

PRELIMINARY Data Sheet June 2003 FN8073

### 11GHz VCO



The ISL3092 is a 11GHz SiGe monolithic VCO circuit designed to simplify and reduce the cost and size of miniature wireless transceivers.

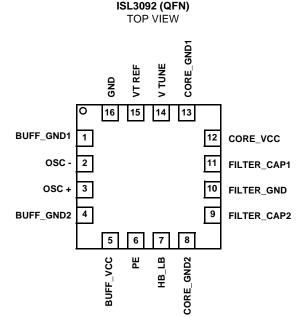
A fully integrated VCO requiring no external elements such as inductors or varactors greatly simplifies low cost local oscillator synthesized applications.

Included in this differential design is a high/low band selection and a low-power standby function.

The ISL3092 directly interfaces with Intersil's 2.4/5GHz dualband ZIF (zero IF) converter (ISL3692). The addition of the Intersil's Wireless LAN Media Access Controller and Baseband Processor (ISL3886) and Intersil's Power Amplifier (ISL3992) completes a worldwide wirelessLAN radio application targeting both the 802.11b/g 2.4GHz and 802.11a 5GHz standard.

The ISL3092 is housed in a 16 lead Quad Flat No Lead Plastic (QFN) Package suitable for Mini-PCI and PCMCIA applications.

#### **Pinout**



#### **Features**

- Single Supply . . . . . . . . . . . . . . . 2.7V to 3.0V
- Frequency ...... 9648 to 11670MHz typical
- Fully integrated / no external varactors or resonators required
- Isolation output buffer/reduced load pulling
- · Differential design/reduced spurs
- · Digitally controlled power down mode

## **QFN Package**

- Compliant to JEDEC PUB95 MO-220 QFN Quad Flat No Leads - Package Outline
- Near Chip Scale Package footprint, which improves PCB efficiency and has a thinner profile

### **Applications**

- High Data Rate Wireless LAN Systems Targeting the IEEE 802.11a and 802.11b Standards
- Only required VCO function for Intersil chip set
- WLAN applications
- · PCMCIA wireless transceivers
- · TDMA packet protocol radios

### **Ordering Information**

PART NUMBER	TEMP. RANGE (°C)	PACKAGE	PKG. DWG. #
ISL3092IR	-40 to 85	16 Lead QFN	L16.3X3
ISL3092IR-TK	-40 to 85	Tape and Reel	

# Simplified Block Diagram

