TriQuint

TQP8080
5GHz WLAN Front End Module

Applications

- 802.11a/n/ac Wireless LAN Systems
- Set Top Box
- Access Points
- Telematics
- Gaming and Infotainment
- Portable Devices

16 Pin 2.5x2.5 mm QFN Package
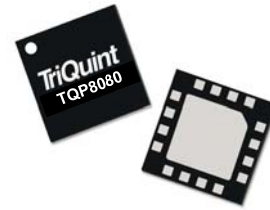
Product Features

- Fully Integrated, 802.11a/n/ac front-end module
- Internally matched input/output
- Integrated power detector
- Temperature Compensated Bias Network
- Typ. Pout=+18 dBm at EVM=1.8% (-35dB) (T=+25°C, V_{DD}=+5 V), 802.11ac/MCS9/HT40
- Typ. Pout=+20 dBm at EVM=3% (-30dB) (T=+25°C, V_{DD}=+5 V), 802.11n/MCS7
- Leadless 2.5 x 2.5 x 0.40 mm SMT Pb-Free

Functional Block Diagram

General Description

The TQP8080 is fully integrated WLAN front-end module for 802.11a/n/ac applications. The TQP8080 contains 5GHz PA, power detector, front-end SPDT switch, and LNA with bypass mode. The architecture and interface are optimized for next generation WLAN integration into High Throughput 802.11ac devices providing outstanding stable performance across temperature and voltage range.
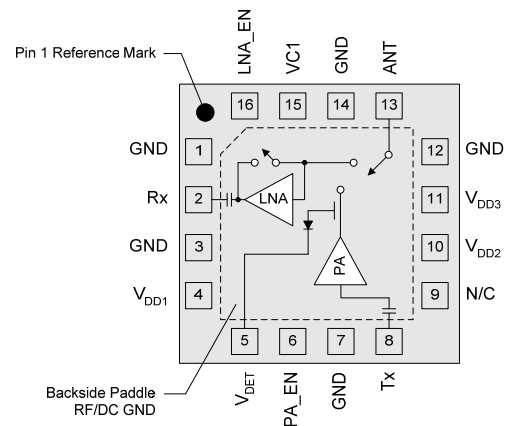
The front-end module features CMOS compatible control voltages to facilitate ease of use. With its low power dissipation, the front-end module contributes to the extended battery life and lower heat dissipation of next generation WLAN solutions.

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.

Pin Configuration

Pin No.	Label
1, 3, 7, 12, 14, 17	GND
2	Rx
4	V_{DD1}
5	Vdet
6	PA_EN
8	Tx
9	No connect
10	V_{DD2}
11	V_{DD3}
13	ANT
15	VC1
16	LNA_EN
Backside Paddle	RF/DC Ground

Ordering Information

Part No.	Description
TQP8080	WLAN Front End Module

Standard T/R size = 10,000 pcs. on a 13" reel