

## PRODUCT SUMMARY

# SKY13568-11: RX Diversity FEM with Gain (B4, B7, and B17)

## Applications

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

## Features

- RX Diversity FEM with three selectable filters and LNA paths and optional bypass mode
- Low insertion loss thru path
- Integrated SAW filter and discrete LNA gain stage
- SAW filters:
  - B17 (734 to 746 MHz)
  - B4 (2110 to 2155 MHz)
  - B7 (2620 to 2690 MHz)
- Integrated GPIO interface
- Small (4 x 3 x 0.8 mm) 17-lead MCM package (MSL3, 260 °C per JEDEC J-STD-020)



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.

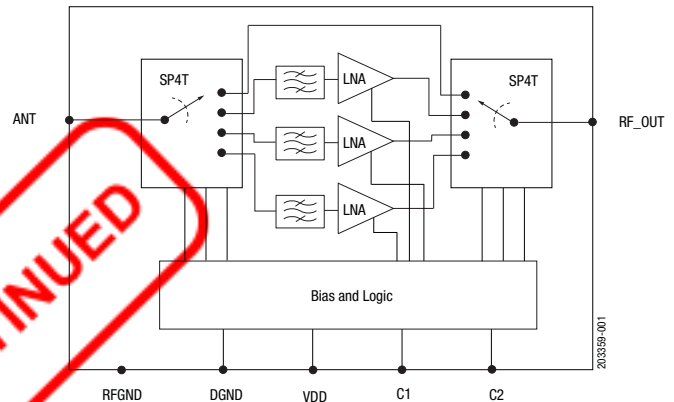


Figure 1. SKY13568-11 Block Diagram

## Description

The SKY13568-11 is an RX front-end module (FEM) combining two SP4T switches (input and output switch) with three paths that include B4, B7, and B17 SAW filters in series with high gain LNAs. The four separate paths are GPIO selectable with two control lines.

Using advanced switching technology, the SKY13568-11 maintains low insertion loss in the thru path and high isolation between paths when RX filtering and gain stages are selected. Integrated LNAs provide cable loss compensation to overcome path loss from the antenna to the transceiver.

The SKY13568-11 is packaged in a small, 4 x 3 x 0.8 mm, 17-lead surface-mount package. No external DC blocking capacitors are required on the RF paths as long as no DC voltage is applied. The switch can operate over the temperature range of -35 °C to +90 °C.

A functional block diagram is shown in Figure 1.

## Ordering Information

Model Name	Manufacturing Part Number	Evaluation Board Part Number
SKY13568-11: RX Diversity FEM	SKY13568-11	SKY13568-11-EVB



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