

InGaP HBT 2.4GHz 802.11ac Power Amplifier

Description

The LX5533 is a power amplifier optimized for 802.11b/g/n/ac applications in the 2.4-2.5 GHz frequency range. The LX5533 includes a three-stage PA, active bias, and input/output matching.

The power amplifier operates with a single positive voltage supply of 5V. It provides power gain of 30 dB and output powers of 24dBm for 802.11ac, VHT40, MCS9 at -35 dB DEVM and 24dBm for 802.11n, HT20, MCS0 across the frequency band. It is fully matched to 50 Ohms on the input and is easily matched on the output port.

Features

- 2.41-2.48GHz Operation
- Single-Polarity 5V Supply
- Power Gain ~ 30dB
- 24dBm @ -35dB DEVM for 802.11ac, VHT40, MCS9
- 24dBm @ 802.11n, HT20, MCS0 Spectral Mask
- Complete Input and Simple Output Match
- On-Chip Output Power Detector
- Small Footprint: 3x3mm²
- Low Profile: 0.9mm typ.
- RoHS Compliant & Halogen Free

Applications

- Tablets
- Access Points
- Mobile Devices
- Notebooks
- Gaming

Block Diagram

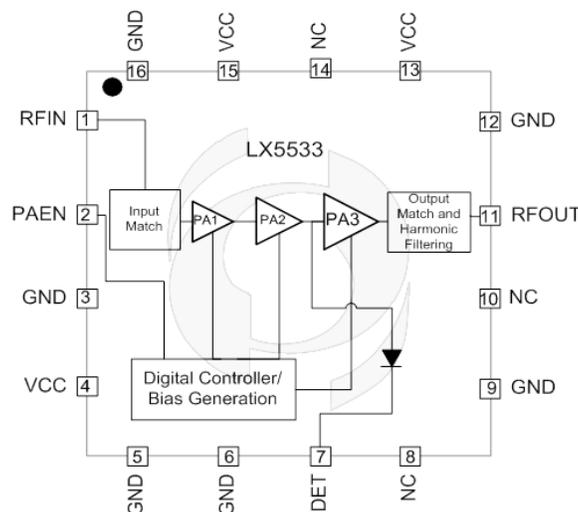


Figure 1 • Functional Block Diagram

Pin Configuration

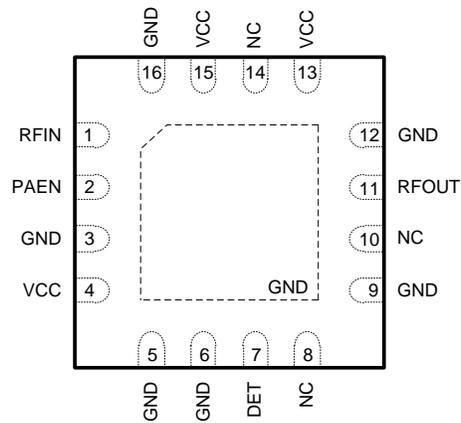


Figure 2 - Pinout (Top View)

Ordering Information

Case Temperature	Type	Package	Part Number	Packaging Type
-40°C to +85°C	RoHS2 compliant, Pb-free	QFN 3x3 16L	LX5533LQ	Bulk / Tube
			LX5533LQ-TR	Tape and Reel



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