

**PRODUCT SUMMARY**

# SKY65404-21: 5 GHz Low Noise Amplifier

## Applications

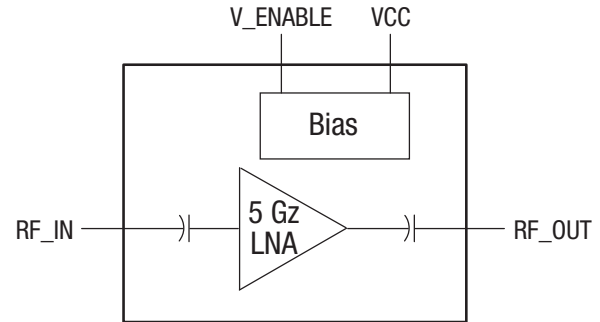
- 802.11a WLANs
- 5 GHz ISM radios
- SmartPhones
- Notebooks, netbooks, tablets
- Access points, routers, gateways
- Wireless video systems

## 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 (MSL1, 260 °C per JEDEC J-STD-020)



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



S1352

**Figure 1. SKY65404-21 LNA Block Diagram**

## 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.

A block diagram of the SKY65404-21 is shown in Figure 1.

## Ordering Information

Model Name	Manufacturing Part Number	Evaluation Kit Part Number
SKY65404-21 LNA	SKY65404-21	EN30-D905-001_V1

Copyright © 2009, 2010 Skyworks Solutions, Inc. All Rights Reserved.

Information in this document is provided in connection with Skyworks Solutions, Inc. ("Skyworks") products or services. These materials, including the information contained herein, are provided by Skyworks as a service to its customers and may be used for informational purposes only by the customer. Skyworks assumes no responsibility for errors or omissions in these materials or the information contained herein. Skyworks may change its documentation, products, services, specifications or product descriptions at any time, without notice. Skyworks makes no commitment to update the materials or information and shall have no responsibility whatsoever for conflicts, incompatibilities, or other difficulties arising from any future changes.

No license, whether express, implied, by estoppel or otherwise, is granted to any intellectual property rights by this document. Skyworks assumes no liability for any materials, products or information provided hereunder, including the sale, distribution, reproduction or use of Skyworks products, information or materials, except as may be provided in Skyworks Terms and Conditions of Sale.

THE MATERIALS, PRODUCTS AND INFORMATION ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, WHETHER EXPRESS, IMPLIED, STATUTORY, OR OTHERWISE, INCLUDING FITNESS FOR A PARTICULAR PURPOSE OR USE, MERCHANTABILITY, PERFORMANCE, QUALITY OR NON-INFRINGEMENT OF ANY INTELLECTUAL PROPERTY RIGHT; ALL SUCH WARRANTIES ARE HEREBY EXPRESSLY DISCLAIMED. SKYWORKS DOES NOT WARRANT THE ACCURACY OR COMPLETENESS OF THE INFORMATION, TEXT, GRAPHICS OR OTHER ITEMS CONTAINED WITHIN THESE MATERIALS. SKYWORKS SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING BUT NOT LIMITED TO ANY SPECIAL, INDIRECT, INCIDENTAL, STATUTORY, OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION, LOST REVENUES OR LOST PROFITS THAT MAY RESULT FROM THE USE OF THE MATERIALS OR INFORMATION, WHETHER OR NOT THE RECIPIENT OF MATERIALS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Skyworks products are not intended for use in medical, lifesaving or life-sustaining applications, or other equipment in which the failure of the Skyworks products could lead to personal injury, death, physical or environmental damage. Skyworks customers using or selling Skyworks products for use in such applications do so at their own risk and agree to fully indemnify Skyworks for any damages resulting from such improper use or sale.

Customers are responsible for their products and applications using Skyworks products, which may deviate from published specifications as a result of design defects, errors, or operation of products outside of published parameters or design specifications. Customers should include design and operating safeguards to minimize these and other risks. Skyworks assumes no liability for applications assistance, customer product design, or damage to any equipment resulting from the use of Skyworks products outside of stated published specifications or parameters.

Skyworks, the Skyworks symbol, and "Breakthrough Simplicity" are trademarks or registered trademarks of Skyworks Solutions, Inc., in the United States and other countries. Third-party brands and names are for identification purposes only, and are the property of their respective owners. Additional information, including relevant terms and conditions, posted at [www.skyworksinc.com](http://www.skyworksinc.com), are incorporated by reference.