

## PRODUCT SUMMARY

# SKY18106: SP8T Antenna Switch With GSM Transmit Filters

## Applications

- 2G GSM/EDGE
- 3G WCDMA

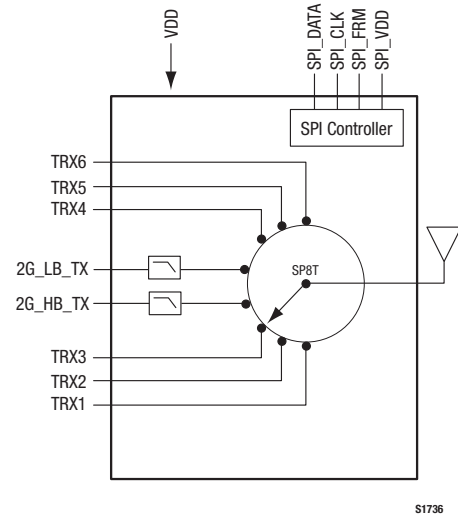
## Features

- Supports quad-band GSM/EDGE with up to six bands of WCDMA or LTE
- Low insertion loss:
  - 0.80 dB @ GSM, 1 GHz
  - 0.90 dB @ GSM, 2 GHz
  - 0.50 dB @ WCDMA transmit, 1 GHz
  - 0.65 dB @ WCDMA transmit, 2.1 GHz
- Good 2<sup>nd</sup> and 3<sup>rd</sup> harmonic performance: –45/–45 dBm @ +35 dBm and +33 dBm for low band and high band, respectively
- Over 25 dB GSM/EDGE harmonic attenuations
- V<sub>DD</sub> or V<sub>BAT</sub> supply voltage: 2.5 to 4.7 V
- SPI logic (V<sub>HIGH</sub> = 1.8 V)
- Small, MCM (26-pin, 3.2 x 4.0 mm) package (MSL3, 260 °C per JEDEC J-STD-020)

### NEW



Skyworks Green™ products are RoHS (Restriction of Hazardous Substances)-compliant, conform to the EIA/EICTA/JEITA Joint Industry Guide (JIG) Level A guidelines, are halogen free according to IEC-61249-2-21, and contain <1,000 ppm antimony trioxide in polymeric materials.



**Figure 1. SKY18106 Block Diagram**

## Description

The SKY18106 is a single-pole, eight-throw (SP8T) Front-End Module (FEM) switch designed for multi-mode, high-power switching applications that demand low harmonics and low insertion loss. The switch is optimized for both 2G GSM/EDGE and 3G WCDMA applications. No external blocking capacitors are required on the RF ports.

The SKY18106 consists of an SP8T switch, GSM transmit signal harmonic filters, and a Serial Peripheral Interface (SPI) controller. The low current consumption of the device makes it very suitable for battery-operated applications.

The switch is manufactured using a state of the art pHEMT process, and is provided in a compact 3.2 x 4.0 mm Multi-Chip Module (MCM) package.

A functional block diagram is shown in Figure 1.

## Ordering Information

Model Name	Manufacturing Part Number	Evaluation Kit Part Number
SKY18106 SP8T Switch	SKY18106	*** TBD ***

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