

PRODUCT SUMMARY

SKY77360-12 Power Amplifier Module for Quad-Band GSM / GPRS / EDGE / TD-SCDMA

Applications

- Quad-band cellular handsets
- GMSK Modulation
 - Class 4 GSM850/900
 - Class 1 DCS1800/ PCS1900
 - Class 12 GPRS multi-slot operation
- EDGE modulation
 - Class E2 GSM850/900
 - Class E2 DCS1800/ PCS1900
- TD-SCDMA
 - Bands 34 and 39

Features

- High efficiency
- Programmable bias for improved backed-off efficiency
- High linearity
- Low standby leakage
- Compatible with DC-DC converter
- Programmable current clamp
- Autonomous Over-Voltage Protection
- Small, low profile package
 - 3.0 x 3.0 mm x 0.67 mm Max.
 - 12-pad configuration



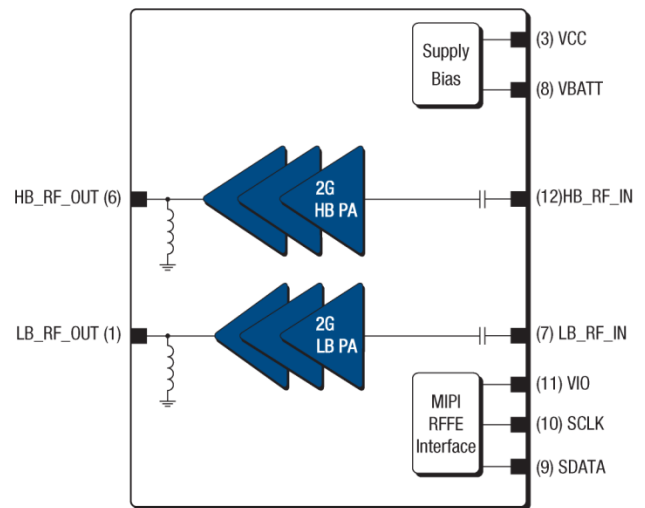
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Description

The SKY77360-12 power amplifier module (PAM) is designed for 2G quad-band cellular handsets supporting fixed gain Gaussian Minimum-Shift Keying (GMSK), fixed gain linear Enhanced Data for GSM Evolution (EDGE) modulation in the GSM850/900 and DCS1800/PCS1900 bands, and TD-SCDMA modulation in Bands 34 and 39. Class12 General Packet Radio Service (GPRS) multi-slot operation is also supported.

The compact 3.0 mm x 3.0 mm x 0.67 mm (Max) module consists of GSM850/900 and DCS1800/PCS1900/B34/B39 power amplifier blocks, 50-ohm input and output matching circuitry, and a multi-function power amplifier control (MFC) block. The custom silicon CMOS MFC provides PA bias and product identification read-back capability and is fully programmable through the RF Front-End Mobile Industry Processor Interface (RFFE MIPI®).

The heterojunction bipolar transistor (HBT) power amplifier blocks are fabricated onto a single InGaP die; one supports the GSM850/900 bands and the other supports the DCS1800/PCS1900/ B34/B39 bands. Both PA blocks share two common power supply pads. The InGaP die, silicon die, and the passive components are mounted on a multi-layer laminate substrate. The entire assembly is encapsulated with plastic over mold.



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Figure 1. SKY77360-12 Functional Block Diagram

Ordering Information

Product Name	Order Number	Evaluation Board Part Number
SKY77360-12 Power Amplifier Module	SKY77360-12	—

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