

**PRODUCT SUMMARY**

# SKY65725-81: Shielded Low-Noise Amplifier Front-End Module with GPS/GNSS/BDS Pre-Filter

**Applications**

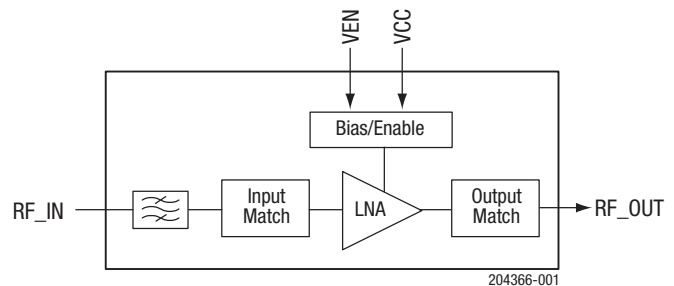
- GPS/GNSS/BDS radio receivers
- Global Navigation Satellite Systems (GLONASS)
- Fitness/activity trackers
- Smartphones
- Laptop PCs and tablets

**Features**

- Innovative proprietary shielded technology
- Wideband pre-filter
- Small signal gain: 16 dB typical
- Excellent out-of-band rejection
- Low noise figure: 1.5 dB typical
- Low current consumption
- Input/output impedance internally matched to 50 Ω
- Single DC supply: 1.8 V
- Minimal number of external components required
- Small MCM (9-pin, 1.6 x 1.6 x 0.8 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 1. SKY65725-81 Block Diagram**

**Description**

The SKY65725-81 is a shielded front-end module (FEM) with an integrated low-noise amplifier (LNA) and pre-filter designed for Global Positioning System/Global Navigation Satellite System/Beidou Navigation Satellite System (GPS/GNSS/BDS) receiver applications. The device provides high linearity, excellent gain, a high 1 dB input compression point (IP1dB), and a superior noise figure (NF).

The 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 SKY65725-81 uses surface-mount technology (SMT) in a 1.6 x 1.6 x 0.8 mm Multi-Chip Module (MCM) package, which allows for a highly manufacturable and low-cost solution.

A functional block diagram is shown in Figure 1.

## Ordering Information

Product Description	Product Part Number	Evaluation Board Part Number
SKY65725-81: Shielded Low-Noise Amplifier FEM with GPS/GLONASS/BDS Filter	SKY65725-81	SKY65725-81EK1

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