

**PRODUCT SUMMARY**

# SKY13638-700LF: 0.4 to 3.8 GHz SP10T LTE Transmit/Receive Switch with MIPI RFFE Interface

**Applications**

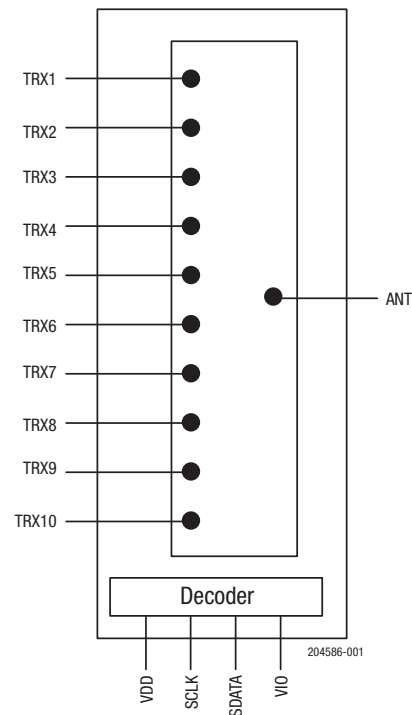
- 3G/4G multimode cellular tablets and handsets (LTE, UMTS, CDMA2000)
- Embedded data cards

**Features**

- Broadband frequency range: 0.4 to 3.8 GHz
- Low insertion loss, 0.75 dB typical @ 2.7 GHz
- High isolation and linearity
- Multi-closed function for CA applications
- Integrated, programmable MIPI Version 2.0 interface
- Default USID = 1010
- Ten linear TRX ports with isolation greater than 26 dB @ 2.7 GHz
- Small QFN (20-pin, 2.4 x 2.4 x 0.50 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.



**Figure 1. SKY13638-700LF Block Diagram**

**Description**

The SKY13638-700LF is a single-pole, ten-throw (SP10T) antenna switch with a Mobile Industry Processor Interface (MIPI), Version 2.0.

Using advanced switching technologies, the SKY13638-700LF 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 SKY13638-700LF make it an ideal choice for UMTS, CDMA2000, and LTE applications.

The switch also exhibits an excellent triple beat ratio and second/third order intermodulation distortion (IMD) performance. Switching is controlled by an integrated MIPI interface. Depending on the logic applied to the decoder, the antenna pin is connected to 1 of 10 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.

Any two arms can be switched on at the same time with multi-closed function for CA applications.

The SKY13638-700LF is manufactured in a compact, 2.4 x 2.4 x 0.50 mm, 20-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
SKY13638-700LF: 0.4 to 3.8 GHz SP10T LTE Transmit/Receive Switch with MIPI RFFE Interface	SKY13638-700LF	SKY13638-700EK1

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