

PRODUCT SUMMARY

SKY53745-21: Sky5® LB/MB/HB 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:
 - B8 (925 to 960 MHz)
 - B26/5/18/19 (859 to 894 MHz)
 - B28A (758 to 788 MHz)
 - B28B (773 to 803 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)
 - 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, B3-41, B39-41, and all LB-MHB
- High-performance variable gain LNAs
- High-performance Multi-On, N-Plexing technology enabling superior non-CA and CA performance
- Two LB RX switch ports (LB_RX1/2/3)
- Two LB RX switch ports
- One MHB RX switch port (MHB_RX1)
- 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_LB1 (617 to 960 MHz)
 - LNA_AUX_LB2 (617 to 960 MHz)
- Integrated MIPI RFFE v3.0 interface
- Small size 3.5 × 3.6 × 0.7 (max.) mm 56-lead package
- Lead (Pb)-free and RoHS-compliant (MSL3 @ 260 °C per JEDEC J-STD-020)

Description

The SKY53745-21 is a low-band (LB)/mid-band (MB)/high-band (HB) diversity receive module to be used in a cellular mobile device. The device supports cellular diversity receiver functions. The SKY53745-21 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 SKY53745-21 is compatible with 3GPP GSM, WCDMA, LTE, LTE-A and 5G standards and includes filters for the following service bands: B8, B26/5/18/19, B28A/B, B3, B39, B25(2), B34, B66(1/4), B40, B41(38), and B7.

Figure 1 shows the SKY53745-21 functional block diagram.



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.

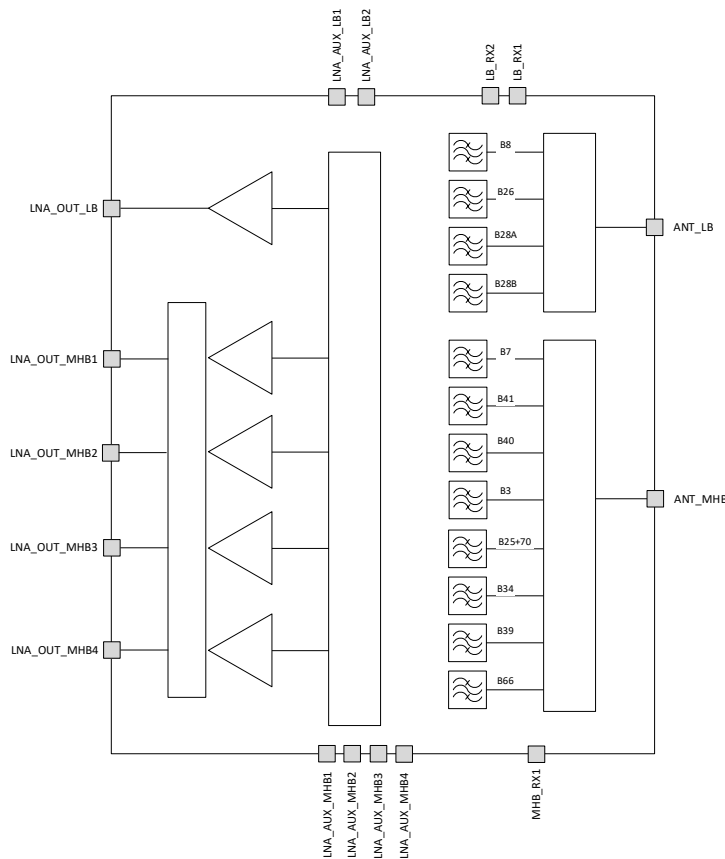


Figure 1. SKY53745-21 Functional Block Diagram

Ordering Information

Part Number	Product Description	Evaluation Board Part Number
SKY53745-21	LB / MB / HB Diversity Receive Module	SKY53745-21EK1

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