

**PRODUCT SUMMARY**

# SKY65715-81: Low-Noise Amplifier Front-End Module with GPS/GNSS/BDS Pre-Filter

**Applications**

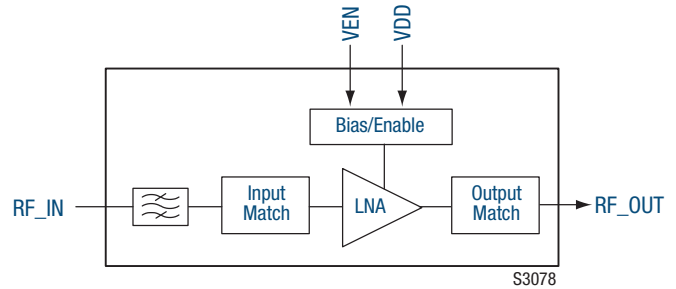
- GPS/GNSS/BDS radio receivers
- Global Navigation Satellite Systems (GLONASS)

**Features**

- Small signal gain: 16.5 dB typical
- Low noise figure: 1.8 dB typical
- Excellent out-of-band rejection
- Low current consumption
- Input/output impedance internally matched to 50 Ω
- Single DC supply: 1.62 to 3 V
- Minimal number of external components required
- Small, MCM (6-pin, 1.7 x 2.3 mm) package (MSL3, 260 °C per JEDEC J-STD-020)



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**Figure 1. SKY65715-81 Block Diagram**

**Description**

The SKY65715-81 is a 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 SKY65715-81 uses surface-mount technology (SMT) in the form of a 1.7 x 2.3 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
SKY65715-81: Low-Noise Amplifier FEM with GPS/GNSS/BDS Filter	SKY65715-81	TW21-D630-001

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