

PRODUCT SUMMARY

SKY53748-11: Sky5[®] LB/MB/HB Diversity Receive Module

Applications

- Antenna cable loss compensation circuit
- 2G/3G/4G/5G multimode cellular handsets (5G NR, LTE, UMTS, CDMA2000, EDGE, and GSM)
- Embedded data cards

Features

- Rx diversity FEM with the following integrated filter bands:
 - B8, 925 to 960 MHz
 - B26/5/18/19, 859 to 894 MHz
 - B20-28F, 758 to 821 MHz
 - B3, 1805 to 1880 MHz
 - B39, 1880 to 1920 MHz
 - B25 (2) + B70, 1930 to 2020 MHz
 - B34, 2010 to 2025 MHz
 - B66 (1/4), 2110 to 2200 MHz
 - B40, 2300 to 2400 MHz
 - B41 (38), 2496 to 2690 MHz
 - B7, 2620 to 2690 MHz
- Low insertion loss
- Integrated downlink carrier aggregation (CA) support for
 - CA: 1+3+7, 1+3+40, 1+3+41, 7+40, 40+41, 34+39+41, 25+66+41, 25+66+7, 1+3+7+40, L+M/HB CA
 - 2CA MIMO: 1-3, 1-7, 3-7, 1-40, 3-40, 1-41, 3-41, 39-41, 25-66, 2-7, 66-7, 25-41, 66-41
- High-performance variable gain LNAs
- High-performance Multi-On, N-Plexing technology enabling superior non-CA and CA performance



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.

- One LB RX switch port (LB_RX1) and one LB TRX switch port (LB_TRX1)
- One MHB RX port (MHB_RX1) and one MHB TRX
- port (MHB TRX1)
- Integrated package shielding
- Auxiliary LNA ports:
 - LNA_AUX_MHB1, 1805 to 2690 MHz
 - LNA_AUX_MHB2, 1805 to 2400 MHz
 - LNA_AUX_MHB3, 1805 to 2690 MHz
 - LNA_AUX_MHB4, 1805 to 2690 MHz
 - LNA_AUX_MHB5, 1805 to 2400 MHz
 - LNA_AUX_MHB6, 1805 to 2400 MHz
 - LNA_AUX_LB1, 617 to 960 MHz
 - LNA_AUX_LB2, 617 to 960 MHz
- Integrated MIPI RFFE v3.0 interface
- Small 3.5 x 3.6 x 0.7 (max.) mm 56-lead package
- Lead (Pb)-free and RoHS-compliant package (MSL3 @ 260 °C per JEDEC J-STD-020)

Description

The SKY53748-11 is a low-band (LB)/mid-band (MB)/high-band (HB) diversity receive module for cellular diversity receiver functions. The SKY53748-11 is part of our Sky5® product portfolio.

The diversity module supports all key two and three carrier aggregation band combinations.

High-performance, multi-gain mode LNAs are integrated enabling compatibility to next generation LNA-less LTE transceivers.

The SKY53748-11 is compatible with 3GPP GSM, WCDMA, LTE, LTE-A, and 5G standards and includes filters for the B8, B26/5/18/19, B28A, B28B, B3, B39, B25 (2), B34, B66 (1/4), B40, B41 (38), and B7 service bands.

February 7, 2023

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Ordering Information

Part Number	Part Description	Evaluation Board Part Number
SKY53748-11	LB/MB/HB Diversity Receive Module	SKY53748-11EK1

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