

## PRODUCT SUMMARY

# SKYA23011 SkyOne® Ultra 3.0 Front-End Module for Automotive Applications – WCDMA / LTE Bands 7, 30, 40, 41

## Applications

- Multiband telematics boxes
- TDD-LTE/FDD LTE-modulated Bands 7, 30, 40 and 41

## Features

- Fully integrated MB multiband module
- Optimized for average power tracking system
- B40 and B41 HPUE compatible
- Integrated duplexer for band 7
- Integrated Band 42 LNA
- MIPI® 2.0/RFFE interface
- Closed loop architecture with the implemented coupler output port
- Integrated LNA module
- Flexible Tx Input
- Support B30/B38/B40/B41 Transmit Output port
- Small, low profile package  
5.3 mm x 5.5 mm x 0.8 mm  
46-pad configuration



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.

## Description

The SKYA23011, SkyOne® Ultra 3.0 is a multimode multiband (MMMB) Front-End Module (FEM) that supports 4G and operates efficiently in LTE modes. RF I/O ports are internally matched to 50 ohms, minimize the need for external components. Extremely low leakage current maximizes standby time. The InGaP/GaAs die and passive components are mounted on a multi-layer laminate substrate and the assembly encapsulated in plastic overmold.

**LTE:** The SKYA23011 meets spectral linearity requirements of LTE modulation with QPSK/16QAM up to 20 MHz bandwidth, including various resource block allocations, with excellent power-added efficiency.

**Receiver Section:** The SKYA23011's integrated LNAs, antenna switch and B7 duplexer provide 4G Rx paths from antenna to input ports of RFIC. Optimized low insertion-loss Rx paths, matching circuits, and well-grounded guard traces (high Tx–Rx isolation) inside module mitigate desense problems and enhance sensitivity performance.

**LNA Rx Ports:** The SKYA23011 provides four LNA input ports to support additional bands and MIMO.

## Ordering Information

Part Number	Part Description	Evaluation Board Part Number
SKYA23011	SkyOne® Ultra 3.0 Front-End Module	SKYA23011EK1

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