PRODUCT SUMMARY

SKY65404-21: 5 GHz Low Noise Amplifier

Applications

- 802.11a WLANs
- 5 GHz ISM radios
- SmartPhones
- Notebooks, netbooks, tablets
- Access points, routers, gateways
- Wireless video systems

Features

- Ultra-low Noise Figure: 1.0 dB
- 4.9 GHz to 5.9 GHz operation
- Enable/disable mode
- High IIP3: +7 dBm
- High gain: 13 dB
- 2.8 to 5.0 V single-supply operation
- QFN (6-pin, 1.5 x 1.5 mm) package (MSL3, 260 °C per JEDEC J-STD-020)

Description

The SKY65404-21 is an ultra Low-Noise Amplifier (LNA) intended for 5 GHz wireless receiver applications. Its industry-leading Noise Figure (NF), together with high linearity, makes it ideal as a first-stage LNA in 802.11a Wireless Local Area Network (WLAN) radios.

Operating with a single supply voltage, the SKY65404-21 consumes only 10 mA of current. The device includes a shutdown mode to save power when the receiver is inactive.

The tiny package footprint of the SKY65404-21, requiring only four external components, enables the industry’s smallest PCB area needed to implement a 5 GHz LNA.

The device package and pinout for the 6-pin Quad Flat No-Lead (QFN) are shown in Figure 1 and a block diagram of the SKY65404-21 is shown in Figure 2.

Skyworks offers lead (Pb)-free RoHS (Restriction of Hazardous Substances) compliant packaging.

Figure 1. SKY65404-21 Pinout – 6-Pin QFN Package
(Top View)

Figure 2. SKY65404-21 LNA Block Diagram
Ordering Information

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<th>Manufacturing Part Number</th>
<th>Evaluation Kit Part Number</th>
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<tr>
<td>SKY65404-21 LNA</td>
<td>SKY65404-21</td>
<td>EN30-D905-001_V1</td>
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