

PRODUCT SUMMARY

SKY65708-51: Low-Noise Amplifier Front-End Module with GPS/GNSS Pre-Filter

Applications

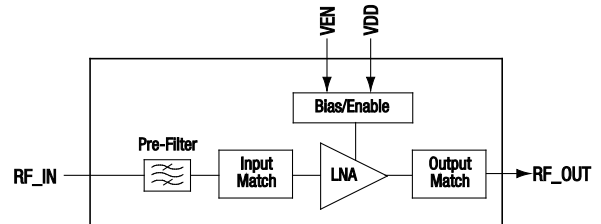
- GPS/GNSS radio receivers
- Smart phones
- Laptop PCs and tablets

Features

- Small signal gain: 14.4 dB typical
- IIP3: +6.5 dBm
- Low Noise Figure: 1.75 dB typical
- Low current consumption
- Input/output impedance internally matched to 50 Ω
- Single DC supply: 1.8 to 3.6 V
- Minimal number of external components required
- Small, MCM (6-pin, 1.7 x 2.3 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.



S2411a

Figure 1. SKY65708-51 Block Diagram

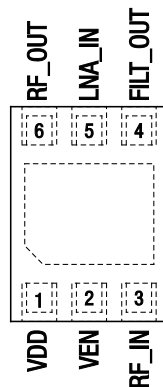
Description

The SKY65708-51 is a Front-End Module (FEM) with an integrated Low Noise Amplifier (LNA) and pre-filter designed for Global Positioning System/Global Navigation Satellite System (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 LNA is fabricated using advanced GaAs pHEMT technology. The GPS pre-filter provides the low in-band insertion loss and integrated notch filtering for excellent rejections of the cellular, PCS, and WLAN frequency bands. The SKY65708-51 uses Surface Mount Technology (SMT) in the form of a 1.7 x 2.3 mm Multi-Chip Module (MCM) package, which allows for a highly manufacturable and low-cost solution.

For applications that require additional rejection for the LTE Band 13, Skyworks SKY65708-11 is the ideal solution.

A functional block diagram is shown in Figure 1. The pin configuration and package are shown in Figure 2.



S2551

Figure 2. SKY65708-51 Pinout – 6-Pin MCM (Top View)

Ordering Information

Model Name	Manufacturing Part Number	Evaluation Board Part Number
SKY65708-51 Low-Noise Amplifier FEM with GPS/GNSS Filter	SKY65708-51	TW19-D505-001

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