PRODUCT SUMMARY

SKY96500-11: 0.4 to 2.7 GHz LTE Diversity Receive Module with MIPI RFFE Interface

Applications

- 2G/3G/4G multimode cellular tablets and handsets (GSM, EDGE, LTE, UMTS, CDMA2000)
- Embedded data cards

Features

- Broadband frequency range: 0.4 to 2.7 GHz
- Low insertion loss, 0.6 dB typical @ 2.7 GHz
- High isolation and linearity
- Integrated, programmable MIPI Version 2.0 interface
- Multi-ON switch technology to enable carrier aggregation
- High-performance TC-SAW filter technology
- Carrier aggregation support for B1+B3+B5/B8 and B34+B39+B41N
- Twelve linear TRX ports with isolation greater than 20 dB @ 2.7 GHz
- Small QFN (22-pin, 3.2 x 3.0 x 0.65 mm) package (MSL3, 260 °C per JEDEC J-STD-020)
- Rx Diversity FEM with 8 integrated bands:
  - B8 (925 to 960 MHz)
  - B26 (859 to 894 MHz)
  - B3 (1805 to 1880 MHz)
  - B39 (1880 to 1920 MHz)
  - B1 (2110 to 2170 MHz)
  - B34 (2010 to 2025 MHz)
  - B41N (2535 to 2655 MHz)
  - B40 (2300 to 2400 MHz)
  - AUX1 and AUX2 (400 to 1000 MHz)
  - AUX3, AUX4, and AUX5 (1800 to 2700 MHz)

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.

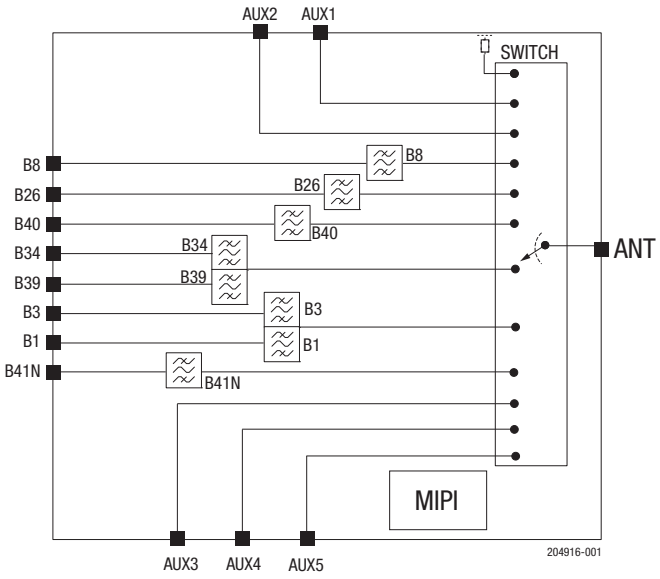

Figure 1. SKY96500-11 Block Diagram

Description

The SKY96500-11 is a single-pole, twelve-throw (SP12T) antenna switch module with integrated filters and a Mobile Industry Processor Interface (MIPI), Version 2.0. Receive filters for bands 1, 3, 26(5), 8, 34, 39, 40, and 41N are integrated into the module.

Using advanced switching technologies, the SKY96500-11 maintains low insertion loss and high isolation for receive switching paths. The high-linearity performance and low insertion loss achieved by the SKY96500-11 makes it an ideal choice for UMTS, CDMA2000, and LTE applications.

Switching is controlled by an integrated MIPI interface. Depending on the logic applied to the decoder, the antenna pin is connected to as many as 3 of 12 switched RF ports using a low insertion loss path, while the paths between the antenna pin and the other RF pins are in a high isolation state. No external DC blocking capacitors are required on the RF paths.

The SKY96500-11 is manufactured in a compact, 3.2 x 3.0 x 0.65 mm, 22-pin surface-mount Quad Flat No-Lead (QFN) package.

A functional block diagram is shown in Figure 1.

Ordering Information

Product Description	Product Part Number	Evaluation Board Part Number
SKY96500-11: DiFEM Receive Module with MIPI RFFE Interface	SKY96500-11	SKY96500-11EK1