

**PRODUCT SUMMARY**

# SKY13529-11: RX Diversity FEM with Gain (B20, B3, and B7)

**Applications**

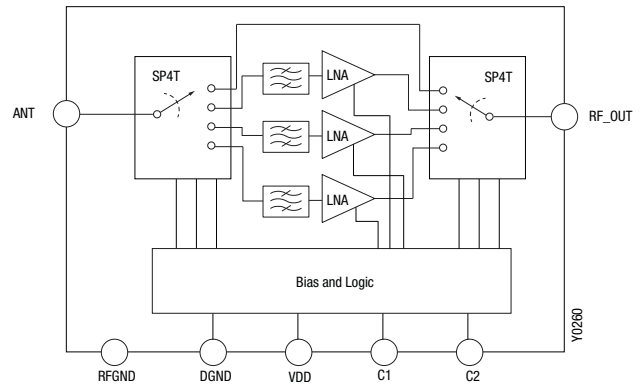
- Antenna cable loss compensation circuit for LTE data antenna
- 3G/4G multimode cellular tablets and handsets (LTE, UMTS, CDMA2000, EDGE, and GSM)
- Embedded data cards

**Features**

- RX diversity FEM with 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:
  - B20 (791 to 821 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)



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**Figure 1. SKY13529-11 Block Diagram**

**Description**

The SKY13529-11 is an RX front end module (FEM) combining two SP4T switches (input and output switch) with three paths that include B20, B3, and B7 SAW filters in series with high gain LNAs. The four separate paths are GPIO selectable with two control lines.

Using advanced switching technology, the SKY13529-11 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 SKY13529-11 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
SKY13529-11: RX Diversity FEM	SKY13529-11	TW21-D800

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