

**1.2GHz IF Converter w/AGC and Synthesizer**



The ISL3787 is a highly integrated, UHF2, Half Duplex IF Converter, PLL Synthesizer and VCO IC device. It is part of the Intersil PRISM® V, 5GHz radio chipset.

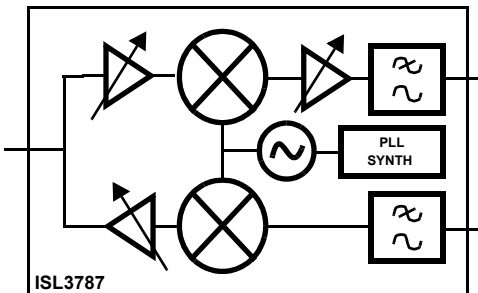
The ISL3787 directly interfaces with the ISL3877 Wireless LAN Integrated Media Access Controller with Baseband Processor. Adding Intersil's ISL3687 5GHz RF/IF Converter with Integrated Synthesizer allows operation with a single SAW filter for both Transmit and Receive IF to Baseband functions. The addition of a power amplifier completes a Wireless LAN radio application for the 802.11a 5GHz standard.

The ISL3787 combines all the necessary IF to Baseband functions into a Micro Lead Frame Plastic Package suitable for Mini-PCI and PCMCIA applications.

**Ordering Information**

PART NUMBER	TEMP. RANGE (°C)	PACKAGE	PKG. NO.
ISL3787IR	-40 to 85	56 Lead MLFP	L56.8 X 8
ISL3787IR-TK	-40 to 85	Tape and Reel	

**Simplified Block Diagram**



**Features**

- Frequency of Operation, RXin/TXout . . . . .300 to 1200MHz
- Frequency of Operation, TXin/RXout . . . . .10 to 30MHz
- Receive Voltage Gain . . . . .78dB
- Wide Dynamic AGC Control . . . . .76dB
- Transmit Power Control Range . . . . .40dB
- Integrated Antialiasing and Preshaping Filters
- Integrates a VCO and a Synthesizer PLL
- Low Supply Operation . . . . .2.7-3.3V

**Applications**

- High Data Rate Wireless LAN IEEE 802.11a Systems
- PCI, Mini-PCI and PCMCIA Wireless LAN Adapters
- Spread Spectrum WLAN RF Modems
- TDMA or CSMA Packet Protocol Radios
- PCN / Wireless PBX / Wireless Local Loop

**Pinout**

**ISL3787  
TOP VIEW**

