

**PRODUCT SUMMARY**

# SKY85742-11: 5 GHz, 802.11n/ac Front-End Module

**Applications**

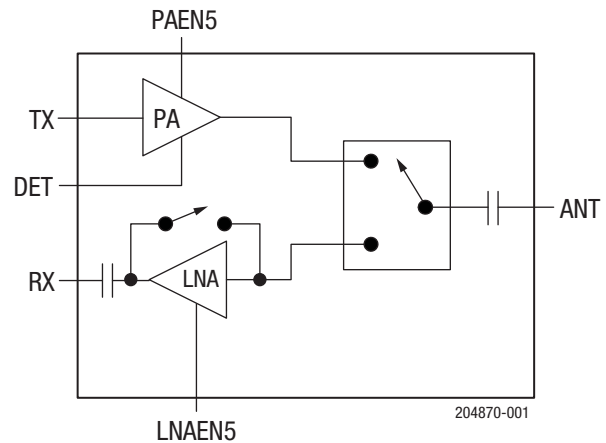
- 802.11ac set-top boxes, networking, and personal computer systems
- PC cards, PCMCIA cards, mini-cards, and half mini-cards
- WLAN enabled wireless video systems

**Features**

- Fully matched, with integrated 5 GHz PA, LNA with bypass mode, and SPDT switch
- Integrated, positive slope logarithmic power detector. Detector output reverts to high impedance when not in use.
- Transmit gain: 29 dB
- Receive gain: 13 dB
- Output power: +18.5 dBm, MCS7, HT20
- Output power: +17.5 dBm, MCS9, VHT80
- Small QFN (16-pin, 2.3 × 2.3 × 0.33 mm) package (MSL1, 260 °C per JEDEC J-STD-020)



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**Figure 1. SKY85742-11 Block Diagram**

**Description**

The SKY85742-11 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 802.11n/ac applications and systems.

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

The device is provided in a compact, 16-pin, 2.3 × 2.3 × 0.33 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
SKY85742-11: 5 GHz, 802.11n/ac Front-End Module	SKY85742-11	SKY85742-11EK1

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