

### PRODUCT SUMMARY

# SKY96000-11 Antenna Switch Front-End Module with Integrated Duplexers (FEMiD) for Bands 1, 2, 3, 5, 8, 12, 20, 26, 66

# **Applications**

- 2G / 3G / 4G multimode cellular handsets
  (LTE, UMTS, CDMA2000, EDGE, GSM)
- Carrier aggregation LB/MB, LB/HB, B1/B3, B2/B66
- · Embedded data card

### **Features**

- Dual antenna ports can be connected externally to an LB / HB Diplexer
- Dual antenna configuration with integrated high directivity coupler on Antenna ports and GSM low pass filters on TX ports
- Excellent low band 3rd harmonic performance
- Integrated MIPI interface
- Small low profile package
  - 6.9 mm x 4.1 mm x 0.75 mm
  - 50-pad configuration
- Lead (Pb)-free and RoHS-compliant MSL3 at 260 °C per JEDEC J-STD-020



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# **Description**

The SKY96000-11 Antenna Switch Front-End Module with Integrated Duplexers (FEMiD) is optimized for Carrier Aggregation (CA) and global frequency Bands 1, 2, 3, 5, 8, 12, 20, 26, 66, and 2G Low Pass Filters.

Module integration includes LB and MB RF Couplers, an SP10T and SP8T with MIPI v. 2.0 Controller Antenna Switch and Duplexers into a small, low profile package.

The SKY96000-11 features advanced switching and Tc-SAW filter technology. This ensures low insertion loss and high isolation in non-CA mode for Bands 1, 2, 3 and 66 mid-Band paths relative to using expensive, high loss quadplexers. In CA mode, Tc-SAW filter technology ensures low insertion loss for these bands. Low insertion loss and high linearity performance makes the SKY96000-11 the ideal choice for Carrier Aggregation applications.

The FEMID accommodates UMTS / CDMA2K / EDGE / GSM / LTE applications as well as inter- and intra-band Carrier Aggregation.

High attenuation harmonic filtering on the LB path enables all low band paths, including the AUX ports, to be used for Carrier Aggregation.

The switch exhibits excellent 2nd/3rd order intermodulation distortion performance.

High-directivity couplers integrated on the LB and HB antenna ports provide excellent power detection accuracy over mismatch conditions.

Figure 1 is a functional block diagram of the SKY96000-11.

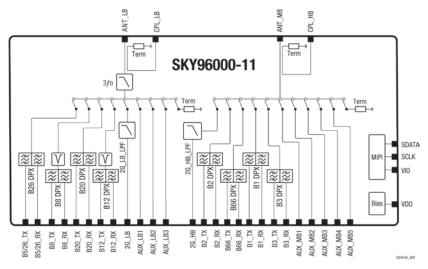


Figure 1. SKY96000-11 Functional Block Diagram

## **Ordering Information**

| Product Name   | Order Number | <b>Evaluation Board Part Number</b> |
|--|--------------|-------------------------------------|
| SKY96000-11 Antenna Switch Front-End Module w/ Integrated Duplexer (FEMiD) | SKY96000-11  | EN21-D925-001                       |

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