

PRODUCT SUMMARY

SKY55951-11: Sky 5® GNSS L1 + L5 Dual-Frequency Low-Noise Amplifier Front-End Module with Post-Filter

Applications

- 4G/5G cellular IoT modules
- Smartwatches
- Personal trackers
- Vehicle trackers
- Personal navigation devices
- Handheld computers
- WiFi-6E enterprise access points

Features

- Dedicated L1 and L5 receive paths
- Small signal gain: 17 dB typical
- Low current consumption: L1 = 1 mA, L5 = 1.9 mA @ 1.8 V
- Integrated input and output matching on L1 and L5 paths
- Integrated B13 notch on L1 path
- Single, wide DC supply range: 1.5 to 3.3 V
- Small MCM (20-pin, 2.0 x 1.6 x 0.7 [nominal] 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.

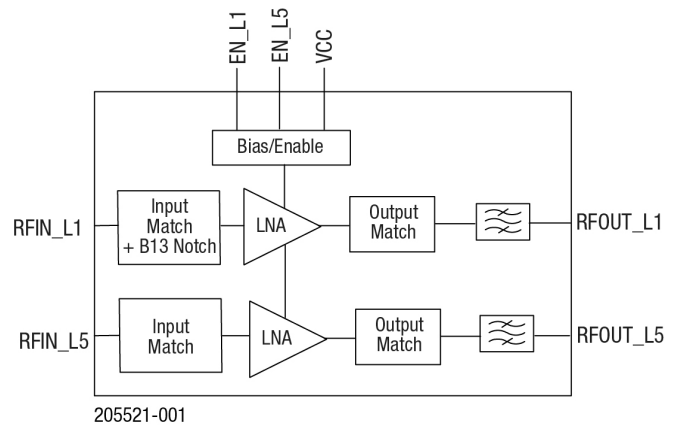


Figure 1. SKY55951-11 Block Diagram

Description

The SKY55951-11 front-end module (FEM) features an integrated L1 low-noise amplifier (LNA) and post-filter along with an L5 LNA and post-filter designed for Global Navigation Satellite System (GNSS) receiver applications.

Part of our Sky5® portfolio, the SKY55951-11 provides high gain, low current consumption, and integrated input and output matching for both L1 and L5, all in a compact 2.0 x 1.6 mm package.

The L1 path also features an integrated B13 notch filter, providing excellent suppression (-50 dBm) of cellular low-band 2nd harmonic signals impacting GPS L1 reception. The post-filtering on the L5 path also provides high (> 45 dBc) out-of-band rejection for interference below 1 GHz.

The SKY55951-11 uses surface-mount technology (SMT) in a Multi-Chip Module (MCM), a proven and highly manufacturable solution.

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

Ordering Information

Part Number	Product Description	Evaluation Board Part Number
SKY55951-11	GNSS L1 + L5 Dual-Frequency Low-Noise Amplifier Front-End Module with Post-Filter	SKY55951-11EK1

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