

PRODUCT SUMMARY

SKYA25001: MLB/MB/HB/UHB Diversity Receive Module

Applications

- Antenna cable loss compensation circuit for LTE data antennas
- 2G/3G/4G multimode telematics module (LTE, UMTS, CDMA2000, EDGE, and GSM)

Features

- Rx diversity FEM with 11 integrated filter bands:
 - B32 (1452 to 1496 MHz)
 - B21/11 (1475.9 to 1510.9 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)
 - B30 (2350 to 2360 MHz)
 - B41(38) (2496 to 2690 MHz)
 - B7 (2620 to 2690 MHz)
- Low insertion loss
- Integrated downlink carrier aggregation (CA) support
- High-performance variable gain LNAs
- Uplink CA support (TRX1, TRX2, and TRX3 support +26 dBm high power, 1452 to 3800 MHz)
- Three auxiliary LNA ports:
 - LNA1_AUX 3400 to 3600 MHz (UHB) or 2300 to 2690 MHz (HB) frequency support
 - LNA2_AUX: 1805 to 2200 MHz frequency support
 - LNA3_AUX: 1805 to 2200 MHz frequency support
- LB and MHB pass-through auxiliary ports
- Integrated MIPI RFFE interface
- Small size 5 × 4 × 0.75 mm 34-lead package
- Lead (Pb)-free and RoHS-compliant (MSL3 @ 260 °C per JEDEC J-STD-020)



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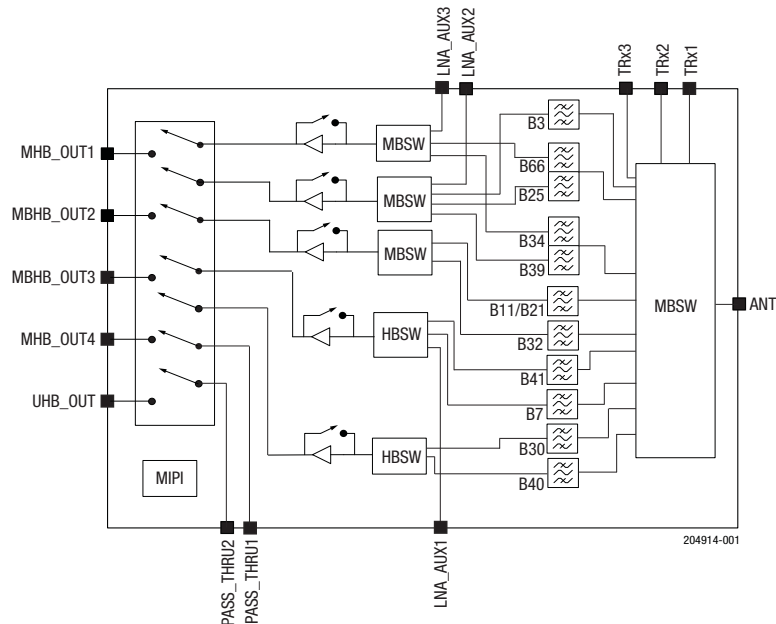


Figure 1. SKYA25001 Functional Block Diagram

Description

The SKYA25001 is a mid-to-low-band (MLB)/mid-band (MB)/high-band (HB)/ultra-high-band (UHB) diversity receive module to be used in a cellular mobile device. It supports cellular diversity receiver and cellular transmitter functions.

The diversity module supports all key downlink 2 and 3 carrier aggregation band combinations as well as uplink signals transmitted through the diversity antenna path.

High-performance LNAs with five variable-gain modes are integrated in this device to enable compatibility for next-generation LNA-less LTE transceivers.

The SKYA25001 is compatible with 3GPP GSM, WCDMA, LTE and LTE-A standards and includes filters for the following service bands: B32, B21/11, B3, B39, B25(2), B34, B66(1/4), B40, B30, B41, and B7 for the cellular part.

A functional block diagram is shown in Figure 1.

Ordering Information

Part Number	Product Description	Evaluation Board Part Number
SKYA25001	MLB/MB/HB/UHB Diversity Receive Module	SKYA25001EK1

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