

PRODUCT SUMMARY

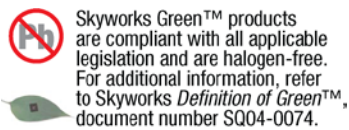
SKY77360-12 Power Amplifier Module for Quad-Band GSM / GPRS / EDGE / TD-SCDMA

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

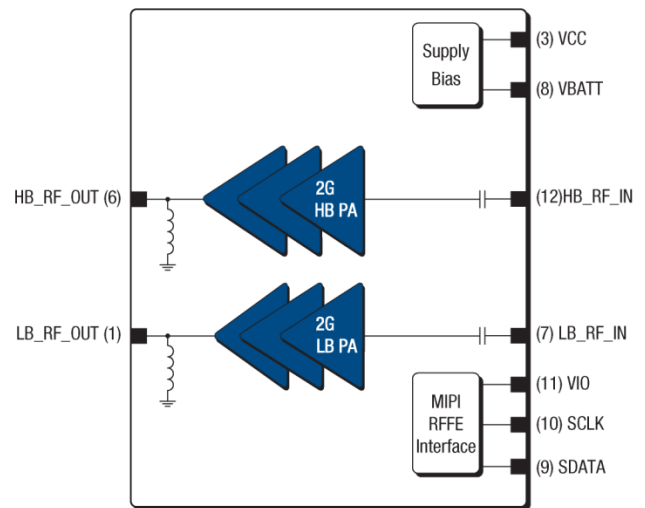


Description

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.



203885_001

Figure 1. SKY77360-12 Functional Block Diagram

Ordering Information

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

Copyright © 2016, Skyworks Solutions, Inc. All Rights Reserved.

Information in this document is provided in connection with Skyworks Solutions, Inc. ("Skyworks") products or services. These materials, including the information contained herein, are provided by Skyworks as a service to its customers and may be used for informational purposes only by the customer. Skyworks assumes no responsibility for errors or omissions in these materials or the information contained herein. Skyworks may change its documentation, products, services, specifications or product descriptions at any time, without notice. Skyworks makes no commitment to update the materials or information and shall have no responsibility whatsoever for conflicts, incompatibilities, or other difficulties arising from any future changes.

No license, whether express, implied, by estoppel or otherwise, is granted to any intellectual property rights by this document. Skyworks assumes no liability for any materials, products or information provided hereunder, including the sale, distribution, reproduction or use of Skyworks products, information or materials, except as may be provided in Skyworks Terms and Conditions of Sale.

THE MATERIALS, PRODUCTS AND INFORMATION ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, WHETHER EXPRESS, IMPLIED, STATUTORY, OR OTHERWISE, INCLUDING FITNESS FOR A PARTICULAR PURPOSE OR USE, MERCHANTABILITY, PERFORMANCE, QUALITY OR NON-INFRINGEMENT OF ANY INTELLECTUAL PROPERTY RIGHT; ALL SUCH WARRANTIES ARE HEREBY EXPRESSLY DISCLAIMED. SKYWORKS DOES NOT WARRANT THE ACCURACY OR COMPLETENESS OF THE INFORMATION, TEXT, GRAPHICS OR OTHER ITEMS CONTAINED WITHIN THESE MATERIALS. SKYWORKS SHALL NOT BE LIABLE FOR ANY DAMAGES, INCLUDING BUT NOT LIMITED TO ANY SPECIAL, INDIRECT, INCIDENTAL, STATUTORY, OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION, LOST REVENUES OR LOST PROFITS THAT MAY RESULT FROM THE USE OF THE MATERIALS OR INFORMATION, WHETHER OR NOT THE RECIPIENT OF MATERIALS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

Skyworks products are not intended for use in medical, life-saving or life-sustaining applications, or other equipment in which the failure of the Skyworks products could lead to personal injury, death, physical or environmental damage. Skyworks customers using or selling Skyworks products for use in such applications do so at their own risk and agree to fully indemnify Skyworks for any damages resulting from such improper use or sale.

Customers are responsible for their products and applications using Skyworks products, which may deviate from published specifications as a result of design defects, errors, or operation of products outside of published parameters or design specifications. Customers should include design and operating safeguards to minimize these and other risks. Skyworks assumes no liability for applications assistance, customer product design, or damage to any equipment resulting from the use of Skyworks products outside of stated published specifications or parameters.

Skyworks and the Skyworks symbol are trademarks or registered trademarks of Skyworks Solutions, Inc., in the United States and other countries. Third-party brands and names are for identification purposes only, and are the property of their respective owners. Additional information, including relevant terms and conditions, posted at www.skyworksinc.com, are incorporated by reference.