PRODUCT SUMMARY

SKY77778-51 Power Amplifier Module for LTE FDD Band 7 (2500–2570 MHz), Band 30 (2305–2315 MHz); LTE TDD Bands 38/41 (2496–2690 MHz), Band 40 (2300–2400 MHz); AXGP Band (2545–2575 MHz)

Applications

- Long-Term Evolution (LTE)
- Evolved Universal Terrestrial Radio Access Networks (EUTRAN)
- Handsets and Data Cards

Features

- Performance optimized for FDD Bands 7 and 30, and coverage in TDD Bands 38, 40, and 41, and AXGP Band
- Optimized for Average Power Tracking (APT) / Compatible with Envelope Tracking Controller (ETC) implementation
- High efficiency Broadband 2.3 GHz to 2.69 GHz
- Supports modulation bandwidth up to 20 MHz
- Small, low profile package
  - 2 mm x 2.5 mm x 0.9 mm
  - 10-pad configuration
- MIPI RFFE interface
- VCC2 decoupling caps < 125 pF

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 SKY77778-51 Power Amplifier Module (PAM) is a fully matched, 10-pad surface mount (SMT) module developed for LTE applications. The module includes broadband coverage of LTE FDD Bands 7 and 30, LTE TDD Bands 38, 40, 41, and AXGP Band in a compact 2.0 mm x 2.5 mm package. Attaining high efficiencies throughout the entire power range while meeting the stringent linearity requirements of LTE, the SKY77778-51 delivers unsurpassed savings in current consumption for data-intensive applications.

The Gallium Arsenide (GaAs) Microwave Monolithic Integrated Circuit (MMIC) contains all amplifier active circuitry, including input, interstage, and output matching circuits. Output match into a 50-ohm load, realized off-chip within the module package, optimizes efficiency and power performance. The silicon CMOS support die, providing precision biasing for the MMIC affords a true CMOS-compatible control interface.

The SKY77778-51 is manufactured with Skyworks' InGaP GaAs Heterojunction Bipolar Transistor (HBT) process which provides for all positive voltage DC supply operation and maintains high efficiency and good linearity. Optimal performance is obtained with VCC1 and VCC2 sourced from a DC-DC power supply based on target output power levels. No external supply side switch is needed as typical "off" leakage is a few microamperes.

Ordering Information

Product Name	Order Number	Evaluation Board Part Number
SKY77778-51 Power Amplifier Module	SKY77778-51	EN40-D475-004