

PRODUCT SUMMARY

SKY58252-11 Sky5® Front-End Module for LTE and NR Bands

Applications

- Multi-band 4G/5G handsets
 - Band B42, B43, B48, n77, n78, and n79 (Downlink)
 - Support n77, n79 Downlink CA

Features

- Fully Baseband Agnostic Design
- Full Power APT support without DPD
- UHB LPAMiF covering B42, B43, B48, n77, n78, and separate Auxiliary TX
- MIPI® v2.1 compliant 52 MHz RFFE bus
- Two ET/APT PA cores
- Two LNA cores
- Supports Fast SRS Hopping timing requirements
- Supports system connectivity for:
 - MIMO-UL with single-feed or diplexed/separate-feed n77/n79
 - SISO-UL with single-feed or diplexed/separate-feed n77/n79
- ASM switch with two selectable ANT ports and 6 AUX ports for seamless SRS Hopping support
- Switchable LAA input
- 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

Features

- Supports full SRS connectivity with minimal external switches
- SRS RX ports for sharing coax cables
- Integrated Antenna and band select switches
- Integrated LNA with MIPI® control features
 - up to seven gain modes
 - independent gain and bias control
- Integrated wide bandwidth filters
- Small, low profile package
 - 4.5 mm x 5.5 mm x 0.7 mm (Max.)
 - 42-pad configuration (includes 20-pad ground array)

Description

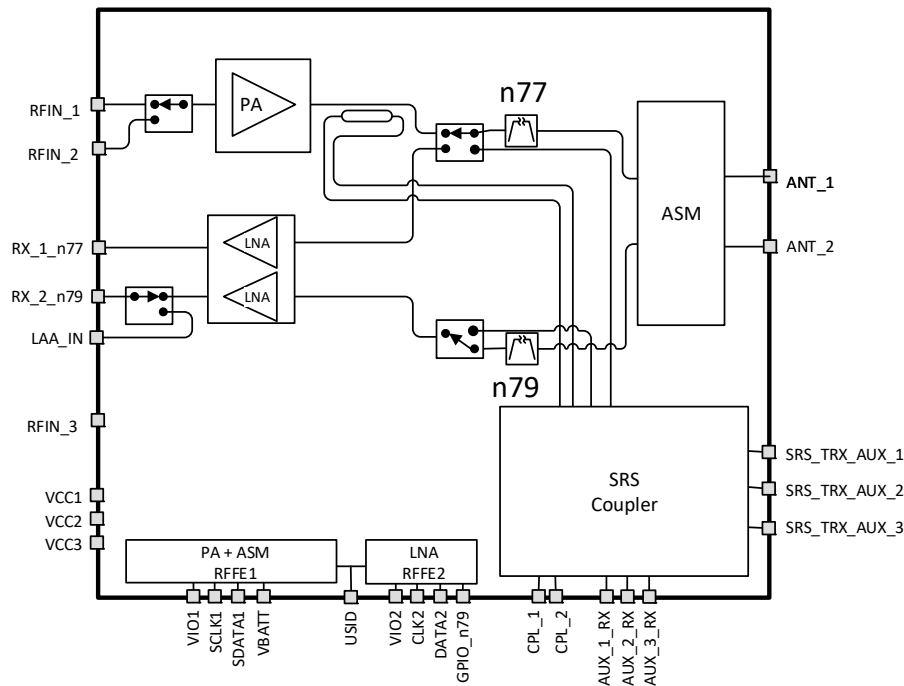
The SKY58252-11 is a recent addition to our Sky5® portfolio of 5G Technology products. This versatile and fully matched Front-End Module (FEM) supports multi-band 4G/5G and LTE/NR applications. Packaged in a single 4.5 mm x 5.5 mm x 0.7 mm (Max.) form factor, the 42-pad surface mount (SMT) module consists of PA blocks, input and output matching, a MIPI standard digital control block, single-ended filters, antenna and band-select switches and Low Noise Amplifier (LNA).

Utilizing an enhanced architecture, the SKY58252-11 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 maximizes efficiency. Extremely low leakage current maximizes handset stand-by 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.

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206040-001

SKY58252-11 Functional Block Diagram

Ordering Information

Part Number	Part Description	Evaluation Board Part Number
SKY58252-11	Front-End Module	SKY58252-11-EVK1

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