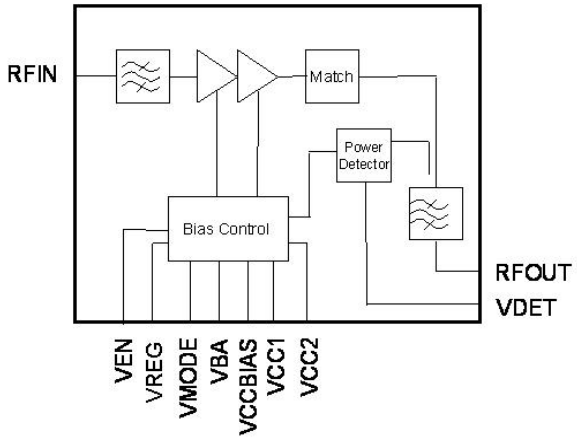
TQM676001

Data Sheet

3V IMT2100 WCDMA Transmit Module

Functional Block Diagram



Product Description

The Transmit Module is fully integrated, including power detection, interstage and frontend filters. It is designed for mobile UMTS handset applications, supporting HSDPA operation.
It features high/low output power modes, analog bias control, low off and standby currents, and a separate pin for module enable. RF input and output matching is included within the module; therefore, minimal external circuitry is required.
The 6X5mm² Transmit Module gives excellent RF performance with low current consumption resulting in longer talk times in portable applications. The small 6x5 mm² surface mount package is ideal for new generation small and light phones.

Electrical Specifications

Parameter	Min	Typ	Max	Units
Frequency	1922.4		1977.6	MHz
Linear P_{OUT}(HSDPA) high mode	25			dBm
Gain high mode (P_{OUT} = 25 dBm)		22		dB
Maximum current high mode		450		mA
Linear P_{OUT}(HSDPA) low mode	16			dBm
Gain low mode (P_{OUT} = 16 dBm)		16		dB
Maximum current low mode (P_{OUT} = 10 dBm)		60		mA
ACLR (HSDPA) 5 MHz		-45		dBc
ACLR (HSDPA) 10 MHz		-60		dBc

Test Conditions: $V_{CC1} = V_{CC2} = V_{CCBIAS} = 3.4$ V, $V_{REF} = 2.775$ V, T = 25°C

Data Sheet
For additional information and latest specifications, see our website: *www.triquint.com*

Features

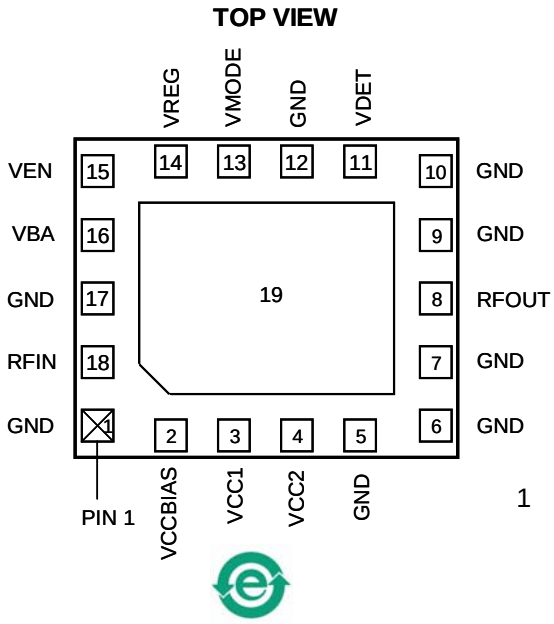
- Handset Transmit Module for UMTS Band I (IMT2100 band)
- Supports two modulation schemes: standard WCDMA, HSDPA
- Integrates power amplifier, power detector, interstage and frontend bandpass filters
- Low V_{Ref} = 2.775 V
- Separate 'module enable' pin
- RF input and output matched to 50 Ω
- Low current consumption:
  – high/low power mode
  – analog bias control
- High-reliability InGaP HBT technology
- 18-pin package
- Compact size: 5 x 6 x 1.5 mm³

Applications

- 3G UMTS Handsets and Data-Cards

Package Style

- 5 x 6 mm² LGA package



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