

**PRODUCT SUMMARY**

# SKY55950-11: Sky5® Low-Current GNSS LNA Front-End Module with Integrated Pre-Filter and Post-Filter

**Applications**

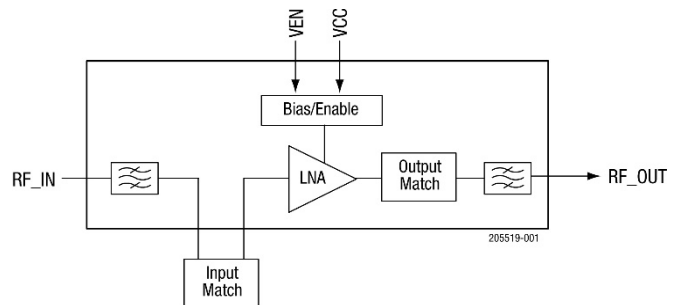
- Wearables
- Action cameras
- Drones
- Personal navigation devices
- GNSS radio receivers

**Features**

- Small signal gain: 16 dB
- Out-of-band P1dB: +8 dBm
- Out-of-band rejection: +90 dBc, 1627 to 1629 MHz
- Low noise figure: 1.9 dB
- Low current consumption: 1 mA @ 1.8 V
- Input/output impedance internally matched to 50 Ω
- Single DC supply: 1.5 to 3.6 V
- Minimum number of external SMT devices required
- Small MCM (10-pin, 2.5 x 2.5 x 0.56 [typical] 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. SKY55950-11 Block Diagram**

**Description**

The SKY55950-11 is a front-end module (FEM) with an integrated low-noise amplifier (LNA) and pre-filter and post-filter designed for Global Navigation Satellite System (GNSS) receiver applications. The SKY55950-11 is part of our Sky5® product portfolio. The device provides low-current, excellent out-of-band rejection, and low noise figure. The pre-filter and post-filter provide low in-band insertion loss and excellent rejection for the cellular, PCS, and WLAN frequency bands. Output matching components are embedded inside the device. Only one external input matching inductor is required.

The SKY55950-11 is optimized to operate at 1559 to 1606 MHz, which makes it ideal for GPS / GLONASS / Galileo / Compass / QZSS radio receiver applications.

The SKY55950-11 uses surface-mount technology (SMT) in the form of a 2.5 x 2.5 x 0.56 (typical) 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**

| Part Number | Product Description   | Evaluation Board Part Number |
|-------------|---|------------------------------|
| SKY55950-11 | Low-Current GNSS LNA FEM with Integrated Pre-Filter and Post-Filter | SKY55950-11EK1               |

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