

# 5.15–5.85GHz 802.11ac Front End Module

### Description

The LX5586 is a complete integrated 5GHz Front-End Module (FEM) for an IEEE 802.11ac system. It includes a highly linear 5GHz Power Amplifier (PA) with power detector, Low Noise Amplifier (LNA) with bypass capability, and SPDT antenna switch. This highly integrated FEM only requires one bypass cap thus reducing system footprint, bill of materials, and manufacturing cost.

The LX5586 is available in a 16-pin low profile 2.5x2.5x0.4mm QFN Package.

### **Features**

- Single Supply Voltage 3V to 4.6V
- Integrated 5GHz PA, LNA, and SPDT Tx/Rx Switch
- POUT = 17dBm (typical) at -35dB EVM (256QAM/80MHz)
- Bypassable low noise figure LNA
- Small Footprint: 2.5 x 2.5mm<sup>2</sup>
- Low Profile: 0.4mm max
- RoHS Compliant & Halogen Free

## **Applications**

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



### Figure 1 - Functional Block Diagram

**Block Diagram** 



# **Pin Configuration**



# Ordering Information

| Ambient<br>Temperature | Туре                        | Package                   | Part Number  | Packaging Type |
|------------------------|-----------------------------|---------------------------|--------------|----------------|
| -40°C to 85°C          | RoHS2 compliant,<br>Pb-free | QFN<br>2.5x2.5x0.4<br>16L | LX5586LL     | Bulk / Tube    |
|                        | NiPdAu lead finish          |                           | LX5586LL -TR | Tape and Reel  |



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