

PRODUCT SUMMARY

SKY18108: 0.4-2.7 GHz SP9T Antenna Switch Module

Applications

- Dual-mode handsets (GSM/EDGE, Quad/TD-SCDMA or WCDMA dual mode)
- · Low-cost, small footprint FEMs

Features

- Supports quad-band GSM/TD-SCDMA or GSM/WCDMA dualmode
- Three TD-SCDMA ports are designed for 3G/4G high power transmit/receive operation
- · Low insertion loss:
 - 0.95 dB @ 1 and 2 GHz GSM transmit
 - 0.90 dB @ 1 GHz GSM receive
 - 1.00 dB @ 2 GHz GSM receive
 - 0.65 dB @ 2 GHz TD-SCDMA transmit/receive
- Good 2nd/3rd harmonic performance:
 - $-45/-42 \text{ dBm } @ P_{IN} = +32 \text{ dBm } (2G \text{ high-band transmit})$
 - -47/-42 dBm @ P_{IN} = +35 dBm (2G low-band transmit)
- Supply voltage: 2.5 to 4.0 V
- State-of-the-art SOI process with GPIO logic
- Small MCM (20-pin, 3.2 x 2.5 mm) package (MSL3, 260 °C per JEDEC J-STD-020)





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.

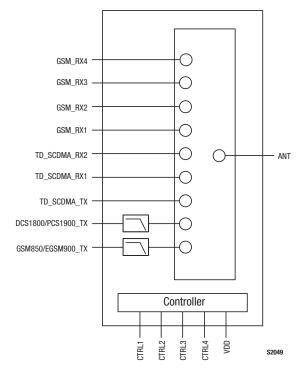


Figure 1. SKY18108 Block Diagram

Description

The SKY18108 is a Single Pole, Nine-Throw (SP9T) antenna switch Front-End Module (FEM) designed for dual-mode, high power band switching applications that require low harmonics and low insertion loss. The device is optimized for both GSM/EDGE and TD-SCDMA systems.

The SKY18108 consists of an SP9T switch, GSM transmit signal low-pass harmonic filters, and a GPIO controller. The low current consumption makes this device very suitable for battery operated applications.

The SKY18108 is manufactured in a compact, 3.2 x 2.5 mm, 20-pin 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
SKY18108 0.4-2.7 GHz SP9T Switch	SKY18108	*** TBD ***

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