PRODUCT SUMMARY

SKY85309-11: 2.4 GHz WLAN Front-End Module

Applications

- 802.11ac networking and personal computing systems
- PC cards, PCMCIA cards, mini-cards, and half mini-cards
- WLAN-enabled wireless video systems

Features

- Integrated high-performance 2.4 GHz PA, LNA with bypass, and T/R switch
- Fully matched input and output
- Integrated power detector and directional coupler
- Transmit gain: 32 dB
- Receive gain: 13 dB
- Output power: +22 dBm @ 1.8% EVM, HT40, MCS9, 5 V
- Output power: +24 dBm @ 3% EVM, HT40, MCS7, 5 V
- Small QFN (24-pin, 3 x 5 mm) package (MSL3, 260 °C per JEDEC J-STD-020)

Skyworks Green™ products are compliant with all applicable legislation and are halogen-free. For additional information, refer to *Skyworks Definition of Green™*, document number SQ04-0074.

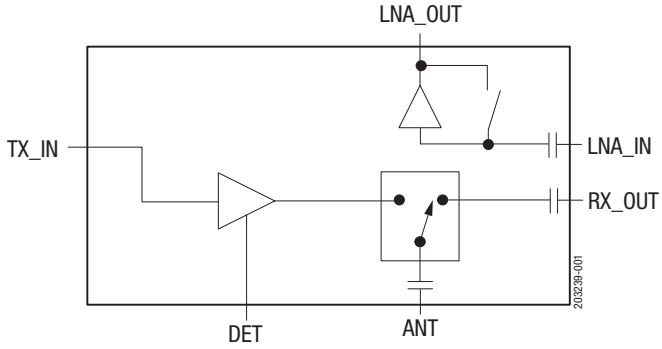


Figure 1. SKY85309-11 Block Diagram

Description

The SKY85309-11 is a highly integrated, 2.4 GHz front-end module (FEM) incorporating a 2.4 GHz single-pole, double-throw (SPDT) transmit/receive (T/R) switch, a 2.4 GHz low-noise amplifier (LNA) with bypass, and a 2.4 GHz power amplifier (PA) intended for high-power 802.11ac applications and systems.

The LNA and PA disable functions ensure low leakage current in off mode. An integrated power detector is included to provide closed-loop power control within the system.

The device is provided in a compact, 24-pin 3 x 5 mm Quad Flat No-Lead (QFN) package. A functional block diagram is shown in Figure 1.

Ordering Information

Part Number	Product Description	Evaluation Board Part Number
SKY85309-11	2.4 GHz WLAN Front-End Module	SKY85309-11EK1

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