PRODUCT SUMMARY

SKY85746-11: 5 GHz 802.11ax Ultra-Linear WLAN Front-End Module with Integrated Log Detector

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 802.11ax 1024 QAM, 5 GHz PA, LNA with bypass, and T/R switch
- Fully-matched input and output
- Integrated logarithmic power detector
- Transmit gain: 32 dB
- Receive gain: 13 dB
- Output power:
 - MCS11, +18 dBm, -43 dB DEVM
 - MCS11, +20 dBm, -40 dB DEVM
 - MCS9, +23 dBm, -35 dB DEVM
 - MCS7, +24 dBm, -30 dB DEVM
- Small QFN (16-pin, 2.5 x 2.5 mm) package (MSL1, 260 °C per JEDEC J-STD-020)



Skyworks Green[™] products are compliant with all applicable legislation and are halogen-free. For additional information, refer to *Skyworks Definition of Green*[™], document number SQ04–0074.



Figure 1. SKY85746-11 Block Diagram

Description

The SKY85746-11 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 802.11ax 1024 QAM applications and systems.

The LNA and PA disable functions ensure low leakage current in off mode. An integrated logarithmic power detector is included to provide closed-loop power control within the system.

The device is provided in a compact, 16-pin $2.5 \times 2.5 \text{ mm}$ 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
SKY85746-11	5 GHz WLAN Front-End Module	SKY85746-11EK1