

PRODUCT SUMMARY

SKY65611-11: GPS/GLONASS/Galileo/BDS Low-Noise Amplifier

Applications

- GPS/GLONASS/Galileo/BDS radio receivers
- Compass (Beidou)
- Smartphones
- Tablet/laptop PCs
- Personal navigation devices

Features

- Small signal gain: 16.5 dB typical
- Low noise figure: 0.65 dB typical
- Out-of-band IIP3: +2 dBm typical
- Low current consumption
- Output impedance internally matched to 50 Ω
- Single DC supply: 1.5 to 3.0 V
- Minimal number of external components required
- Small DFN (6-pin, 1.1 x 0.9 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.

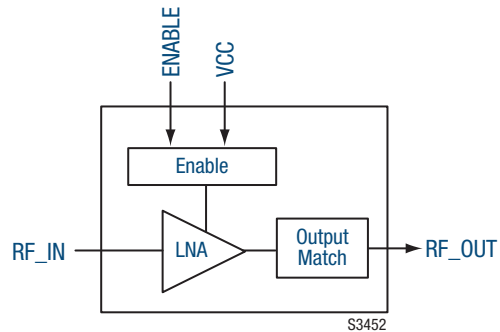


Figure 1. SKY65611-11 Block Diagram

Description

The SKY65611-11 is a Microwave Monolithic Integrated Circuit (MMIC) front-end low-noise amplifier (LNA) designed for Global Positioning System/Global Navigation Satellite System (GPS/GLONASS)/Galileo and Beidou Navigation Satellite System (BDS) receiver applications. The device provides high linearity, excellent gain, a high 1 dB Input Compression Point (IP1dB), and a superior noise figure (NF). Output matching components are embedded inside the device. Minimal input matching components are required.

The SKY65611-11 is optimized to operate at 1559 to 1606 MHz, which makes it ideal for GPS/GLONASS/Galileo/BDS radio receiver applications.

The SKY65611-11 is fabricated using advanced SiGe BiCMOS technology. The LNA uses surface-mount technology (SMT) in the form of a 1.1 x 0.9 mm Dual Flat No-Lead (DFN) package, which allows for a highly manufacturable and low-cost solution.

A functional block diagram is shown in Figure 1.

Ordering Information

Model Name	Manufacturing Part Number	Evaluation Board Part Number
SKY65611-11: GPS/GLONASS/Galileo/BDS Low-Noise Amplifier	SKY65611-11	TW21-D590-003

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