

PRODUCT SUMMARY

SKYA25000: Low-Band LNA Front-End Module (B26/B5/B18/B19, B8, B20, B12/13/17, B28A, B28B, and B29)

Applications

- Diversity antenna cable or PCB trace loss compensation
- 3G/4G multimode (LTE, UMTS, CDMA2000, EDGE, and GSM)
- Embedded data cards
- Telematics boxes for automotive applications

Features

- Rx diversity FEM with seven selectable filters and LNA paths, two low-band LNA input ports for extended band support
- Low insertion loss
- High-performance TC-SAW filter technology
- High-performance variable gain LNAs
- SAW filters:
 - B29 (717 to 728 MHz)
 - B12/13/B17 (729 to 756 MHz)
 - B28A (758 to 788 MHz)
 - B28B (773 to 803 MHz)
 - B20 (791 to 821 MHz)
 - B26/B5/B18/B19 (859 to 894 MHz)
 - B8 (925 to 960 MHz)
- Integrated MIPI interface
- Small (4.0 × 3.0 × 0.7 mm [max]) 24-lead MCM package (MSL3, 260 °C per JEDEC J-STD-020)



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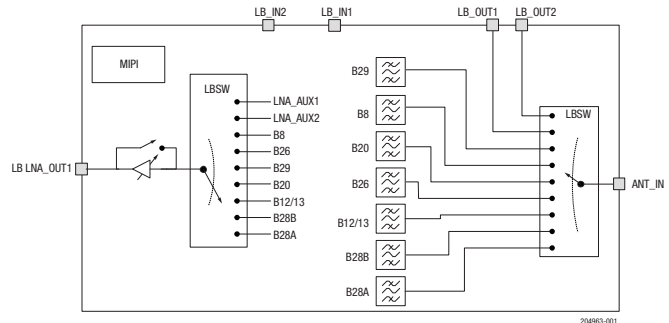


Figure 1. SKYA25000 Block Diagram

Description

The SKYA25000 is an LNA diversity module used in cellular mobile devices. The module is typically placed close to the cellular diversity receiver antenna to enable improved system signal-to-noise ratio (SNR), improved user equipment (UE) sensitivity, and higher data throughput rates.

It is compatible with 3GPP GSM, WCDMA, and LTE standards and supports the following cellular bands: B26/B5/B18/B19, B8, B20, B12/13/B17, B28A, B28B, and B29.

The SKYA25000 is packaged in a small 4.0 × 3.0 × 0.7 mm (max), 24-lead surface-mount package. No external DC blocking capacitors are required on the RF paths as long as no DC voltage is applied. The part can operate over the temperature range of -40 °C to +95 °C ambient.

A functional block diagram is shown in Figure 1.

Ordering Information

Part Number	Product Description	Evaluation Board Part Number
SKYA25000	Low-Band LNA Front-End Module	SKYA25000EK1

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