

**PRODUCT SUMMARY**

**SKYA21037: 0.7 to 3.8 GHz DPDT Switch**

**Automotive Applications**

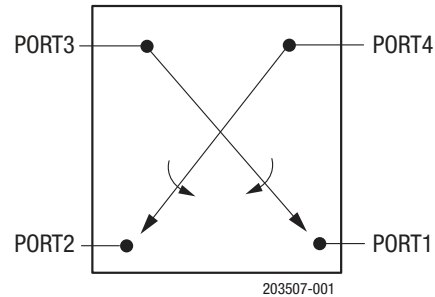
- Cellular eCall antenna switching
- Cellular diversity antenna switching

**Features**

- AEC-Q100 grade 2 (-40 °C to +105 °C) qualified
- Automotive level-3 PPAP available
- IMDS material declaration available
- Independent BOM management to minimize PCN risk
- Broadband frequency range: 0.7 to 3.8 GHz
- Ultra-low insertion loss: 0.5 dB @ 2.7 GHz
- GSM power handling
- Single control voltage input
- No DC blocking capacitors required
- Lead (Pb)-free and RoHS-compliant, low profile 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 low profile Quad Flat No-Lead (QFN) 2 x 2 mm package. A functional block diagram is shown in Figure 1.

## Ordering Information

Part Number	Product Description	Evaluation Board Part Number
SKYA21037	0.7 to 3.8 GHz DPDT Switch	SKYA21037-EVB

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