



# Microsemi<sup>®</sup>

## LX5535

### InGaP HBT 2.4 – 2.5 GHz Power Amplifier

#### PRODUCTION DATA SHEET

#### DESCRIPTION

The LX5535 is a power amplifier optimized for WLAN applications in the 2.4-2.5 GHz frequency range. The PA is implemented as a three-stage monolithic microwave integrated circuit (MMIC) with active bias and output pre-matching.

The device is manufactured with an InGaP/GaAs Heterojunction Bipolar Transistor (HBT) IC process (MOCVD). With single low voltage supply of 5V, it provides 32 dB power gain between 2.4-2.5GHz, at a low quiescent current of 120mA.

The output power for EVM(Error Vector Magnitude) of 3.5% is 25dBm (64QAM/54Mbps), where the PA consumes 260mA total DC current.

The LX5535 is available in a 16-pin 3mm x 3mm micro-lead package (MLPQ-16L). The compact footprint, low profile, and thermal capability of the MLP package makes the LX5535 an ideal solution for high-gain power amplifier requirements for IEEE 802.11b/g and WiMAX applications.

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

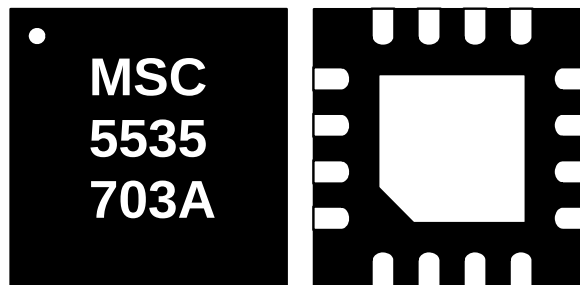
#### KEY FEATURES

- 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



#### PACKAGE ORDER INFO

**LQ**

Plastic MLPQ  
3x3 16 pin  
RoHS Compliant / Pb-free  
**LX5535LQ**

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



## INFORMATION

*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

<http://www.microsemi.com/contact/contactfind.asp>

**or**

Contact us directly by sending an email to:

[IPGdatasheets@microsemi.com](mailto:IPGdatasheets@microsemi.com)

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

*We look forward to hearing from you.*