



## PRODUCT SUMMARY

# SKY5A5011: Sky5® LB/MB/HB Diversity Receive Module

## Applications

- 4G/5G automotive and telematics Network Attached Device (NAD)

## Features

- RX diversity front-end module (FEM) with integrated filter bands:
  - B26/5/18/19: 859 to 894 MHz
  - B14: 758 to 768 MHz
  - B12/13: 729 to 756 MHz
  - B29: 717 to 728 MHz
  - B71: 617 to 652 MHz
  - B20-28F: 758 to 821 MHz
  - B3: 1805 to 1880 MHz
  - B25 (2) + B70: 1930 to 2020 MHz
  - B66 (1/4): 2110 to 2200 MHz
  - B30: 2350 to 2360 MHz
  - B40: 2300 to 2400 MHz
  - B41 (38): 2496 to 2690 MHz
  - B7: 2620 to 2690 MHz
- Low insertion loss
- Integrated downlink carrier aggregation (CA) support for:
  - CA: 1+3+7, 1+3+40, 1+3+41, 7+40, 40+41, 25+66+41, 25+66+7, 1+3+7+40, B2+66+30RX, B25+66+B30RX, L+M/HB CA
  - 2CA MIMO: 1-3, 1-7, 3-7, 1-40, 3-40, 1-41, 3-41, 25-66, 2-7, 66-7, 25-41, 6-41
- High-performance variable gain low noise amplifiers (LNAs)
- High-performance multi-on, N-plexing technology enabling superior non-CA and CA performance
- Automotive support:
  - AEC-Q104 Grade 2
  - Production Part Approval Process (PPAP)
  - IMDS material declaration
- One MHB RX port (MHB\_RX1) and one MHB TRX port (MHB\_TRX1)
- Integrated package shielding

## Features

- Auxiliary LNA ports:
  - LNA\_AUX\_MHB1: 1805 to 2690 MHz
  - LNA\_AUX\_MHB2: 1805 to 2400 MHz
  - LNA\_AUX\_MHB3: 1805 to 2690 MHz
  - LNA\_AUX\_MHB4: 1805 to 2690 MHz
  - LNA\_AUX\_MHB5: 1805 to 2400 MHz
  - LNA\_AUX\_MHB6: 1805 to 2400 MHz
- Integrated MIPI RFFE v3.0 interface
- Small, low profile package:
  - 3.5 x 3.6 x 0.7 mm (max.)
  - 56-pad configuration
- Lead (Pb)-free MSL3 at 260 °C per JEDEC J-STD-020
- For RoHS and other product compliance information, see the [Skyworks Certificate of Conformance](#)

## Description

The SKY5A5011 is a low-band (LB)/mid-band (MB)/high-band (HB) diversity receive module for automotive and telematics NAD. The device supports cellular diversity receiver functions. The SKY5A5011 is part of our Sky5® product portfolio.

The diversity module supports all key 2- and 3-carrier aggregation band combinations. High-performance, multi-gain mode LNAs are integrated enabling compatibility to next generation LNA-less LTE transceivers.

The SKY5A5011 is compatible with 3GPP GSM, WCDMA, LTE, LTE-A and 5G standards and includes filters for the following service bands: B26/5/18/19, B14, B12/13, B29, B71, B3, B25(2), B66(1/4), B40, B30, B41(38), and B7.

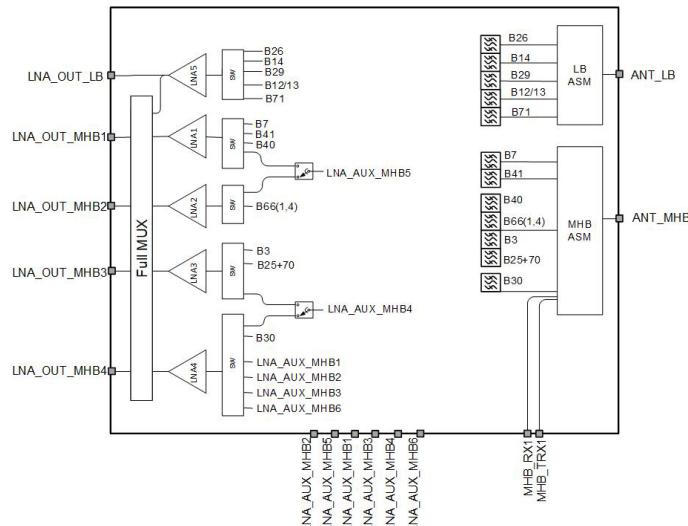


Figure 1. Functional Block Diagram

## Ordering Information

Part Number	Part Description	Evaluation Board Part Number
SKY5A5011	LB/MB/HB Diversity Receive Module	SKY5A5011EK1

Copyright © 2025, Skyworks Solutions, Inc. All Rights Reserved.

Information in this document is provided in connection with Skyworks Solutions, Inc., and its subsidiaries ("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 INFORMATION IN THIS DOCUMENT AND THE MATERIALS AND PRODUCTS DESCRIBED THEREIN 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 designed, intended, authorized, or warranted for use or inclusion in life support or life endangering applications, devices, or systems where failure or inaccuracy might cause death or personal injury. Skyworks customers agree not to use or sell the Skyworks products for such applications, and further agree to, without limitation, fully defend, indemnify, and hold harmless Skyworks and its agents from and against any and all actions, suits, proceedings, costs, expenses, damages, and liabilities including attorneys' fees arising out of or in connection with such improper use or sale.

Skyworks assumes no liability for applications assistance, customer product design, or damage to any equipment resulting from the use of Skyworks products outside of Skyworks' published specifications or parameters. Customers are solely responsible for their products and applications using the Skyworks products.

"Skyworks" and the Skyworks Starburst logo are 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.