

PRODUCT SUMMARY

SKY85312-11: 2.4 GHz, 802.11ac Front-End Module

Applications

- Wi-Fi-enabled handsets, tablets, and mobile/portable systems
- System-in-Package (SIP) modules for embedded systems
- 802.11n/ac smartphones and tablets

Features

- Integrated high-performance 2.4 GHz PA, two SPDT switches, LNA with bypass, and one SP3T switch
- Integrated positive-slope power detector
- Transmit gain: 28 dB
- Receive gain: 14 dB
- Output power: +19.5 dBm, MCS7, HT20
- Output power: +19 dBm, MCS9, HT20
- Small QFN (16-pin, 2.3 x 2.3 x 0.33 mm) package (MSL1, 260 °C per JEDEC J-STD-020)
- For RoHS and other product compliance information, see the [Skyworks Certificate of Conformance](#)

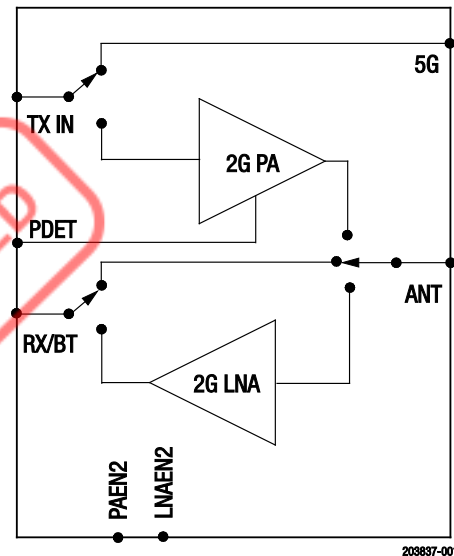


Figure 1. SKY85312-11 Block Diagram

Description

The SKY85312-11 is a complete 802.11b/g/n/ac WLAN RF front-end module (FEM) with a port suitable for a Bluetooth® signal. The device provides all the functionality of a fully matched power amplifier (PA), power detector, harmonic filter, low-noise amplifier (LNA), single-pole, double-throw (SPDT) switches, and a single-pole, triple-throw (SP3T) switch.

The SKY85312-11 provides a complete 2.4 GHz WLAN RF solution from the output of the transceiver to the antenna, and from the antenna to the input of the transceiver. The LNA increases the receive sensitivity of embedded solutions to improve range or to overcome the insertion loss of cellular filters (often included for mobile applications).

The SKY85312-11 also includes a transmitter power detector with 20 dB of dynamic range, and a digital enable control for transmitter power ramp on/off control.

The device is provided in a compact, 16-pin 2.3 x 2.3 mm Quad Flat No-Lead (QFN) package. A functional block diagram is shown in Figure 1.

Ordering Information

Product Description	Product Part Number	Evaluation Board Part Number
SKY85312-11: 2.4 GHz, 802.11ac Front End Module	SKY85312-11	SKY85312-11EK1



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