

#### **PRODUCT SUMMARY**

# SKY5A5009: Sky5® 5G NR UHB Diversity Receive Module

# **Applications**

- 5G NR sub-6 GHz automotive applications
- Telematics
- Network Attached Devices (NAD)

#### **Features**

- Low insertion loss
- High-performance variable gain LNAs
- Integrated SRS support through TRX port
- Integrated MIPI v2.1+ interface
- Integrated package shielding
- AEC-Q104
- PPAP
- IMDS material declaration
- Small 2.8 × 2.6 × 0.65 mm, 21-lead MCM package MSL3, 260 °C per JEDEC J-STD-020

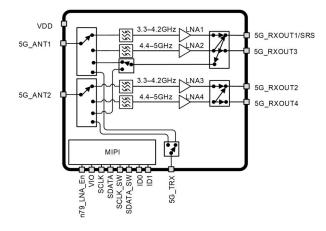


Figure 1. SKY5A5009 Block Diagram

## **Description**

The SKY5A5009 is a highly integrated LNA and filter module that enables support for the 5G New Radio (NR) bands in the 3.3 to 4.2 GHz and 4.4 to 5.0 GHz frequency ranges. The SKY5A5009 is part of our Sky5® product portfolio.

It utilizes the latest advanced SOI process technologies to achieve leading high-bandwidth, low noise figure (NF) LNA performance in a small footprint. It also integrates all required filtering to attenuate unwanted out-of-band blockers in adjacent and far-out frequency bands while maintaining very low insertion loss (IL) in the pass-band frequencies.

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  $40 \,^{\circ}\text{C}$  to  $+105 \,^{\circ}\text{C}$ .

A functional block diagram is shown in Figure 1.





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Skyworks Green<sup>™</sup> products are compliant with all applicable legislation and are halogen-free. For additional information, refer to *Skyworks Definition of Green*<sup>™</sup>, document number SQ04–0074.

December 6, 2023

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### **Ordering Information**

Part Number	Part Description	Evaluation Board Part Number
SKY5A5009	Sky5® 5G NR UHB Diversity Receive Module	SKY5A5009EK1

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