

PRODUCT SUMMARY

SKYA21037: 0.4 to 3.8 GHz DPDT Switch

Automotive Applications

- Infotainment
- Automated toll systems
- Garage door opener
- 802.11 b/g/n WLAN, Bluetooth® systems
- Wireless control systems
- Outdoor lighting control
- Remote keyless entry
- Telematics
- GPS/Navigation
- SVLTE systems
- Main/Diversity antenna swapping

Features

- Single control voltage input
- Broadband frequency range: 0.7 to 3.0 GHz
- Low insertion loss: 0.5 dB @ 2.7 GHz
- No DC blocking capacitors required
- Positive control voltage range: 1.35 to 3.1 V
- GSM power handling
- Designed and manufactured in an ISO/TS16949-certified facility
- JEDEC (JESD22) qualified at 25 °C
- Lead (Pb)-free and RoHS-compliant, small QFN (12-pin, 2 × 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.

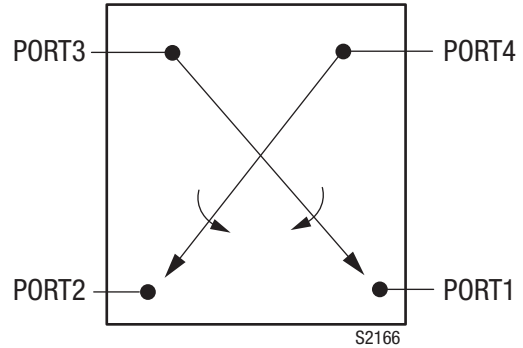


Figure 1. SKYA21037 Block Diagram

Description

The SKYA21037 is a state-of-the-art CMOS, silicon-on-insulator (SOI) double-pole, double-throw (DPDT) switch. The switch provides high-linearity performance, low insertion loss, and high isolation.

Switching is controlled by one voltage input (CTRL1). Depending on the logic voltage level applied to this pin, the PORT1 and PORT2 pins connect to one of the two other RF port pins (PORT3 or PORT4) through a low insertion loss path, while maintaining a high-isolation path to the alternate port. No external DC blocking capacitors are required on the RF path as long as no DC voltage is applied externally.

The SKYA21037 DPDT switch is provided in a compact Quad Flat No-Lead (QFN) 2 x 2 mm package.

A functional block diagram is shown in Figure 1.

Ordering Information

Model Name	Manufacturing Part Number	Evaluation Board Part Number
SKYA21037: DPDT Switch	SKYA21037	SKYA21037-EVB

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