

PRODUCT SUMMARY

SKY13569-11: RX Diversity FEM with Gain (B28, B3, and B7)

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 two selectable filters and LNA paths, optional bypass mode, and one AUX path (ANT to B28_OUT and B29_IN to RF_OUT)
- Low insertion loss thru path
- Integrated SAW filter and discrete LNA gain stage
- Frequency bands:
 - B28 (758 to 803 MHz)
 - B3 (1805 to 1880 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.

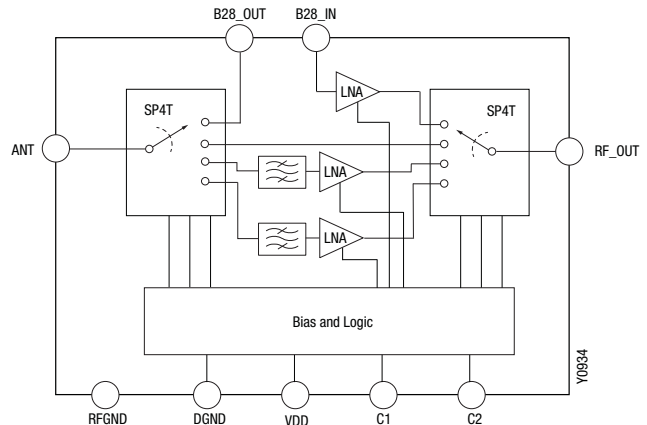


Figure 1. SKY13569-11 Block Diagram

Description

The SKY13569-11 is an RX front-end module (FEM) combining two SP4T switches (input and output switch) with four paths (Bypass, B28, B3, and B7). The detail is shown in Figure 1. Each path is GPIO selectable with two control lines.

Using advanced switching technology, the SKY13569-11 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 SKY13569-11 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
SKY13569-11: RX Diversity FEM	SKY13569-11	TW21-D970

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