

#### PRODUCT SUMMARY

# SKY85309-11: 2 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 GHz PA, LNA with bypass, and T/R switch
- Fully-matched input and output
- Integrated power detector and directional coupler
- Transmit gain: 32 dBReceive gain: 12 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)



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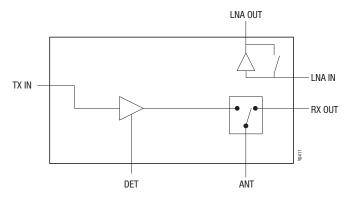


Figure 1. SKY85309-11 Block Diagram

## **Description**

The SKY85309-11 is a highly integrated, 2 GHz front-end module (FEM) incorporating a 2 GHz single-pole, double-throw (SPDT) transmit/receive (T/R) switch, a 2 GHz low-noise amplifier (LNA) with bypass, and a 2 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  $\times$  5 mm Quad Flat No-Lead (QFN) package. A functional block diagram is shown in Figure 1.

#### **Ordering Information**

| Model Name                               | Manufacturing Part Number | Evaluation Board Part Number |
|--|---------------------------|------------------------------|
| SKY85309-11: 2 GHz WLAN Front-End Module | SKY85309-11               | SKY85309-EK1 or -EK2         |

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