

#### PRODUCT SUMMARY

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

### **Applications**

- WiFi-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 dBReceive 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)



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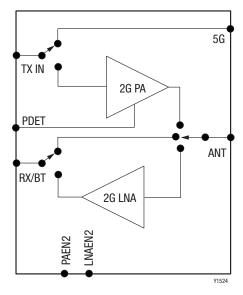


Figure 1. SKY85312-11 Block Diagram

## **Description**

The SKY85312-11 is a complete 802.11b/g/n/ac WLAN RF frontend module (FEM) with a Bluetooth® port. 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**

Model Name	Manufacturing Part Number	Evaluation Board Part Number
SKY85312-11: 2.4 GHz, 802.11ac Front End Module	SKY85312-11	SKY85312-11-EVB

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