

# InGaP HBT 2.4 - 2.5 GHz Power Amplifier

PRODUCTION DATA SHEET

### **DESCRIPTION**

The LX5535 is a power amplifier PA is implemented as a three-stage monolithic microwave integrated output pre-matching.

(HBT) IC process (MOCVD). With single low voltage amplifier requirements for supply of 5V, it provides 32 dB power 802.11b/g and WiMAX applications. gain between 2.4-2.5GHz, at a low quiescent current of 120mA.

The output power for EVM(Error optimized for WLAN applications in Vector Magnitude) of 3.5% is 25dBm the 2.4-2.5 GHz frequency range. The (64QAM/54Mbps), where the PA consumes 260mA total DC current.

The LX5535 is available in a 16-pin circuit (MMIC) with active bias and 3mm x 3mm micro-lead package (MLPQ-16L). The compact footprint, The device is manufactured with an low profile, and thermal capability of InGaP/GaAs Heterojunction Bipolar the MLP package makes the LX5535 an ideal solution for high-gain power

IMPORTANT: For the most current data, consult MICROSEMI's website: http://www.microsemi.com

#### **KEY FEATURES**

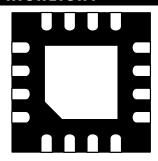
- Advanced InGaP HBT
  - 2.4-2.5GHz Operation
- Single-Polarity 3-5V Supply
- Quiescent Current 120mA
- Power Gain 32 dB
- Power for EVM~3.5 % 54Mbps/64QAM: 25dBm
- Total Current 260mA for Pout=25dBm, 802.11g
- 802.11b mask-compliant power: 28dBm
- Total Current 370mA for Pout=+28dBm, 802,11b
- Small Footprint: 3x3mm<sup>2</sup>
- Low Profile: 0.9mm

### APPLICATIONS

- IEEE 802.11b/g
- IEEE 802.16 WiMAX

### PRODUCT HIGHLIGHT

**MSC** 



### PACKAGE ORDER INFO

Plastic MLPQ 3×3 16 pin LO RoHS Compliant / Pb-free LX5535LQ

> Note: Available in Tape & Reel. Append the letter "TR" to the part number. (i.e. LX5535LQ-TR)



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### NOTES

Thank you for your interest in Microsemi® Analog Mixed Signal products.

The full data sheet for this device contains proprietary information.

To obtain a copy, please contact your local Microsemi sales representative. The name of your local representative can be obtained at the following link <a href="http://www.microsemi.com/contact/contactfind.asp">http://www.microsemi.com/contact/contactfind.asp</a>

or

Contact us directly by sending an email to:

IPGdatasheets@microsemi.com

Be sure to specify the data sheet you are requesting and include your company name and contact information and or yeard.

We look forward to hearing from you.