

Applications

- Portable WLAN – Cell phones, PDA's
- DSSS 2.4 GHz WLAN (IEEE802.11b)
- OFDM 2.4 GHz WLAN (IEEE802.11g)

Features

- Includes: PA, 50 ohm matching, Power detector, harmonic filter and SPDT Switch.
- 802.11g Output Power
 - + 17 dBm, EVM = 3.0 %, I_{CC} = 125 mA
- 802.11b Output Power
 - + 19 dBm, ACPR = -40 dB, I_{CC} = 150 mA
- 28 dB Gain
- Robust, selectable slope, power detector with ~1.5 dB variation over 2:1 mismatch
- Integrated power amplifier enable pin (V_{EN})
- Single supply voltage: 2.7 V to 3.6 V
- Lead free and RoHs compliant
- Small, lead free package, 18 pin 4 mm x 4.5 mm x 0.6 mm QFN, MSL3

Product Description

The SE2550BL is a 2.4 GHz front end module designed for use in the 2.4 GHz ISM band for portable wireless LAN applications. The device offers high efficiency at the required output powers to ensure longer battery life for cellphone, PDA and other portable applications.

The SE2550BL is highly integrated, allowing for a smaller footprint and simple design. The device includes a power amplifier, digital enable control for device on/off control, T/R Switch, harmonic filter and 50 ohm matching on all I/O. With the digital enable control, the device can be directly connected to a CMOS baseband or transceiver.

The SE2550BL temperature compensated power detector has two selectable power detectors slopes, positive and negative. This allows easy use with multiple chipsets. The detector is also highly immune to mismatch at its output with less than 1.5 dB of variation with a 2:1 mismatch.

Ordering Information

Type	Package	Remark
SE2550BL	18-QFN	Samples
SE2550BL-R	18-QFN	Tape and Reel
SE2550BL-EK1	Evaluation Kit	Standard

Functional Block Diagram

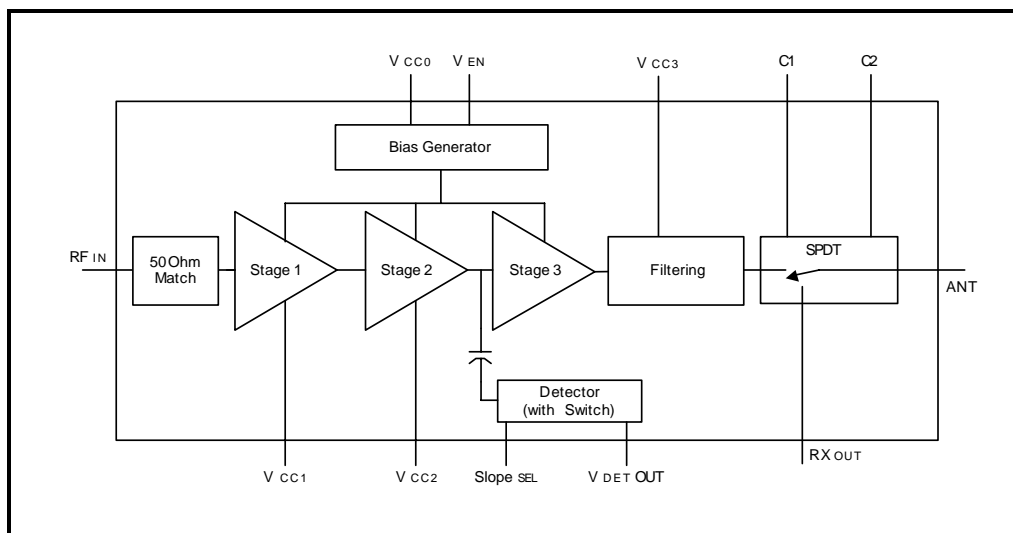


Figure 1: SE2550BL Functional Block Diagram

<http://www.sige.com>

Email: sales@sige.com

Customer Service Locations:

North America:
1050 Morrison Drive, Suite 100
Ottawa ON K2H 8K7 Canada

Phone: +1 613 820 9244
Fax: +1 613 820 4933

Hong Kong
Phone: +852 3428 7222
Fax: +852 3579 5450

San Diego
Phone: +1 858 668 3541 (ext. 226)
Fax: +1 858 668 3546

United Kingdom
Phone: +44 1279 464217
Fax: +44 1279 464201

Product Preview

The datasheet contains information from the product concept specification. SiGe Semiconductor, Inc. reserves the right to change information at any time without notification.

Preliminary Information

The datasheet contains information from the design target specification. SiGe Semiconductor, Inc. reserves the right to change information at any time without notification.

Production testing may not include testing of all parameters.

Information furnished is believed to be accurate and reliable and is provided on an "as is" basis. SiGe Semiconductor, Inc. assumes no responsibility or liability for the direct or indirect consequences of use of such information nor for any infringement of patents or other rights of third parties, which may result from its use. No license or indemnity is granted by implication or otherwise under any patent or other intellectual property rights of SiGe Semiconductor, Inc. or third parties. Specifications mentioned in this publication are subject to change without notice. This publication supersedes and replaces all information previously supplied. SiGe Semiconductor, Inc. products are NOT authorized for use in implantation or life support applications or systems without express written approval from SiGe Semiconductor, Inc.

Copyright 2009 SiGe Semiconductor, Inc.
All Rights Reserved

