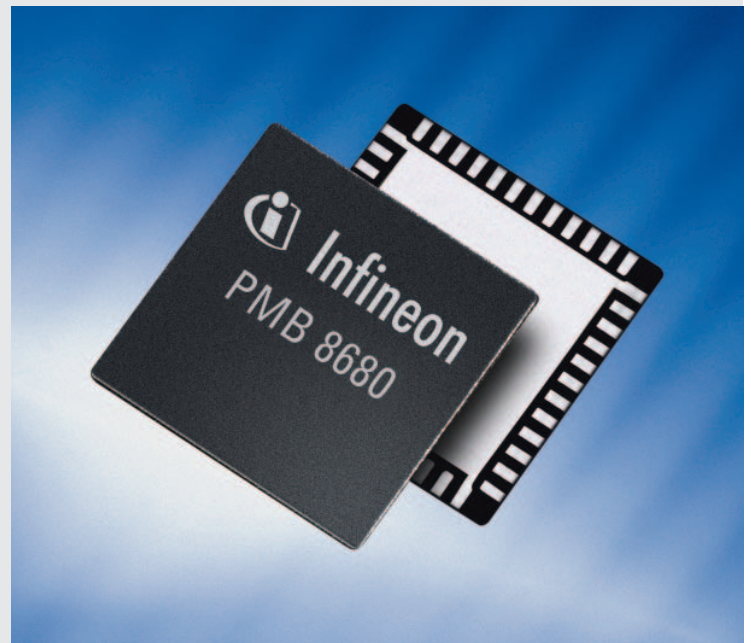


Dual-Band RF Transceiver for WLAN System Solutions

The PMB 8680 is a low power, high performance dual-band RF Transceiver for IEEE Wireless LAN Standards 802.11a, 11b and 11g.

The PMB 8680 is designed to form an Infineon WLAN chipset in combination with the PMB 8787 Baseband PHY IC, the PMB 8825 dual-band Power Amplifier and the PMB 8789 MAC IC.

This highly integrated solution together with low external component requirement (low Bill of Material) shortens time to market.



WirelessLAN

Features

- 0.25 μm BiCMOS technology
- 3-wire bus control
- Supply voltage 3.0 ... 3.6 V
- Alternative direct supply of regulated supply voltage 2.5 ... 2.7 V
- 2 integrated voltage regulators (LDO)
- Power down modes
- Operational temperature -30 ... +85°C
- Frequency bands: 2.4 - 2.5 GHz/5.15 - 5.875 GHz
- Small size VQFN-48 package (7x7x0.9 mm)

Applications

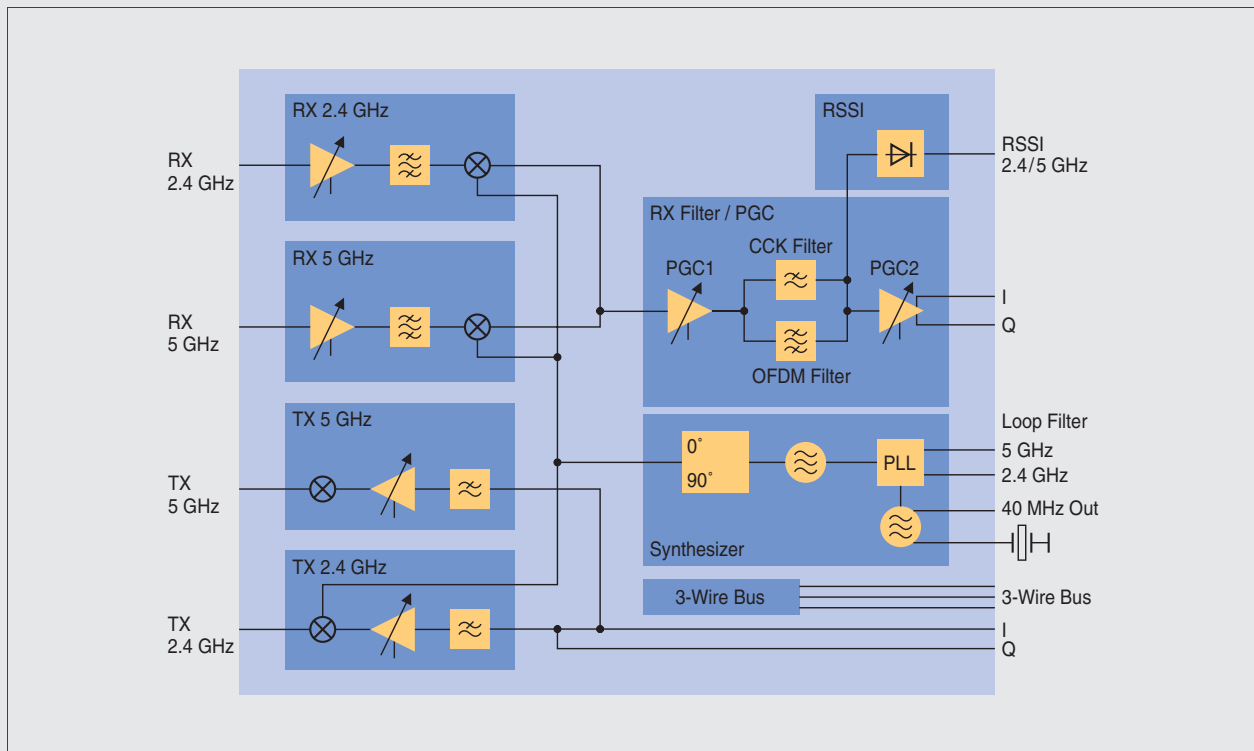
- High data-rate wireless LAN
- PC card wireless LAN adapters
- (Mini) PCI wireless LAN cards
- CardBus wireless LAN adapters
- Compact flash wireless LAN cards
- USB wireless LAN adapters
- Wireless LAN modules, access points, bridge products, and point-to-multipoint systems

P M B 8 6 8 0
Dual-Band RF Transceiver



N e v e r s t o p t h i n k i n g .

Block Diagram



Features

- Highly integrated single chip WLAN RF Transceiver
- Dual-band solution for 2.4 GHz and 5 GHz
- Dual mode solution for CCK and OFDM
- Direct conversion receiver for 802.11b
- Low IF receiver for 802.11a and 11g
- Integrated channel filter and PGC
- DC offset cancellation
- Synthesizer with integrated VCO, PLL, 40 MHz XO with digital frequency calibration
- I-Q differential interface for RX and TX multiplexed for 802.11a, 11b and 11g
- Direct modulation transmitter with programmable output power -24 ... -4 dBm

- High sensitivity ~10 dBm better than IEEE requirements
 - 74 dBm @ 54 Mbit/s
 - 90 dBm @ 6 Mbit/s
- Low BOM, low external component count
- Highly integrated solution
 - No external SAW required
 - On-chip low drop regulator
- Low power dissipation
 - 180 mA for 802.11a
 - 140 mA for 802.11g
- 3-wire bus control interface

Ordering Information

Please contact the local Infineon sales office for dedicated information on our Wireless LAN products

Type	Sales Code	Package
WLAN RF Transceiver	PMB 8680	P-VQFN-48

How to reach us:

<http://www.infineon.com>

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Infineon Technologies is an approved CECC manufacturer.

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For further information on technology, delivery terms and conditions and prices please contact your nearest Infineon Technologies Office in Germany or our Infineon Technologies Representatives worldwide.

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