

PRODUCT SUMMARY

SKYA23010 SkyOne® Ultra 3.0 Front-End Module for Automotive Applications – WCDMA / LTE Bands 7, 30, 40, 41

Applications

- Multiband 3G handsets
- TDD-LTE/FDD LTE telematics module
 - Bands 7, 30, 40 and 41

Features

- Fully integrated HB multiband module
- Optimized for average power tracking system
- B40 and B41 HPUE compatible
- 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 Max.
 - 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 SKYA23010, SkyOne® Ultra 3.0 is a multimode multiband (MMMB) Front-End Module (FEM) that supports 4G, handsets and operates efficiently in LTE modes. RF I/O ports internally matched to 50 ohms, minimize the need for external components. Extremely low leakage current maximizes handset 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 SKYA23010 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 SKYA23010 integrated LNAs and antenna switch 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.

Ordering Information

| Part Number | Part Description | Evaluation Board Part Number |
|-------------|------------------------------------|------------------------------|
| SKYA23010 | SkyOne® Ultra 3.0 Front-End Module | SKYA23010-EK1 |

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