

**PRODUCT SUMMARY**

# SKY85330-21: 2.4 GHz, 1024 QAM WLAN Front-End Module

## Applications

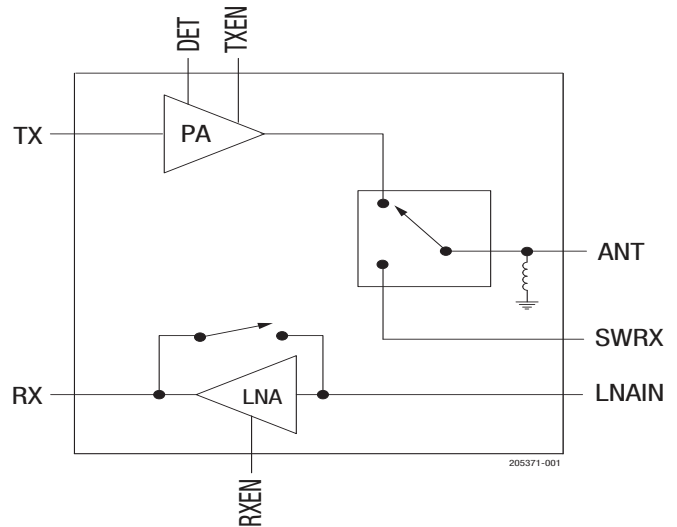
- 802.11ax set-top boxes, networking, and personal computer systems
- PC cards, PCMCIA cards, mini-cards, and half mini-cards
- WLAN enabled wireless video systems

## Features

- Integrated high-performance 2.4 GHz PA, LNA with bypass, and T/R switch
- Fully-matched input and output
- LNA with integrated bypass mode
- Integrated positive slope power detector
- Transmit gain: 32 dB
- Receive gain: 16 dB
- Small QFN (16-pin, 2.5 x 2.5 mm) package (MSL1, 260 °C per JEDEC J-STD-020)



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**Figure 1. SKY85330-21 Block Diagram**

## Description

The SKY85330-21 is a complete 802.11b/g/n/ac/ax 1024 QAM WLAN RF front-end module (FEM). The device provides all the functionality of a fully matched power amplifier (PA), power detector, low-noise amplifier (LNA), and single-pole, double-throw (SPDT) switch.

The SKY85330-21 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 SKY85330-21 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 an ultra-compact, 16-pin 2.5 x 2.5 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
SKY85330-21	2.4 GHz, 1024 QAM WLAN Front-End Module	SKY85330-21EK1

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