

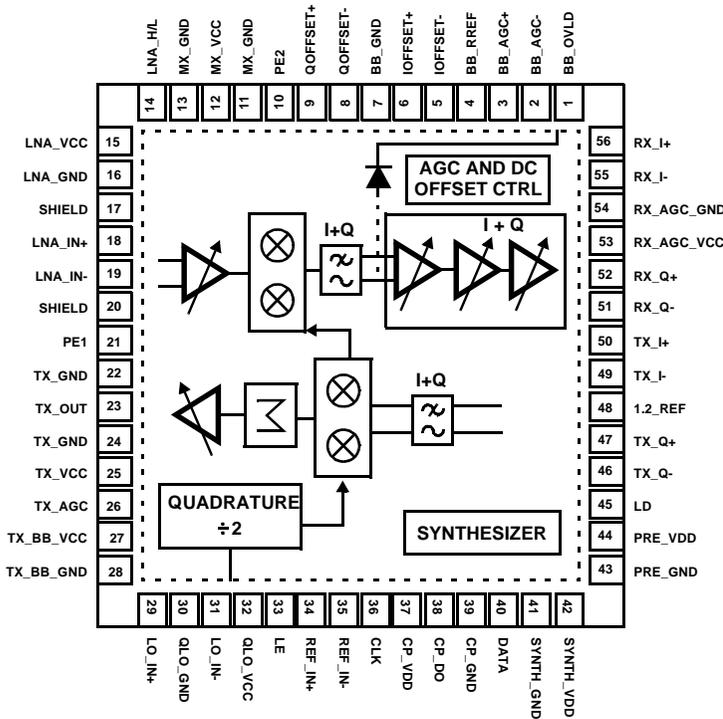
**Direct Down Conversion Transceiver**



The Intersil ISL3684A is a highly integrated SiGe process, direct down conversion transceiver and is part of the PRISM 3, 2.4GHz 11Mbps, IEEE802.11b compliant radio chipset. The ISL3684A directly interfaces with the Intersil's ISL3871 Integrated LAN Medium Access Controller (MAC) with baseband processor. The addition of the ISL3984/85 Intersil power amplifiers, and the ISL3084 5GHz VCO completes the LAN radio application.

**Pinout**

ISL3684A  
MLFP  
TOP VIEW



**Features**

- Highly integrated RF to baseband solution
- Frequency of operation . . . . . 2.4GHz to 2.5GHz
- Low supply operation . . . . . 2.7V to 3.3V
- Noise figure . . . . . 3.5dB
- Voltage gain . . . . . +1.5dB to 88.5dB
- Gain and phase balance, typical . . . . .  $\pm 0.5$ dB,  $\pm 2$ deg.
- TX/RX switching speed . . . . .  $< 1\mu$ s
- Direct simple interface to ISL3871
- Enhanced replacement for ISL3684

**Applications**

- PC card wireless LAN adapters
- High data rate wireless LAN systems targeting IEEE802.11b standard
- Spread spectrum WLAN RF modems
- TDMA or CSMA packet protocol radios
- PCI wireless LAN cards
- ISA, ISA PnP WLAN cards
- PCN / wireless PBX / wireless local loop

**Ordering Information**

PART NUMBER	TEMP. RANGE (°C)	PACKAGE	PKG. NO.
ISL3684AIR	-40 to 85	56 Ld MLFP	L56.8x8
ISL3684AIR-TK	Tape and Reel		