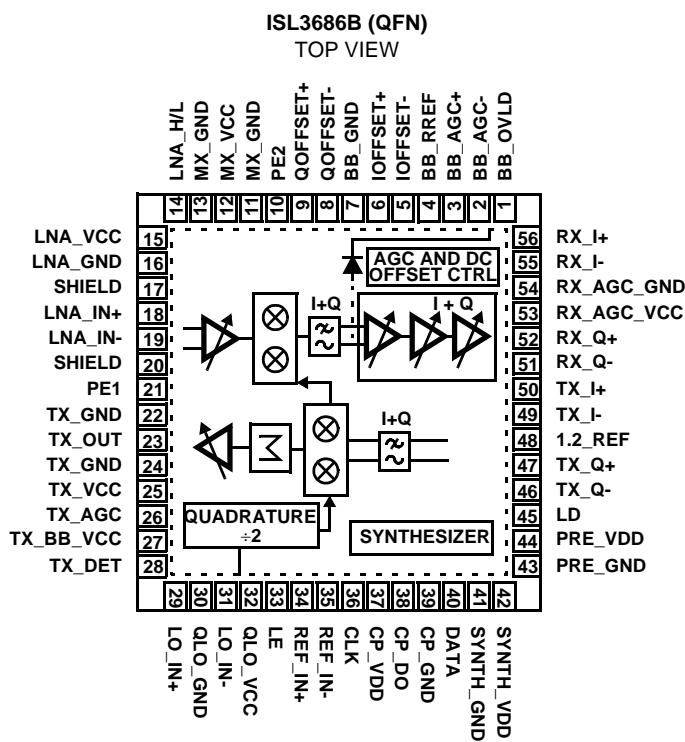


Direct Down Conversion Transceiver



The Intersil ISL3686B is a highly integrated SiGe process, direct down conversion transceiver and is part of the PRISM GT, 2.4GHz 54Mbps, IEEE802.11b/g compliant radio chipset. The ISL3686B directly interfaces with Intersil's ISL3685A Baseband Processor (BBP) and ISL3880 Integrated Medium Access Controller (MAC) with BBP. The addition of the ISL3984/85 Intersil power amplifier, and the ISL3084 5GHz VCO completes the LAN radio application.

Pinout



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 5.1dB
- Voltage gain +1.5dB to 81dB
- Gain and phase balance, typical ±0.5dB, ±2deg.
- TX/RX switching speed <1µs
- Direct simple interface to ISL3880
- Enhanced replacement for ISL3686, ISL3686A

Applications

- PC card wireless LAN adapters
- High data rate wireless LAN systems targeting IEEE802.11b/g standards
- 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. DWG. #
ISL3686BIR	-40 to 85	56 Ld QFN	L56.8x8
ISL3686BIR-TK	Tape and Reel		