

PRODUCT SUMMARY

SKY65704-22: Low-Noise Amplifier Front-End Module with GPS/GNSS Pre-Filter

Applications

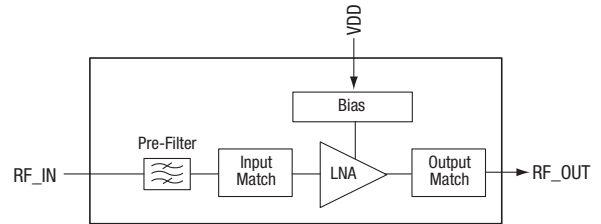
- GPS/GNSS radio receivers
- Smart phones
- Laptop PCs and tablets

Features

- Small signal gain: 14.5 dB typical
- IIP3: +6 dBm
- Low Noise Figure: 2.5 dB typical
- Low current consumption
- Input/output impedance internally matched to 50 Ω
- Single DC supply: 1.8 V
- No external components required
- Small, MCM (10-pin, 2.8 x 2.5 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.



S2411b

Figure 1. SKY65704-22 Block Diagram

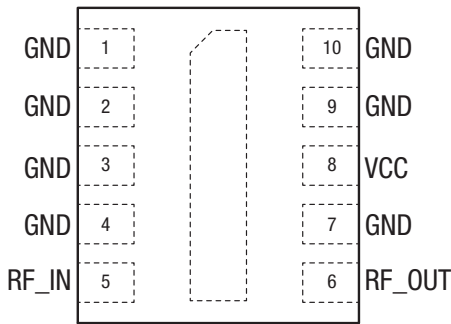
Description

The SKY65704-22 is an integrated, 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 SKY65704-22 uses Surface Mount Technology (SMT) in the form of a 2.8 x 2.5 mm Multi-Chip Module (MCM) package, which allows for a highly manufacturable and low-cost solution.

An integrated low-band notch filter is incorporated in the SKY65704-22 to improve 2nd Order Intermodulation (IMD2) performance.

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



S3148

Figure 2. SKY65704-22 Pinout – 10-Pin MCM (Top View)

Ordering Information

Model Name	Manufacturing Part Number	Evaluation Board Part Number
SKY65704-22 Low-Noise Amplifier FEM with GPS/GNSS Filter	SKY65704-22	TW21-D240-001

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