

**PRODUCT SUMMARY**

# SKY85717-21: 5 GHz, 802.11ac Front-End Module

**Applications**

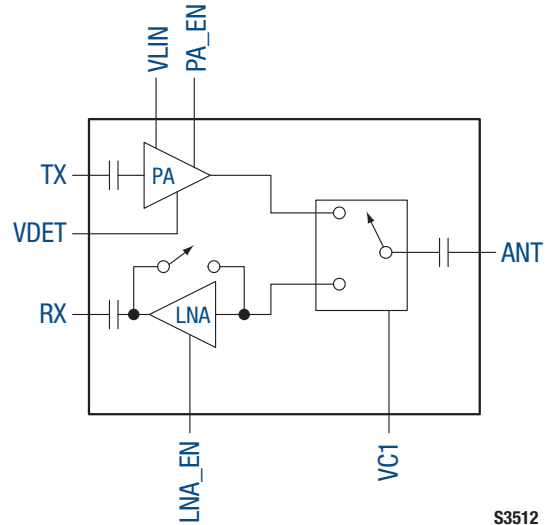
- 802.11ac set-top boxes, networking, and personal computer systems
- PC cards, PCMCIA cards, mini-cards, and half mini-cards
- WLAN enabled wireless video systems

**Features**

- Integrated high-performance 5 GHz PA, LNA with bypass, and SPDT
- Fully matched input and output
- Integrated, positive slope power detector
- Transmit loopback mode
- Transmit gain: 28 dB
- Receive gain: 12 dB
- Output power: +19.5 dBm, MCS7, HT40
- Output power: +18.5 dBm @ 1.8% EVM, MCS9, HT80
- High-linearity and high-efficiency modes
- Direct connection to battery with 5 V nominal supply voltage
- Small, QFN (16-pin, 2.5 x 2.5 x 0.4 mm) package (MSL1, 260 °C per JEDEC J-STD-020)



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**Figure 1. SKY85717-21 Block Diagram**

**Description**

The SKY85717-21 is a highly integrated, 5 GHz front-end module (FEM) incorporating a 5 GHz single-pole, double-throw (SPDT) transmit/receive (T/R) switch, a 5 GHz low-noise amplifier (LNA) with bypass, and a 5 GHz power amplifier (PA) intended for mobile/portable 802.11ac applications and systems.

An enable/disable function is included that allows power savings during off mode. An integrated power detector with 20 dB of dynamic range is included to provide closed-loop power control within the system.

The device is provided in a compact, 16-pin 2.5 x 2.5 x 0.4 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
SKY85717-21: 5 GHz, 802.11ac Front-End Module	SKY85717-21	SKY85717-21-EVB

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