SKY13560-485LF: 0.4 to 2.7 GHz SP4T LTE Transmit/Receive Switch with MIPI RFFE Interface

Applications

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

Features

- Broadband frequency range: 0.4 to 2.7 GHz
- Low insertion loss
- High isolation and linearity
- External MIPI select pin
- Four linear TRX ports with isolation greater than 20 dB @ 2.7 GHz
- Small QFN (14-pin, 2 x 2 mm) package (MSL1, 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.

Description

The SKY13560-485LF is a single-pole, four-throw (SP4T) antenna switch with a Mobile Industry Processor Interface (MIPI).

Using advanced switching technologies, the SKY13560-485LF maintains low insertion loss and high isolation for both transmit and receive switching paths. The high linearity performance and low insertion loss achieved by the SKY13560-485LF makes it an ideal choice for UMTS, CDMA2000, EDGE, and LTE applications.
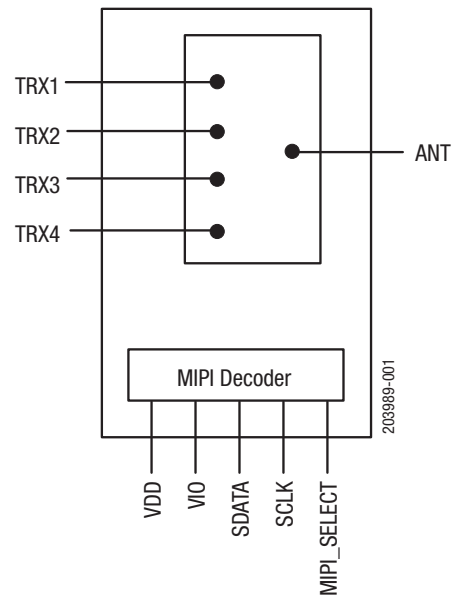

Figure 1. SKY13560-485LF Block Diagram

Depending on the logic applied to the decoder, the antenna pin is connected to one of four 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. Switching is controlled by the MIPI decoder. There is an external MIPI select pin that enables how the switch responds to power mode triggers. When this pin is grounded, the switch responds to any of the power mode triggers. When this pin is left open, the switch responds to individual power mode triggers. No external DC blocking capacitors are required on the RF paths as long as no DC voltage is applied.

The SKY13560-485LF is manufactured in a compact, 2 x 2 mm, 14-pin surface-mount Quad Flat No-Lead (QFN) package.

A functional block diagram is shown in Figure 1.

Ordering Information

Model Name	Manufacturing Part Number	Evaluation Board Part Number
SKY13560-485LF 0.4 to 2.7 GHz SP4T LTE Transmit/Receive Switch with MIPI RFFE Interface	SKY13560-485LF	SKY13560-485LF-EVB

Skyworks Solutions, Inc. • Phone [781] 376-3000 • Fax [781] 376-3100 • sales@skyworksinc.com • www.skyworksinc.com

2   April 20, 2016 • Skyworks Proprietary Information • Products and Product Information are Subject to Change Without Notice • 203989A