

## PRODUCT SUMMARY

# SKY58277-31 Sky5® Front-End Module for 4G and 5G Applications

### Applications

- Multi-band 4G and 5G mobile devices
- Handsets, data cards, Machine-to-Machine (M2M)

### Features

- Supports bands : 4G/5G NR
  - B42, B43, B48, n48, n77 and n78
- Full Power average power tracking (APT) support without digital predistortion (DPD)
- UHB S-PAD covering B42, B43, B48, n48, n77 and n78
- High Performance APT PA Core
- Low leakage current in power-down mode
- Integrated TX-RX switch
- Integrated SRS switch supporting Fast SRS Hopping timing requirements
- SRS input ports facilitate dual placement and enable auxiliary receive functionality
- Two Integrated LNA, filter and switch paths support both primary and MIMO receive within the same module
- MIPI v2.1 compliant 52MHz RFFE<sup>SM</sup> bus
- MIPI v3.0 compliant RX function support
- Small, low profile package
  - 5.0 mm x 3.0 mm x 0.7 mm Max.
  - 30-pad configuration
  - LGA with conformal shielding



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 SKY58277-31 Front-End Module (FEM) for LTE and NR is a new addition to the Skyworks Sky5 portfolio of 5G technology products. The device is packaged in a single 5.0 mm x 3.0 mm x 0.7 mm (max) form factor. This versatile and fully matched FEM supports ultra-high band 4G/5G and LTE/NR applications.

The 30-pad surface mount (SMT) module consists of PA blocks, input and output ports matched to 50 ohms, a MIPI standard digital control block, filter, antenna and Tx-Rx switches, and low noise amplifier (LNA).

Utilizing an enhanced architecture, the SKY58277-31 covers multiple bands and meets the spectral linearity requirements of CP-OFDM and DFTS-OFDM modulations with up to 100 MHz bandwidth and up to 273 resource block allocations. Output power is controlled by varying input power and adjusting VCC to maximize efficiency. Extremely low leakage current maximizes handset stand-by time.

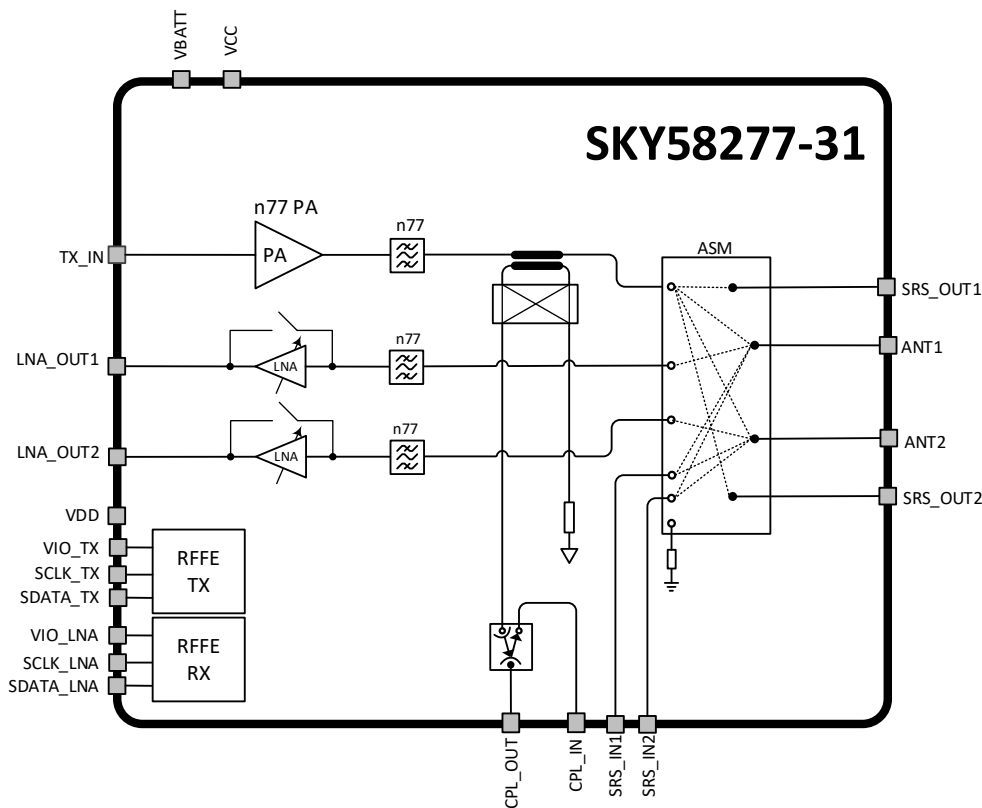


Figure 1. SKY58277-31 Functional Block Diagram

Ordering Information

Part Number	Part Description	Evaluation Board Part Number
SKY58277-31	Front-End Module	SKY58277-31-EVB

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