

LINEAR TECHNOLOGY LTC5510IUF#TRPBF RF Active Mixer IC, 3.1V to 5.3V, 1MHz to 6GHz, QFN-16

Manufacturers	Analog Devices, Inc
Package/Case	16-WQFN
Product Type	RF Integrated Circuits
RoHS	Green
Lifecycle	



Images are for reference only

Please submit RFQ for LTC5510IUF#TRPBF or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The LTC5510 is a high linearity mixer optimized for applications requiring very wide input bandwidth, low distortion, and low LO leakage. The chip includes a double-balanced active mixer with an input buffer and a high speed LO amplifier. The input is optimized for use with 1:1 transmission line baluns, allowing very wideband impedance matching. The mixer can be used for both up- and down-conversion and can be used in wideband systems.

The LO can be driven differentially or single-ended and requires only 0dBm of LO power to achieve excellent distortion and noise performance, while also reducing external drive circuit requirements. The LTC5510 offers low LO leakage, greatly reducing the need for output filtering to meet LO suppression requirements.

The LTC5510 is optimized for 5V but can also be used with a 3.3V supply with slightly reduced performance. The shutdown function allows the part to be disabled for further power savings.

Features

Input/LO Frequency Range to 6GHz

50Ω Matched Input from 30MHz to >3GHz

Capable of Up- or Down-Conversion

OIP3: 27dBm at>

1.5dB Conversion Gain

Noise Figure: 11.6dB at>

High Input P1dB: 11dBm at 5V

5V or 3.3V Supply at 105mA

Shutdown Control

LO Input Impedance Always Matched

0dBm LO Drive Level

On-Chip Temperature Monitor

16-Lead (4mm × 4mm) QFN Package

Application

Wideband Receivers/Transmitters

Cable Downlink Infrastructure

HF/VHF/UHF Mixer

Wireless Infrastructure



Related Products



[LTC5510IUF](#)

Analog Devices, Inc
QFN-16



[LT5519EUF](#)

Analog Devices, Inc
QFN-16



[LTM9001IV-AA#PBF](#)

Analog Devices, Inc
LGA81



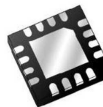
[LT5581IDDB](#)

Analog Devices, Inc
DFN8



[LT5538IDD](#)

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DFN8



[LT5521EUF](#)

Analog Devices, Inc
QFN-16



[LTP5902IPC-IPMA#PBF](#)

Analog Devices, Inc
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[LTP5901IPC-IPMA#PBF](#)

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