

**PRODUCT SUMMARY**

# SKY16706-11: Dual Coupler Module

## Applications

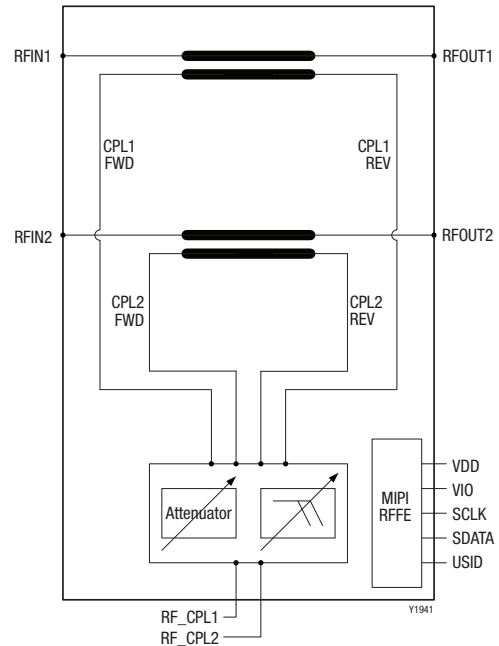
- 2G/3G/4G multimode cellular applications
- Supports GSM/WCDMA/HSPA+/LTE/CDMA2000/EVDO applications

## Features

- Dual bidirectional couplers
- Low insertion loss (0.22 dB typical at 2690 MHz)
- 25 dB coupling factor at 824 to 2690 MHz
- 25 dB directivity
- High linearity with low harmonics
- Programmable low-pass filtering in the coupled paths to reject 2.4 GHz and 5 GHz ISM blockers
- Programmable attenuators; 4 programmable steps: 0 dB, 3 dB, 6 dB, and 9 dB state
- Supply voltage range of 2.5 V to +4.8 V
- Integrated MIPI RFFE interface
- Small, lead (Pb)-free and RoHS-compliant, 16-lead surface mount package (1.6 × 1.6 × 0.54 mm) (MSL3 @ 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. SKY16706-11 Functional Block Diagram**

## Description

The SKY16706-11 is a dual coupler module (DCM) that consists of two bidirectional couplers with coupled path filtered with a filter optimized for 2.4 GHz and 5 GHz rejection. SKY16706-11 has 50 Ω input and output impedance with internal DC blocking and minimal number of external support components. The DCM is targeted for use in mobile applications. It is compatible with 3GPP GSM, WCDMA, LTE and LTE-A standards and supports the B1, B2, B3, B4, B7, B30, B34, B39, B38, B40, and B41 service bands: for the cellular part. It also supports GPS/GNSS/Beidou localization standards.

The SKY16706-11 is packaged in a compact 16-lead, 1.6 × 1.6 × 0.54 mm surface mount package that meets requirements for board-level assembly.

No external DC blocking capacitors are required on the RF paths as long as no DC voltage is applied. The DCM can operate over the temperature range of -35 °C to +90 °C.

A functional block diagram is shown in Figure 1.

## Ordering Information

Model Name	Manufacturing Part Number	Evaluation Board Part Number
SKY16706-11: 2.4 GHz, Dual Coupler Module	SKY16706-11	SKY16706-11-EVB

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