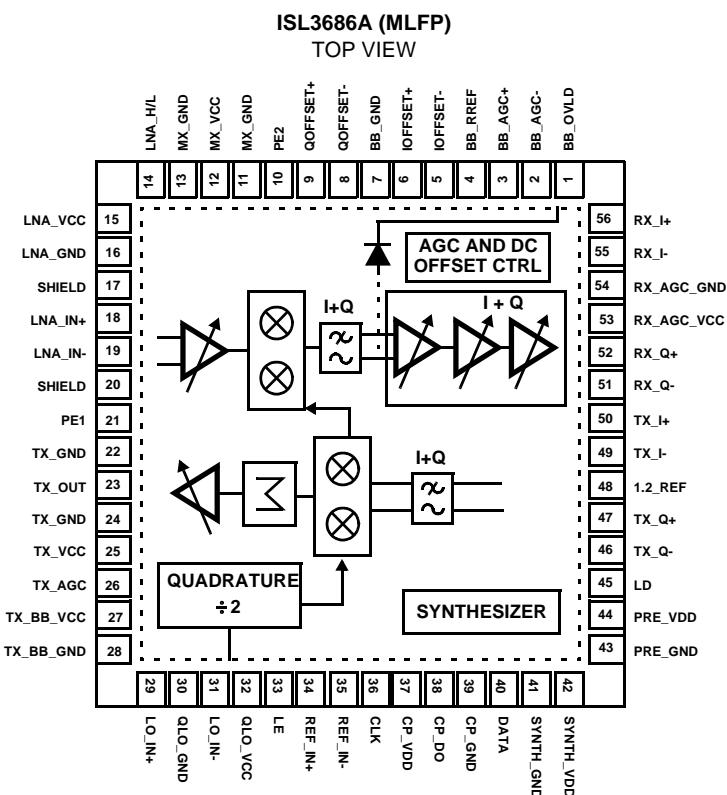


Direct Down Conversion Transceiver



The Intersil ISL3686A 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 ISL3686A directly interfaces with Intersil's ISL3685A Baseband Processor (BBP) and ISL3880 Integrated Medium Access Controller (MAC) with BBP. The addition of the ISL3980 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

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. # |
|---------------|------------------|------------|-------------|
| ISL3686AIR | -40 to 85 | 56 Ld MLFP | L56.8x8 |
| ISL3686AIR-TK | Tape and Reel | | |