

2.4 - 2.5 GHz LNA With Bypass

Description

The LX5563 is a low noise amplifier (LNA) for WLAN applications in the 2.412 to 2.472 GHz frequency range. It operates with a single voltage supply of 3.3V, and features both high gain and bypass modes.

The LNA is fully matched on both the input and output ports; no external inductors or matching is required. It includes all bias circuitry and operates with a digital control signal. Only one external bypass capacitor on the supply line is required.

The LNA is packaged in a 1.5x1.5x0.5 mm dual-flat no-leads (DFN) package.

Features

- 2.412GHz to 2.472GHz Frequency Range
- Single 3.3V Operation
- 14dB Gain in High Gain Mode; 7dB Loss in Bypass Mode
- 1.3dB Noise Figure
- Input IP3 = +7.5 dBm (high gain)
- Input P1dB = -3 dBm (high gain) or +18dBm (bypass)
- Single Control Enables LNA in High Gain Mode, or Places LNA into Bypass Mode.

Applications

- 2.4GHz Wi-Fi RF Front Ends
- 802.11 b/g/n/ac Radios
- Laptops, Tablets
- Smartphones
- Wireless Access Points
- Routers

Block Diagram

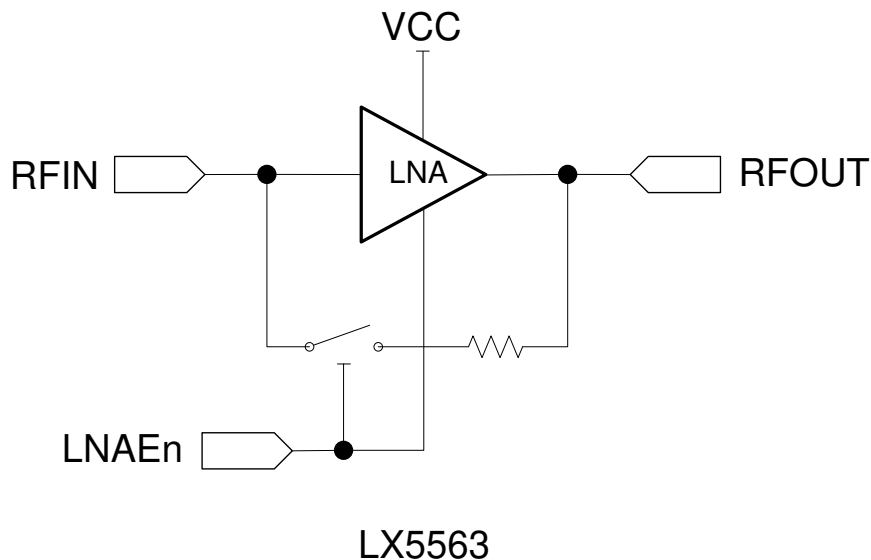


Figure 1 · Functional Block Diagram

Pin Configuration

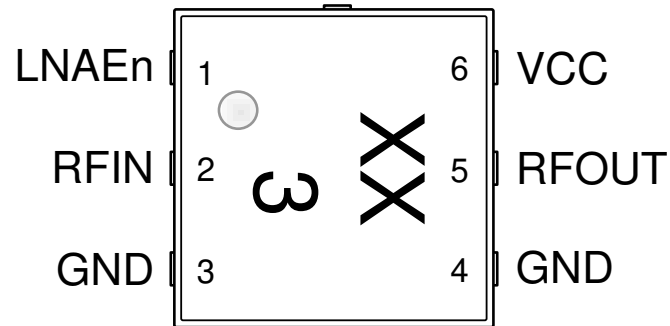


Figure 2 · Pinout

Ordering Information

Ambient Temperature	Type	Package	Part Number	Packaging Type
-40°C to 85°C	RoHS2 compliant, Pb-free	DFN 1.5x1.5 - 6L	LX5563LL	Bulk / Tube
			LX5563LL -TR	Tape and Reel



Microsemi Corporate Headquarters
One Enterprise, Aliso Viejo CA 92656 USA
Within the USA: +1 (949) 380-6100
Sales: +1 (949) 380-6136
Fax: +1 (949) 215-4996

Microsemi Corporation (NASDAQ: MSCC) offers a comprehensive portfolio of semiconductor solutions for: aerospace, defense and security; enterprise and communications; and industrial and alternative energy markets. Products include high-performance, high-reliability analog and RF devices, mixed signal and RF integrated circuits, customizable SoCs, FPGAs, and complete subsystems. Microsemi is headquartered in Aliso Viejo, Calif. Learn more at www.microsemi.com.

© 2013 Microsemi Corporation. All rights reserved. Microsemi and the Microsemi logo are trademarks of Microsemi Corporation. All other trademarks and service marks are the property of their respective owners.

LX5563.0/0.2.6
(Abridged)