TQF9046

802.11b/g/n + BT WLAN Front End Module

Applications

- IEEE802.11b/g/n WLAN + BT Applications
- Single-Chip RF Front-end Module
- Wireless LAN Systems
- Portable Battery-Powered Equipment

Product Features

- Fully Integrated, 802.11b/g/n +BT front-end module
- Internally matched input/output
- Integrated directional detector
- Temperature Compensated Bias Network
- Single battery voltage of 3.2V- 4.6V
- Leadless 2.5 x 2.5 x 0.40 mm SMT Pb-Free
- Typ. Pout (+25C, V_{DD} = +3.8V) = 19.3dBm, EVM=3.0%, 802.11n/MCS7
- Typ. Pout (+25C, V_{DD} = +3.8V) = 20.2dBm, EVM=4.6%, 64QAM, 54Mbps OFDM

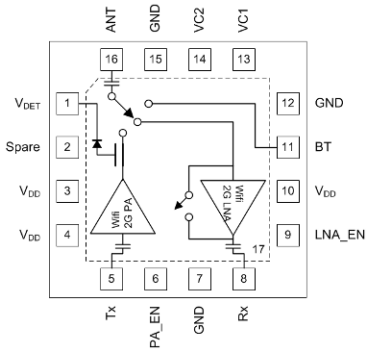
General Description

The TQF9046 is full WLAN front-end module in an ultra small 2.5mm x 2.5mm footprint package for 802.11b/g/n + BT applications. The TQF9046 contains 2.4GHz PA, directional detector, front-end SP3T switch, and LNA with bypass mode. The architecture and interface are optimized for next generation WLAN integration into handset devices.

The front-end module features CMOS compatible control voltages to facilitate ease of use. With its low power dissipation, the front-end Module contributes to the extended battery life of next generation WLAN solutions.

The front-end module is manufactured in TriQuint's high-reliability E/D pHEMT technology and is assembled in ultra thin profile 2.5mm x 2.5mm x 0.40mm QFN - 16 Pb-Free package.

Functional Block Diagram



Pin Configuration

Pin #	Symbol
7, 12, 15, 17	GND
1	Detector Pin for 2.4G TX
2	Spare
3	Vdd3, DC supply pin for 2.4GHz PA(final stage)
4	Vdd2, DC supply pin for 2.4GHz PA(1st stage) and PA logic and regulator
5	Tx
6	PA_Enable
8	Rx
9	LNA_Enable
10	Vdd1, DC supply pin for 2.4GHz LNA and Switch logic
11	Bluetooth port
13	Vcontrol 1
14	Vcontrol 2
16	ANT

Ordering Information

Part No.	Description
TQF9046	Packaged part

Standard T/R size = 2.5K pieces on a 7" reel.

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