

# SKY53735-61: Sky5<sup>®</sup> LB/LMB/MB/HB and 4x4 MIMO Diversity Receive Module

## **Applications**

- Antenna cable loss compensation circuit
- 2G/3G/4G/5G multimode cellular handsets (5G NR, LTE, UMTS, CDMA2000, EDGE, and GSM)
- Embedded data cards

#### **Features**

- Rx diversity FEM with the following integrated filter bands:
  - B71 (617 to 652 MHz)
  - B29 (717 to 728 MHz)
  - B12/13/17 (729 to 756 MHz)
  - B14 (758 to 768 MHz)
  - B28A (758 to 788 MHz)
  - B28B (773 to 803 MHz)
  - B20 (791 to 821 MHz)
  - B8 (925 to 960 MHz)
  - B26/5/18/19 (859 to 894 MHz)
  - B32 (1452 to 1496 MHz)
  - B3 (1805 to 1880 MHz)
  - B39 (1880 to 1920 MHz)
  - B25 (2) (1930 to 1995 MHz)
  - B34 (2010 to 2025 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 B1-3-7-40, B1-3-7-32, B1-3-41, B2-66-7, B34-39-41, B7-40, B40-41, B2-66-30, B25-66-41, and B1-21 (Aux)
- High-performance variable gain LNAs
- High-performance Multi-On, N-Plexing technology enabling superior non-CA and CA performance
- TRX switch ports:
  - MHB\_TRX1

- MHB\_TRX2
- Auxiliary LNA ports:
  - LNA\_AuxIN\_MHB1 4x4 (1805 to 2700 MHz)
  - LNA\_AuxIN\_MHB2 4x4 (1805 to 2700 MHz)
  - LNA\_AuxIN\_MHB3 4x4 (2300 to 2700 MHz)
  - LNA\_AuxIN\_HB (2300 to 2700 MHz)
  - LNA\_AuxIN\_MB1 (1452 to 2400 MHz)
  - LNA\_AuxIN\_MB2 (1452 to 2200 MHz)
  - LNA\_AuxIN\_LMB (1452 to 2200 MHz)
- Integrated MIPI RFFE interface
- Small 4.2 x 6.2 x 0.7 (max) mm 47-lead package
- Lead (Pb)-free and RoHS-compliant (MSL3 @ 260 °C per JEDEC J-STD-020)

#### Description

The SKY53735-61 is a low-band (LB)/low-mid-band (LMB)/mid-band (MB)/high-band (HB) diversity receive module for cellular mobile devices. The device supports cellular diversity receiver functions and is scalable to support 4x4 MIMO regional and roaming band requirements. The SKY53735-61 is part of our Sky5<sup>®</sup> product portfolio.

The diversity module supports all key 2, 3, and 4 carrier aggregation band combinations.

High-performance, multi-gain mode LNAs are integrated enabling compatibility to next generation LNA-less LTE transceivers.

The SKY53735-61 is compatible with 3GPP GSM, WCDMA, LTE, LTE-A and 5G standards and includes filters for the following service bands: B71, B29, B12/ 13/17, B14, B28A, B28B, B20, B8, B26/5/18/19, B32, B3, B39, B25(2), B34, B66(1/4), B30, B40, B41(38), and B7.



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.

### **Ordering Information**

Part Number	Part Description	Evaluation Board Part Number
SKY53735-61	Sky5® LB/LMB/MB/HB and 4x4 MIMO Diversity Receive Module	SKY53735-61EK1

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