

## PRODUCT SUMMARY

# SKY58277-11 Sky5® Front-End Module for 4G and 5G Applications

## Applications

- Multi-band 4G and 5G mobile devices
- Handsets, data cards, Machine-to-Machine (M2M)

## Features

- Supports bands : 4G/5G NR
  - B42, B43, B48, n48, n77 and n78
- Full Power average power tracking (APT) support without digital predistortion (DPD)
- UHB S-PAD covering B42, B43, B48, n48, n77 and n78
- High Performance APT PA Core
- Supports Fast SRS Hopping timing requirements
- Low leakage current in power-down mode
- Integrated TX-RX switch
- Integrated SRS switch
- Two Integrated LNA, filter and switch paths support both primary and MIMO receive within the same module
- MIPI v2.1 compliant 52MHz RFFE<sup>SM</sup> bus
- MIPI v3.0 compliant RX function support
- Small, low profile package
  - 5.0 mm x 3.0 mm x 0.7 mm Max.
  - 30-pad configuration
  - LGA with conformal shielding



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.

## Description

The SKY58277-11 Front-End Module (FEM) for LTE and NR is a new addition to the Skyworks Sky5 portfolio of 5G technology products. The device is packaged in a single 5.0 mm x 3.0 mm x 0.7 mm (max) form factor. This versatile and fully matched FEM supports ultra-high band 4G/5G and LTE/NR applications.

The 30-pad surface mount (SMT) module consists of PA blocks, input and output ports matched to 50 ohms, a MIPI standard digital control block, single-ended filter, antenna and Tx-Rx switches, and low noise amplifier (LNA).

Utilizing an enhanced architecture, the SKY58277-11 covers multiple bands and meets the spectral linearity requirements of CP-OFDM and DFTS-OFDM modulations with up to 100 MHz bandwidth and up to 273 resource block allocations. Output power is controlled by varying input power and adjusting VCC to maximize efficiency. Extremely low leakage current maximizes handset stand-by time.

**Ordering Information**

Part Number	Part Description	Evaluation Board Part Number
SKY58277-11	SKY58277-11 Sky5 Front-End Module	SKY58277-11-EK1

Copyright © 2021, 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 Sky5<sup>®</sup>, are trademarks or registered trademarks of Skyworks Solutions, Inc. or its subsidiaries, 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.