

**PRODUCT SUMMARY**

# SKY85716-11: 5 GHz, 802.11n/ac Front-End Module

**Applications**

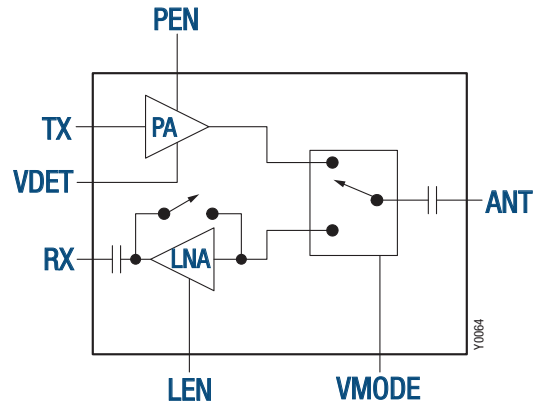
- WiFi-enabled handsets, tablets, and mobile/portable systems
- System-in-Package (SIP) modules for embedded systems
- 802.11n/ac smartphones and tablets

**Features**

- Fully matched, with integrated 5 GHz PA with harmonic, LNA with bypass mode and SPDT switch
- Integrated, positive slope logarithmic power detector. Detector output reverts to high impedance when not in use.
- High-power and Power-save modes
- Transmit gain: 30 dB
- Receive gain: 11 dB
- Output power: +17.5 dBm, MCS7, HT20
- Output power: +16 dBm, MCS9, HT80
- 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. SKY85716-11 Block Diagram**

**Description**

The SKY85716-11 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 x 2.3 x 0.33 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
SKY85716-11: 5 GHz, 802.11n/ac Front-End Module	SKY85716-11	SKY85716-11-EVB

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