PRODUCT SUMMARY

SKY77773 Power Amplifier Module for LTE Bands 13/14 (777 MHz–798 MHz)

Applications

- LTE Bands 13/14

Features

- Low voltage positive bias supply 3.0 V to 4.5 V
- Optimized for Average Power Tracking systems
- High efficiency
- Large dynamic range
- Small, low profile package
  - 2.0 x 2.5 mm x 0.9 mm
  - 10-pad configuration
- InGaP GaAs HBT
- Supports low collector voltage operation
- No V_{REF} required
- MIPI RFFE control interface
- For RoHS and other product compliance information, see the Skyworks Certificate of Conformance

Description

The SKY77773 Power Amplifier Module (PAM) is a fully matched 10-pad surface mount module developed for Long Term Evolution (LTE) applications. This small and efficient module packs full 777 MHz–798 MHz bandwidth coverage into a single compact package. Because of high efficiencies attained throughout the entire power range, the SKY77773 delivers unsurpassed talk-time advantages. The SKY77773 meets the stringent spectral linearity requirements of Long Term Evolution (LTE) data transmission with high power-added efficiency.

DISCONTINUED

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

The SKY77773 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 SKY77773 can be supplied directly from any suitable battery with an output of 3.0 V to 4.5 V, optimal performance is obtained with VCC1 and VCC2 sourced from a DC-DC power supply adjusted within 0.5 V to 3.4 V 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.

Ordering Information

Product Name	Order Number	Evaluation Board Part Number
SKY77773 Power Amplifier Module	SKY77773	EN40-D555-002



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