

PRODUCT SUMMARY

SKY66109-11: 2.4 GHz ZigBee®/Smart Energy Front-End Module

Applications

- Smart meters
- In-home appliances
- Smart thermostats

Features

- Integrated PA with up to +24 dBm output power
- Integrated LNA with programmable bypass
- Integrated antenna switching with transmit and receive diversity function
- Low Noise Figure: 2 dB typical
- Differential transmit/receive interface with integrated baluns
- Fast switch on/off time: <800 ns
- Supply range: 2.0 V to 3.6 V
- Sleep mode current: 0.05 μ A typical
- No bias resistor is required
- Small MCM (20-pin, 3 x 4 x 0.9 mm) package, NiPdAu-plated (MSL3, 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.

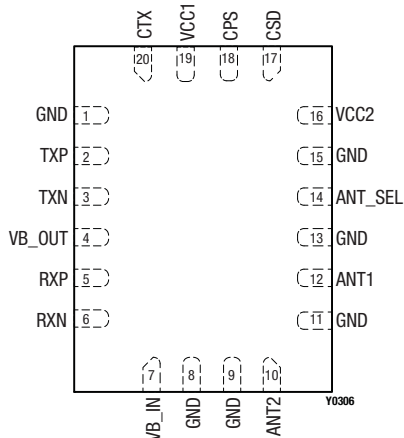


Figure 1. SKY66109-11 Pinout – 20-Pin MCM (Top View)

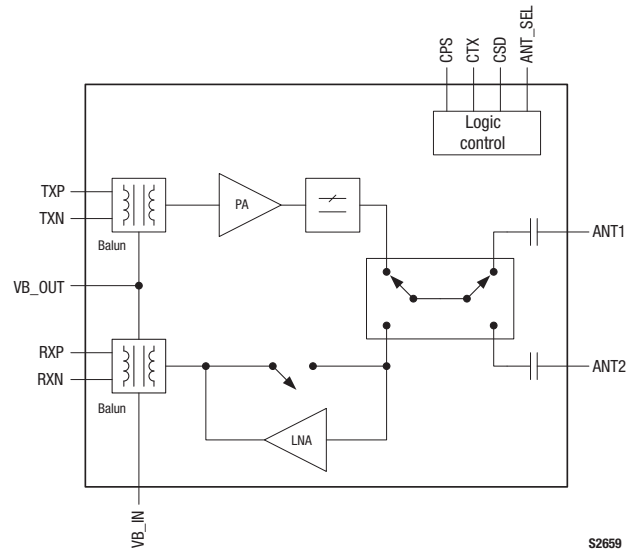


Figure 2. SKY66109-11 Block Diagram

Description

The SKY66109-11 is a high-performance, fully integrated RF Front-End Module (FEM) designed for ZigBee®/Smart Energy applications.

The SKY66109-11 is designed for ease of use and maximum flexibility. The device provides integrated and fully matched input baluns, an integrated interstage matching and harmonic filter, and digital controls compatible with 1.6 to 3.6 V CMOS levels.

The RF blocks operate over a wide supply voltage range from 2.0 V to 3.6 V that allows the SKY66109-11 to be used in battery powered applications over a wide spectrum of the battery discharge curve.

The SKY66109-11 is provided in a small, 20-pin, 3 x 4 mm Multi-Chip Module (MCM) package. The pin configuration and package are shown in Figure 1. A functional block diagram is shown in Figure 2.

Ordering Information

Model Name	Manufacturing Part Number	Evaluation Board Part Number
SKY66109-11	SKY66109-11-R	SKY66109-11-EK1

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