 75mA at 3V

3-Wire Serial Interface

Application

General Purpose Wireless



Recommended For You

RF2051

Qorvo, Inc

QFN

RFSA2013TR7

Qorvo, Inc

QFN

RFMD2080TR13

Qorvo, Inc

QFN

RFSA2013SR

Qorvo, Inc

NULL

RFFM6404TR13

Qorvo, Inc

LGA-28

RFPD3220

Qorvo, Inc

PACK

RFPP3870

Qorvo, Inc

SMD

RFSA2023TR7

Qorvo, Inc

QFN

RFSA2033TR7

Qorvo, Inc

QFN

RFSA3714TR13

Qorvo, Inc

QFN

RF6555

Qorvo, Inc

QFN

RFFM4554TR7

Qorvo, Inc

QFN

RFFM6907SR

Qorvo, Inc

QFN

RFFM8228P

Qorvo, Inc

QFN

RF5604

Qorvo, Inc

BGA