

### Applications

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

### Features

- Dual Mode IEEE802.11b & IEEE802.11g
- Integrated PA, TX Filter, DPDT T/R and Diversity switches
- Integrated Negative Slope Power Detector
- 21 dBm Output Power, 802.11b, 11 Mbits, ACPR <-30 dBc
- 18 dBm @ 3.0 % EVM, 802.11g, 54 Mbits
- Single supply voltage: 3.3 V ± 10 %
- Lead free, halogen free and RoHS compliant
- Small lead free, plated package, 4 mm x 5 mm x 0.9 mm, MSL 1

### Product Description

The SE2559L20 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 SE2559L20 provides a complete 2.4 GHz WLAN RF solution from the output of the transceiver to the antennas in an ultra compact form factor.

The SE2559L20 is designed for ease of use, with all the critical matching and harmonic filtering integrated, offering a simple 50 Ω interface to the antenna. The SE2559L20 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 0.5 μs typical.

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

### Ordering Information

Part No.	Package	Remark
SE2559L20	22 pin QFN	Samples
SE2559L20-R	22 pin QFN	Tape & Reel
SE2559L20-EK1	N/A	Evaluation kit

### Functional Block Diagram

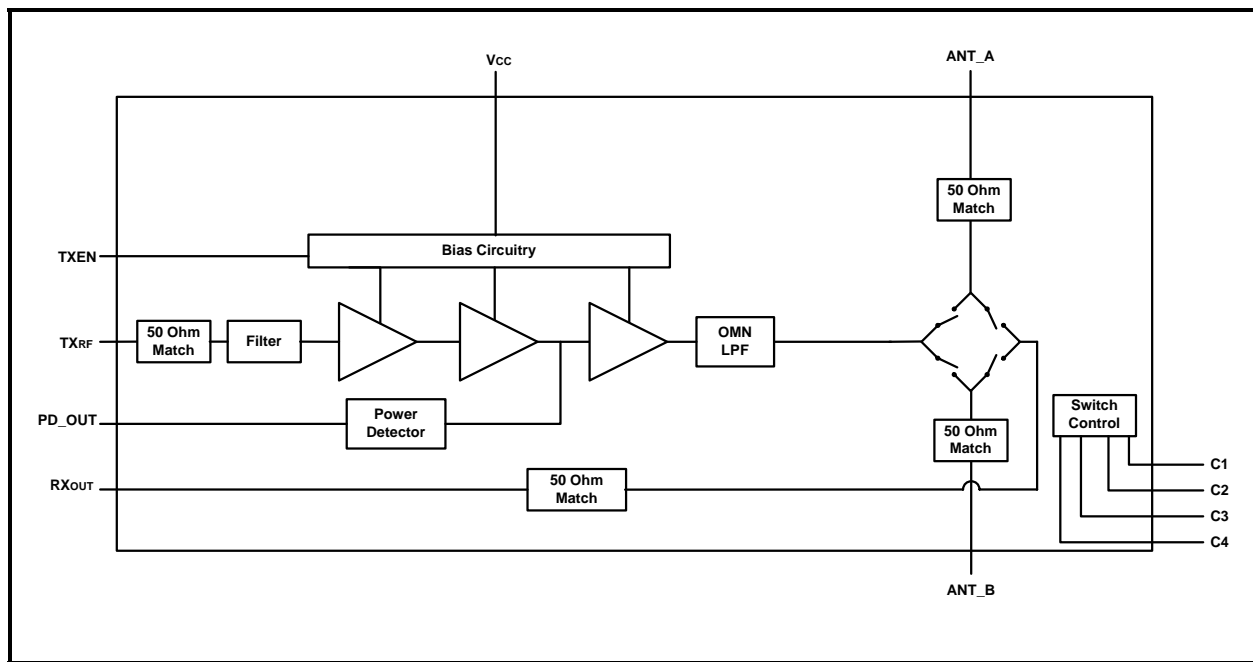


Figure 1: Functional Block Diagram

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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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