

PRODUCT SUMMARY

SKY67302-11: 648 to 849 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 GreenTM products are compliant with all applicable legislation and are halogen-free. For additional information, refer to *Skyworks Definition of Green*TM, document number SQO4-OO74.

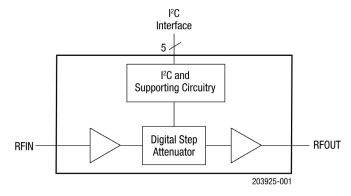


Figure 1. SKY67302-11 Block Diagram

Description

The SKY67302-11 consists of a low-noise amplifier, digital step attenuator and I^2C 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 SKY67302-11 is manufactured in an 8 x 8 mm, 16-pin Multi-Chip Module (MCM) package. The SKY67302-11 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 |
|-------------|--|------------------------------|
| SKY67302-11 | 648 to 849 MHz Digital Variable Gain Low-Noise Amplifier | SKY67302-11EK1 |

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