

## PRODUCT SUMMARY

# SKY85747-11: 5 GHz High-Power WLAN Front-End Module

## Applications

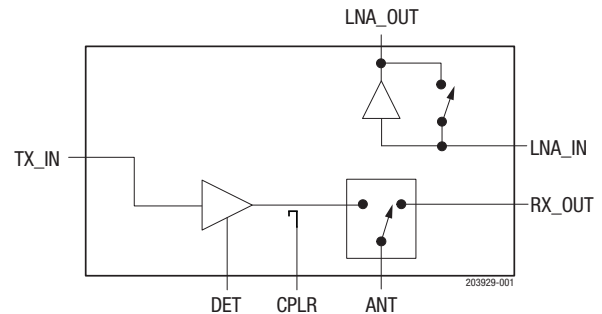
- 802.11ax networking systems
- WLAN-enabled wireless video streaming systems

## Features

- Integrated high-performance 5 GHz PA, LNA with bypass, and T/R switch
- Fully matched input and output
- Integrated logarithmic power detector and directional coupler
- Transmit gain: 32 dB typical
- Receive gain: > 15 dB
- Output power: +18.5 dBm typical, -43 dB DEVM, HT80, MCS11, 5 V
- Integrated, temperature compensated log detector
- Highly sensitive, jammer-tolerant LNA
- Small LGA (24-pin, 3 x 5 mm) package (MSL3, 260 °C per JEDEC J-STD-020)



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**Figure 1. SKY85747-11 Block Diagram**

## Description

The SKY85747-11 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 high-gain low-noise amplifier (LNA) with bypass, and a 5 GHz power amplifier (PA) intended for high-power 802.11ax applications and systems.

The LNA and PA disable functions ensure low leakage current in the off mode. An integrated logarithmic power detector is included to provide closed-loop power control over 25 dB of dynamic range.

The device is provided in a compact, 24-pin 3 x 5 mm Land Grid Array (LGA) package, which may reduce the front-end board space by more than 50 percent. A functional block diagram is shown in Figure 1.

## Ordering Information

Model Name	Manufacturing Part Number	Evaluation Board Part Number
SKY85747-11: 5 GHz WLAN Front-End Module	SKY85747-11	SKY85747-11-EK1

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