



SKYWORKS®

PRODUCT SUMMARY


# SKY66409-11: 2.4 GHz Front-End Module for Zigbee®/Thread/Bluetooth® Applications

## Applications

- Wearables
- Trackers
- Beacons
- Sensor networks
- Home automation
- Internet of Things (IoT) devices

## Features

- Adjustable gain, output power, and current consumption
- Integrated PA with +13 dBm output power, up to 15 dBm (max). Bluetooth® signal EDR output power: +10.5 dBm
- Integrated LNA (2.5 dB noise figure typ.) and bypass path
- Single-ended transmit/receive interface
- Fast switch on/off time: < 800 ns
- Supply range: 1.8 V to 3.6 V
- Sleep mode current: < 1 uA typical
- Small (1.25 mm x 1.7 mm x 0.35 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.

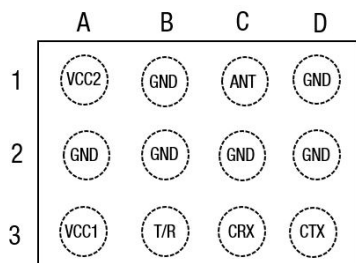


Figure 1. SKY66409-11 Pinout (Top View)

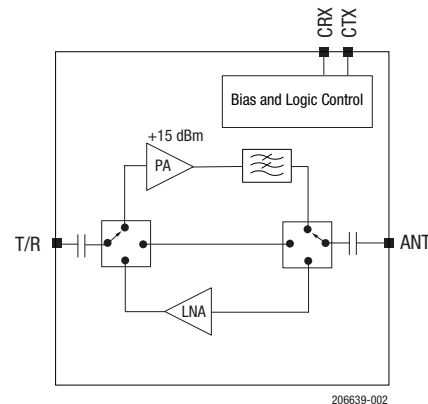


Figure 2. SKY66409-11 Block Diagram

## Description

The SKY66409-11 is a high-performance, fully integrated RF front-end module (FEM) designed for Zigbee®, Thread, and Bluetooth® (including low energy) applications.

The SKY66409-11 is designed for ease of use and maximum flexibility. The device provides a power amplifier, low-noise amplifier, low-loss bypass path, transmit/receive switches, and digital controls compatible with 1.2 V to 3.6 V CMOS levels. The RF blocks operate over a wide supply voltage range from 1.8 V to 3.6 V that allows the SKY66409-11 to be used in battery powered applications over a wide spectrum of the battery discharge curve.

The pin configuration and package is shown in Figure 1. A functional block diagram is shown in Figure 2. The SKY66409-11 is provided in a 1.25 mm x 1.7 mm x 0.35 mm, 12-pin Chip Scale Package (CSP).

Ordering Information

Part Number	Product Description	Evaluation Board Part Number
SKY66409-11	2.4 GHz Front-End Module for Zigbee®/Thread/Bluetooth® Applications	SKY66409-11EK1

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