

**PRODUCT SUMMARY**

# SKY65605-21: BDS/GPS/GNSS Low-Noise Amplifier

## Applications

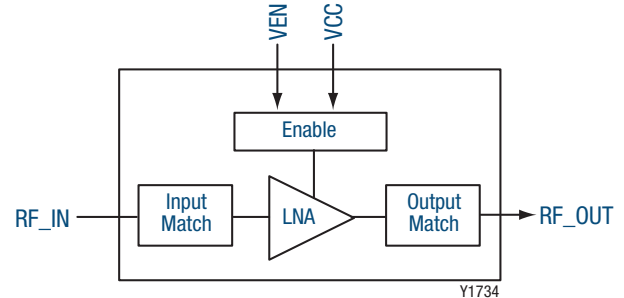
- BDS/GPS/GNSS radio receivers
- Global Navigation Satellite Systems (GLONASS)
- Smartphones
- Tablet/laptop PCs
- Personal navigation devices

## Features

- Small signal gain: 19 dB typical
- High IIP3
- Low noise figure: 0.75 dB typical
- IP1dB: up to -14.0 dBm
- Low current consumption
- Input/output impedance internally matched to 50 Ω
- Single DC supply: 1.8 to 2.8 V
- Minimal number of external components required
- Ultra-small QFN (6-pin, 0.7 x 1.1 mm) package (MSL1, 260 °C per JEDEC J-STD-020)



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**Figure 1. SKY65605-21 Block Diagram**

## Description

The SKY65605-21 is a Microwave Monolithic Integrated Circuit (MMIC) front-end low-noise amplifier (LNA) designed for BeiDou Satellite Navigation System/Global Positioning System/Global Navigation Satellite System (BDS/GPS/GNSS) receiver applications. The device provides high linearity, excellent gain, a high 1 dB Input Compression Point (IP1dB), and a superior noise figure (NF).

The SKY65605-21 is optimized to operate from 1.5500 to 1.6018 GHz, which makes it ideal for BDS/GPS/GNSS radio receiver applications.

The SKY65605-21 is fabricated using advanced SiGe BiCMOS technology. The LNA uses surface-mount technology (SMT) in the form of a 0.7 x 1.1 mm Quad Flat No-Lead (QFN) 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
SKY65605-21: BDS/GPS/GNSS Low-Noise Amplifier	SKY65605-21	EN34-D410

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