

## PRODUCT SUMMARY

# SKY5™ -8212-11 Front-End Module for 5G NR, LTE, WCDMA and CDMA

### Applications

- Multi-band 4G/3G handsets
  - WCDMA Bands 5, 8 and CDMA BC0, BC10
- Long Term Evolution (LTE)
  - LTE Bands 5, 8, 12, 13, 14, 17, 18, 19, 20, 26, 28, 29
  - Up to 20 MHz bandwidth /100 resource blocks

### Features

- LB S-PAD covering B71A/B, B12/B17, B13, B14, B29, B20, B28A/B, B26, B8, and separate Auxiliary LB TX and LB Rx Paths
- Two MIPI® v2.1 compliant 52 MHz RFFE buses
  - one bus each for Tx control and Rx control
- One ET PA core
- Single switched LNA RX output.
- TX band select switch
- B29 Rx path switched through B28B Tx filter.
- SP12T ASM with one ANT port and 2G input switch throw
- Six LNA gain states
- Switchable 2G input, separate Auxiliary LB TX and LB Rx Paths
- 50 ohm input/output impedance with internal DC-blocking
- Continuous bias control via RFFE interface
- Low Supply voltage
- Low leakage current in power-down mode
- SkyShield™ shielded module
- Temperature sensor
- Integrated Antenna and band select switches

### Features

- Integrated LNA with MIPI control features
  - up to six gain modes
  - independent gain and bias control
- Small, low profile package
  - 6.7 mm x 5.3 mm x 0.9 mm Max
- Integrated single ended duplexers
  - Bands 71A, 71B, 12/17, 13, 14, 20, 28A, 28B/29, 26, 8

### Description

The SKY58212-11 Front-End Module (FEM) is a fully matched, surface-mount (SMT) module developed for 4G/3G LTE/WCDMA/HSDPA/HSUPA applications. The FEM consists of PA blocks, input and output matching, a MIPI® standard digital control block, single-ended duplexers, antenna and band select switches, and low Noise amplifier (LNA) in a single 6.7 mm x 5.3 mm x 0.9 mm Max package.

The SKY58212-11 uses an enhanced architecture to cover multiple bands and meet the spectral linearity requirements of LTE QPSK and 16QAM modulations with up to 20 MHz bandwidth and up to 100 resource block allocations. Output power is controlled by varying the input power and VCC is adjusted using an ET modulator to maximize efficiency. Extremely low leakage current maximizes handset standby time.



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.

**Ordering Information**

Part Number	Part Description	Evaluation Board Part Number
SKY58212-11	Front-End Module	SKY58212-11EK1

**Revision History**

Revision	Date	Description
A	February 3, 2019	Initial Release <span style="float: right;">CN 29904</span>

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