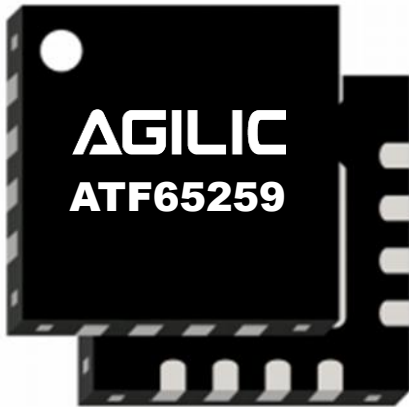


ATF65259-11

Wi-Fi 7 2.4 GHz Front End Module



16 Pin 3×3 mm QFN Package

Product Overview

The ATF65259-11 is an integrated front end module (FEM) designed for Wi-Fi 7 (802.11be) systems. The compact form factor and integrated matching minimizes layout area in the application.

Performance is focused on optimizing the PA for a 5V supply voltage that conserves power consumption while maintaining the highest linear output power and leading edge throughput.

Integrated die level filtering for 2nd and 3rd harmonics as well as 5-7 GHz rejection for DBDC operation are included. A RF coupler, as well as, broadrange power detector is provided for application feedback.

The ATF65259-11 integrates a 2 GHz power amplifier (PA), single pole two throw switch (SPDT) and bypassable low noise amplifier (LNA) into a single device.

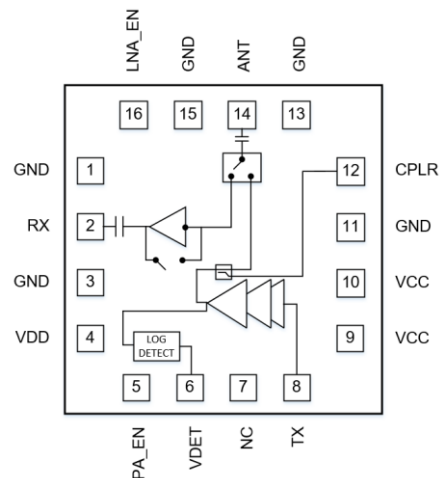
Key Features

- Frequency Range: 2.4 – 2.5 GHz
- Optimized for +5 V Operation
- Transmit gain: 34 dB
- Receive gain: 15 dB
- Noise Figure: 1.4 dB
- 15 dB Rx Gain & 8 dB Bypass Loss
- 15 dB 5-7 GHz Rejection on Rx Path
- Integrated RF Couple and DC Power Detector

Output power:

- MCS13, +21 dBm, -43 dB DEVM
- MCS11, +21 dBm, -43 dB DEVM
- MCS9, +23.5 dBm, -35 dB DEVM
- MCS0, +26 dBm, Spectral Mask Compliance
- Small 16-pin, 3 × 3 mm QFN package

Function Block Diagram



ATF65259-11 Block Diagram

Applications

- Access Points
- Wireless Routers
- Residential Gateways
- Customer Premise Equipment
- Internet of Things