

PRODUCT SUMMARY

SKY65708-11: Low-Noise Amplifier Front-End Module with GPS/GNSS Pre-Filter

Applications

- GPS/GNSS radio receivers
- Global Navigation Satellite Systems (GLONASS)

Features

- Integrated LTE Band 13 notch filter
- Small signal gain: 13.9 dB typical
- IIP3: +8.1 dBm
- Low Noise Figure: 1.95 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.

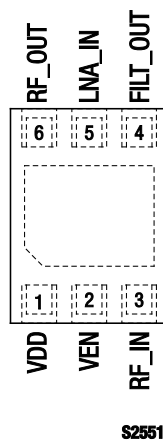


Figure 2. SKY65708-11 Pinout – 6-Pin MCM (Top View)

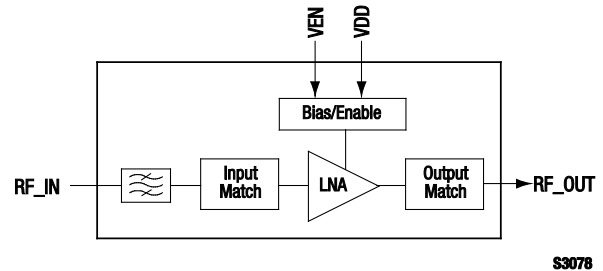


Figure 1. SKY65708-11 Block Diagram

Description

The SKY65708-11 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 SKY65708-11 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.

An integrated LTE Band 13 notch filter has been incorporated to improve performance in the presence of a Band 13 blocker. For solutions that do not require a Band 13 filter, the Skyworks SKY65708-51 is ideal.

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

Ordering Information

Model Name	Manufacturing Part Number	Evaluation Board Part Number
SKY65708-11 Low-Noise Amplifier FEM with GPS/GNSS Filter (with Integrated Band 13 Notch Filter)	SKY65708-11	TW19-D510

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