

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: 17.2 dB typical

• Out of band IIP3: 0 dBm

• Low noise figure: 0.6 dB typical

• IP1dB: up to −16.5 dBm

• Low current consumption

ullet Output impedance internally matched to 50 Ω

• Single DC supply: 1.5 to 2.85 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)



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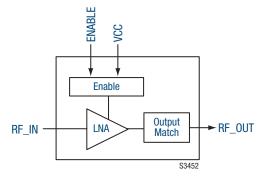


Figure 1. SKY65611-11 Block Diagram

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 1610 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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