PRODUCT SUMMARY

SKY77778-11 Power Amplifier Module for LTE FDD Band 7 (2500–2570 MHz)

Applications

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

Features

- Optimized for Average Power Tracking (APT) / Compatible with Envelope Tracking Controller (ETC) implementation
- Up to 20 MHz bandwidth
- Small, low profile package
  - 2 mm x 2.5 mm x 0.9 mm
  - 10-pad configuration
- MIPI interface
- V_{CC2} decoupling caps < 125 pF
- For RoHS and other product compliance information, see the Skyworks Certificate of Conformance

Description

The SKY77778-11 Power Amplifier Module (PAM) is a fully matched, 10-pad surface mount (SMT) module developed for LTE applications. The module provides broadband coverage of LTE FDD Band 7 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 SKY77778-11 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 SKY77778-11 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. While primary bias to the SKY77778-11 can be supplied directly from any suitable battery with an output of 2.5 V to 5.0 V, optimal performance is obtained with 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 with full primary voltage supplied from the battery.

DISCONTINUED

Ordering Information

Product Name	Order Number	Evaluation Board Part Number
SKY77778-11 Power Amplifier Module	SKY77778-11	EN40-D475-004

Revision History

Revision	Date	Description
A	December 11, 2013	Initial Release
B	September 24, 2026	OBSOLETE per Skyworks external website page



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