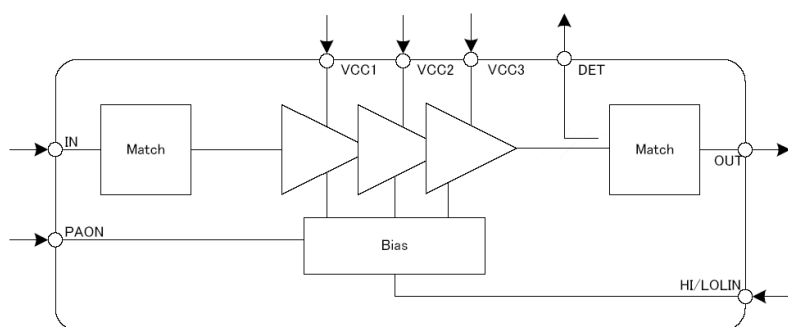


802.11a 5GHz WLAN Power Amplifier

Functional Block Diagram



Product Description

The TQP787011 is a fully integrated power amplifier in an ultra-small 3mm x 3mm footprint package for 802.11a applications. The TQP787011 contains 5GHz PA + power detector, and on-chip input and output matching. The architecture and interface are optimized for next generation WLAN devices. The PA features CMOS compatible control voltages to facilitate ease of use. With its low power dissipation, the PA contributes to the extended battery life of next generation WLAN solutions. The TQP787011 is manufactured in TriQuint's high-reliability E/D pHEMT technology and is assembled in a 3mm x 3mm x 0.45mm leadless package.

Electrical Specifications^{1, 2}

Parameter	Typ	Units
Frequency	5.5	GHz
Gain (High Lin.)	32.0	dB
EVM (High Lin, Pout=17dBm)	-31.0	dB
Current (High Lin, Pout=17dBm)	185	mA

Note 1: Vcc PA=3.3V, T=25C

Note 2: Test Conditions 802.11a 64QAM signal

Features

- Fully integrated 802.11a Power Amplifier
- Internally matched input/output
- Integrated power detector
- Temperature compensated bias network
- Single battery voltage of 2.95V to 3.6V
- High Linearity Performance: Pout = 17dBm, DEVM = -31dB, Icc = 185mA

Applications

- 802.11a WLAN applications
- WLAN systems
- Portable battery powered equipment

Package Style

- 3mm x 3mm x 0.45mm ETSLP-16 Lead-free, Halogen-free, MSL-1 package