



**SKYWORKS®**

**PRODUCT SUMMARY**

# SKY5A3048 Sky5® Front-End Module for LTE and NR

## Applications

- 4G/5G automotive and telematics Network Attached Device (NAD)

## Features


- UHB LPAMiF for B42, B43, B48, n77, n78 and n79
- Fully Baseband Agnostic Design
- Full Power APT support without DPD
- n78, n79 PC2 power support
- Integrated n77, n78 and n79 primary and MIMO Rx path
- MIPI® v3.0 compliant 52 MHz RFFE bus
- High performance APT/ET PA cores
- Support 2x2 UL-MIMO using two TX placements
- Support Fast SRS Hopping timing requirements
- Integrated ANT swap switch
- Integrated SRS\_IN/OUT port supports full SRS connectivity
- Switchable LAA input
- 50Ω I/O impedance with internal DC-blocking
- Continuous bias control via RFFE interface
- Low leakage current in power-down mode
- High performance integrated LNA with MIPI® control features
  - Up to seven gain modes
  - Independent gain and bias control
- Integrated wide bandwidth filters
- Automotive Support:
  - PPAP
  - AEC-Q104 qualification
  - IMDS material declaration
- Small, low profile package:
  - 4.5 mm x 5.5 mm x 0.7 mm (Max.)
  - 42-pad configuration
  - LGA with conformal shielding

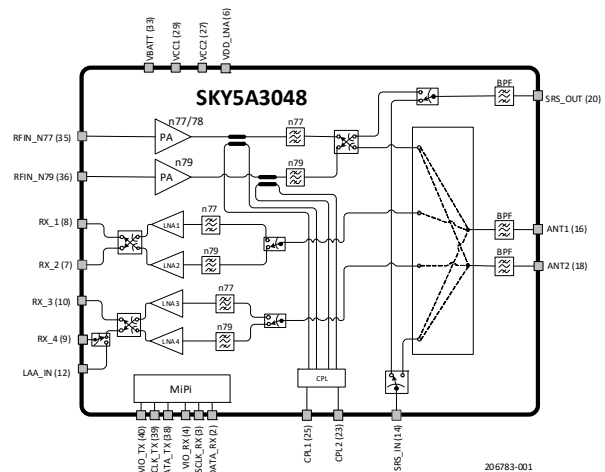
## Description

The SKY5A3048 Front-End Module (FEM) for LTE and NR is a new addition to our Sky5 portfolio of 5G Technology products. Key advances compared to previous generation dual band UHB modules are integrated MIMO Rx path and increased output power. Its higher Pout enables PC2 support for n78 and n79. 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, SKY5A3048 covers multiple bands and meets the spectral linearity and EVM requirements of CP-OFDM and DFTS-OFDM modulations up to 256 QAM. 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.



**Figure 1. SKY5A3048 Functional Block Diagram**

Ordering Information

Part Number	Part Description	Evaluation Board Part Number
SKY5A3048	Front-End Module for LTE and NR	SKY5A3048EK1

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