

### Applications

- IEEE802.11b DSSS WLAN
- IEEE802.11g OFDM WLAN
- Access Points, PCMCIA, PC cards

### Features

- Dual Mode IEEE802.11b & IEEE802.11g
- All RF ports matched to 50  $\Omega$
- Integrated PA, TX Filter, DPDT T/R and Diversity switches
- Integrated Power Detector
- 20 dBm @ 3.0 % EVM, 802.11g, 54 Mbits
- 20 dBm, 802.11b, ACPR = -37 dB, 11 Mbits
- Single supply voltage: 3.3 V  $\pm$  10 %
- Small lead free package, 8 mm x 7 mm x 1.2 mm, MSL 3

### Ordering Information

Part Number	Package	Remark
SE2521A80	24 pin LGA	Samples
SE2521A80-R	24 pin LGA	Tape and Reel
SE2521A80-EK1	N/A	Evaluation kit

### Product Description

The SE2521A80 is a complete 802.11 b/g WLAN RF front-end module providing all the functionality of the power amplifier, power detector, T/R switch, diversity switch and associated matching. The SE2521A80 provides a complete 2.4 GHz WLAN RF solution from the output of the transceiver to the antennas in an ultra compact form factor.

Designed for ease of use, all RF ports are matched to 50  $\Omega$  to simplify PCB layout and the interface to the transceiver RFIC. The SE2521A80 also includes a transmitter power detector with 20 dB of dynamic range and a digital enable control for transmitter power ramp on/off control. The power ramp rise/fall time is 1  $\mu$ sec typical.

The SE2521A80 is pin for pin compatible to SiGe's SE2521A34 for easy transition of medium power designs to higher power designs.

The device also provides a notch filter from 3.2-3.3 GHz prior to the input of the power amplifier.

### Functional Block Diagram

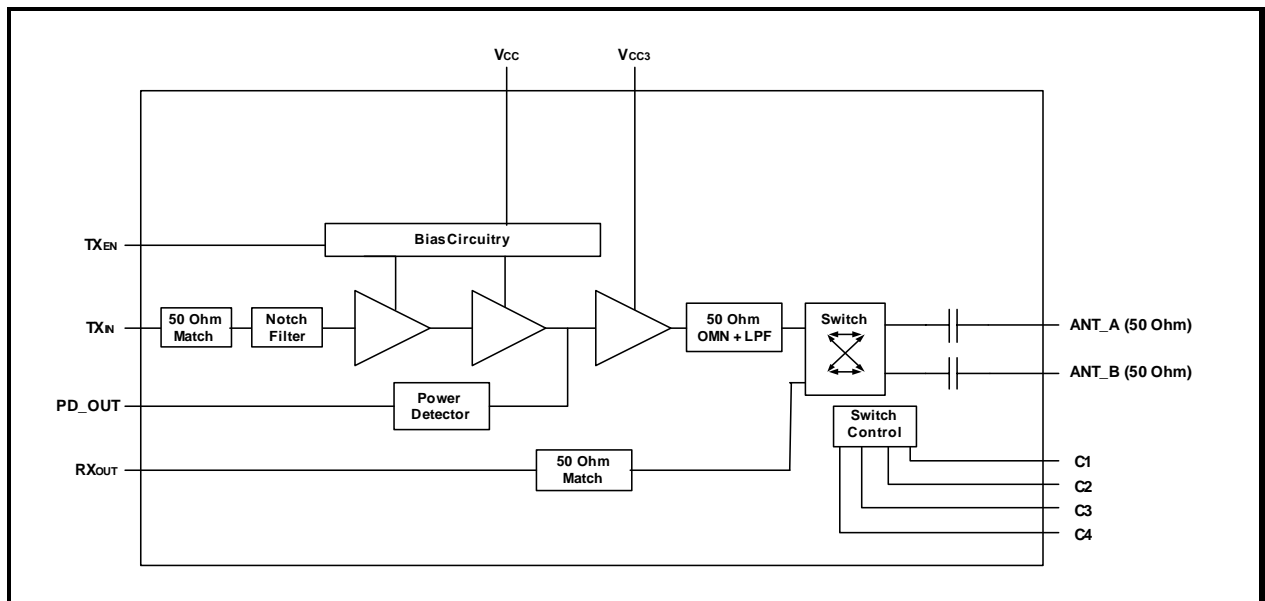


Figure 1: Functional Block Diagram

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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.

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