

#### **PRODUCT SUMMARY**

# SKY85310-21: 2.4 GHz, 256 QAM WLAN/Bluetooth® Front-End Module

### **Applications**

- 802.11ac set-top boxes, networking, and personal computer systems
- PC cards, PCMCIA cards, mini-cards, and half mini-cards
- WLAN enabled wireless video systems

### **Features**

- Integrated high-performance 2.4 GHz PA, harmonic filter, LNA with bypass, and T/R switch
- Fully-matched input and output
- LNA with integrated bypass mode
- High performance SP3T switch to support Bluetooth/WiFi functions
- Integrated positive slope power detector
- Transmit gain: 30 dB
- Receive gain: 12 dB
- Small QFN (16-pin, 3 x 3 mm) package (MSL1, 260 °C per JEDEC J-STD-020)



Skyworks Green<sup>™</sup> products are compliant with all applicable legislation and are halogen-free. For additional information, refer to *Skyworks Definition of Green<sup>™</sup>*, document number SQ04–0074.

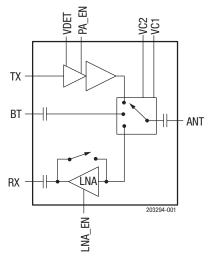


Figure 1. SKY85310-21 Block Diagram

#### **Description**

The SKY85310-21 is a complete 802.11b/g/n 256 QAM WLAN RF front-end module (FEM) with a Bluetooth port. The device provides all the functionality of a fully matched power amplifier (PA), power detector, low-noise amplifier (LNA), and single-pole, triple-throw (SP3T) switch.

The SKY85310-21 provides a complete 2.4 GHz WLAN RF solution from the output of the transceiver to the antenna, and from the antenna to the input of the transceiver. The LNA increases the receive sensitivity of embedded solutions to improve range or to overcome the insertion loss of cellular filters (often included for mobile applications).

The SKY85310-21 also includes a transmitter power detector with 20 dB of dynamic range, and a digital enable control for transmitter power ramp on/off control.

The device is provided in an ultra-compact, 16-pin  $3 \times 3 \text{ mm}$ Quad Flat No-Lead (QFN) package. A functional block diagram is shown in Figure 1..

#### **Ordering Information**

Model Name	Manufacturing Part Number	Evaluation Board Part Number
SKY85310-21: 2.4 GHz Front-End Module	SKY85310-21	SKY85310-21EK1

Copyright © 2017 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 and the Skyworks symbol 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, are incorporated by reference.

## **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for RF Front End category:

Click to view products by Skyworks manufacturer:

Other Similar products are found below :

SE2622L-R BGM1032N7E6327XUSA1 LX5586LL SKY85703-11 LX5586HLL LX5586ALL SKY66111-21 SKY65728-11 SKY68000-31 SKY85308-11 SKY85302-11 SKY65724-11 ADTR1107ACCZ LMP91051MTX/NOPB SE5501L-R QPF4519SR SE5503A-R ADA8282WBCPZ ADRF5545ABCPZN ADRF5545ABCPZN-R7 AD8283WBCPZ AD8284WCSVZ ADRF5547BCPZN ADRF5547BCPZN-R7 ADRF5549BCPZN ADRF5549BCPZN-R7 HV7350K6-G SE5516A-R MCP2030-I/SL MAX2009ETI+ MAX2078CTK+ MAX2335ETI+ MAX2678GTB/V+T MD2131K7-G MD2134K7-G RFFM6903TR13 HV7351K6-G MCP2035-I/ST SE2614BT-R SE2438T-R SST12LF02-QXCE SST12LF09-Q3CE RFX2401C RFX2402E SKY85201-11 RFFM4591FTR7 RFFM8211TR7 RFFM4293TR7 RFFM4203TR7 RFFM5765QTR7