

PRODUCT SUMMARY

SKY67304-12: 1710 to 2020 MHz Digital Variable Gain Low-Noise Amplifier

Applications

- LTE, WCDMA, GSM wireless infrastructure
- Low-noise, high-linearity systems
- Macro base stations

Features

- Fully integrated low-noise front end
- High gain: 35 dB
- Excellent return loss
- High linearity gain control: 35 dB
- Low noise figure: 1 dB
- Adjustable gain range from 22 dB to 35 dB
- Temperature and process stable active bias
- Small MCM (16-pin, 8 x 8 mm) package (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.

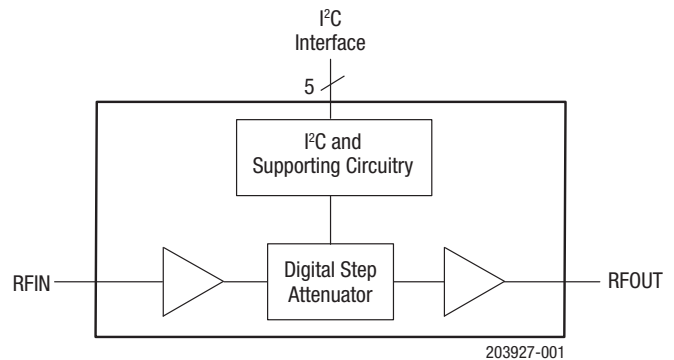


Figure 1. SKY67304-12 Block Diagram

Description

The SKY67304-12 consists of a low-noise amplifier, digital step attenuator and I²C circuit to digitally control the module. This module architecture provides excellent return loss, low noise, and high-linearity performance.

The internal active bias circuitry ensures repeatable performance over temperature. The device is fully integrated and requires minimal external components.

The SKY67304-12 is manufactured in an 8 x 8 mm, 16-pin Multi-Chip Module (MCM) package. The SKY67304-12 is part of a family of LNAs that cover the frequency range of 648 MHz to 2020 MHz. Table 1 lists the pin-to-pin compatible parts in the LNA family. A functional block diagram is shown in Figure 1.

Table 1. Pin-to-Pin Compatible LNA Family

Part Number	Frequency (MHz)
SKY67302-11	648 to 849
SKY67303-11	703 to 915
SKY67304-12	1710 to 2020

Ordering Information

Part Number	Product Description	Evaluation Board Part Number
SKY67304-12	1710 to 2020 MHz Digital Variable Gain Low-Noise Amplifier	SKY67304-12EK1

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