

**PRODUCT SUMMARY**

# SKY65903-11: Low-Noise Amplifier Front-End Module with GPS/GNSS/BDS Pre- and Post-Filters

**Applications**

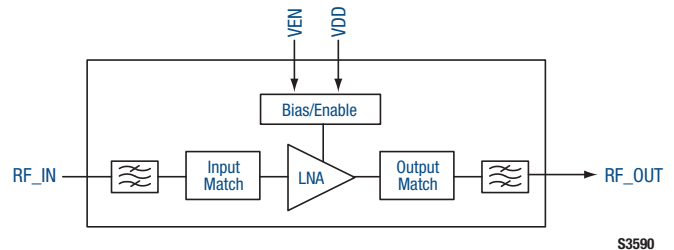
- GPS/GNSS/BDS radio receivers
- Global Navigation Satellite Systems (GLONASS)
- Cellular phones
- Table/laptop PCs
- Personal navigation devices

**Features**

- Small signal gain: 14.2 dB
- In-band IIP3: -7.3 dBm
- Low noise figure: 1.7 dB
- Low current consumption
- Input/output impedance internally matched to 50 Ω
- Single DC supply: 1.8 V
- No external SMT required
- Small, MCM (16-pin, 2.5 x 2.5 mm) package (MSL1, 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. SKY65903-11 Block Diagram**

**Description**

The SKY65903-11 is a front-end module (FEM) with an integrated low-noise amplifier (LNA), and pre- and post-filters 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, and a low noise figure (NF).

The pre- and post-filters provide low in-band insertion loss and excellent rejection for the cellular, PCS, and WLAN frequency bands.

The SKY65903-11 uses surface-mount technology (SMT) in the form of a 2.5 x 2.5 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

Model Name	Manufacturing Part Number	Evaluation Board Part Number
SKY65903-11: Low-Noise Amplifier FEM with GPS/GNSS/BDS Pre- and Post-Filters	SKY65903-11	TW21-D730

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