SKY66408-21: 2.4 GHz Front-End Module for Zigbee®/Thread/Bluetooth® Signal Applications

Applications

- In-home appliances
- Smart thermostats
- Internet of Things (IoT) devices
- Smart lighting
- Sensors
- Range extenders
- Wireless audio

Features

- Fully programmable Pout via I2C interface in 0.7 dB steps
- Integrated PA with up to +21 dBm output power
- Integrated LNA and bypass path
- Integrated antenna diversity switching for all modes
- Single-ended transmit/receive interface
- Supply range: 1.7 V to 3.6 V
- Sleep mode current: < 3 µA typical
- No external bias resistor is required
- Small MCM (24-pin, 3.0 mm x 3.0 mm x 0.6 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.
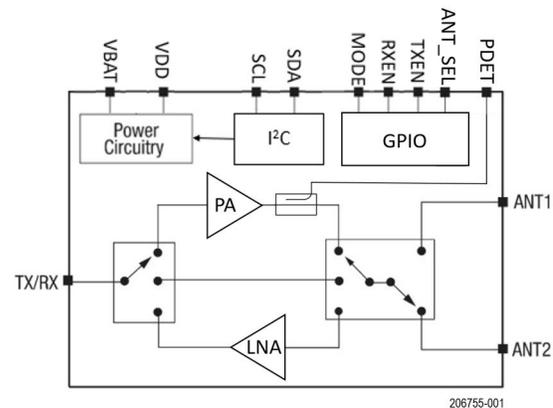

Figure 1. SKY66408-21 Block Diagram

Description

The SKY66408-21 is a high-performance, fully integrated RF front-end module (FEM) designed for Zigbee® technology, Thread, and Bluetooth® signal (including Low Energy) applications.

The SKY66408-21 is designed for ease of use and maximum flexibility. The device provides an integrated inter-stage matching and harmonic filter, 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 1.7 V to 3.6 V that allows the SKY66408-21 to be used in battery powered applications over a wide spectrum of the battery discharge curve.

A functional block diagram is shown in Figure 1. The SKY66408-21 is provided in a small, 24-pin, 3.0 mm x 3.0 mm Multi-Chip Module (MCM) package.

Ordering Information

Part Number	Part Description	Evaluation Board Part Number
SKY66408-21	2.4 GHz Front-End Module for Zigbee®/Thread/Bluetooth® Signal Applications	SKY66408-21EK1

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