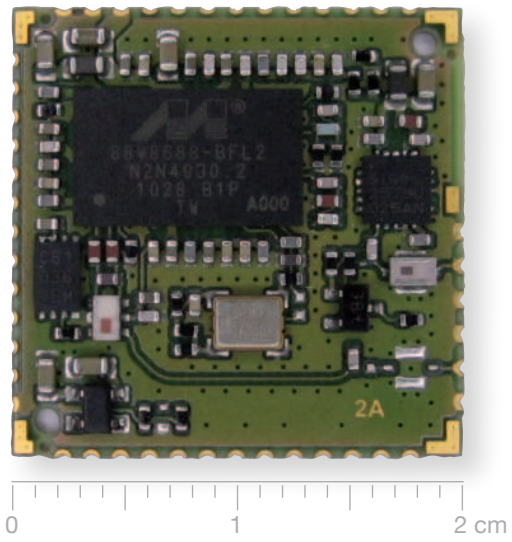


- For automotive and industrial applications
- High transmission power and sensitivity
- Low current consumption
- Small footprint
- Guaranteed long-term availability of 5+ years

Embedded Wireless LAN Module

WiBear 11g

The WiBear 11g is a reliable, automotive-grade WLAN front-end module with an extended temperature range from -40 °C to +85 °C.

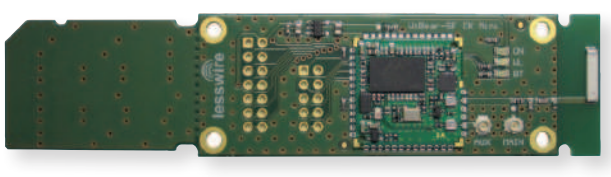
The module supports IEEE 802.11b/g WLAN station (client) and micro access point operation modes. It provides a complete end-to-end solution for low-power applications. The WiBear 11g includes an integrated MAC/Baseband processor and RF front-end components and can connect to a host processor through SDIO/SPI interface. Host drivers for common operating systems such as Linux, Android, and Windows Mobile are available. The modules are radio type approved for Europe (CE) and the United States (FCC).

Key Features

- Compliant to WLAN Standards IEEE 802.11b/g
- Station and micro access point operation (up to 8 clients supported)
- Support for WEP, WPA and WPA2 encryption
- SDIO or G-SPI host interface
- Compact footprint, surface mount (SMD) type
- Driver Support for Linux 2.6.x, Windows Embedded (CE 6)
- Wide temperature operation range from -40°C to +85°C
- Conformity with CE, FCC and IC

Evaluation Board

The WiBear 11g's Evaluation Board is also a ready-made reference design. Users can either work with its on-board antenna or an external antenna connected via coaxial connector. The board offers a standard SDIO connector for host communication.



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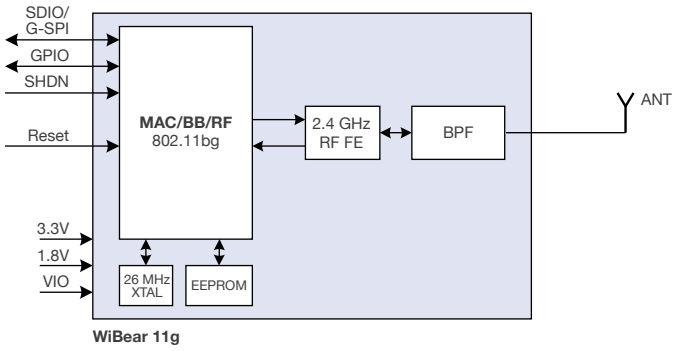
Application Diagram



Technical Specification

WLAN Standards	IEEE 802.11b, g, IEEE 802.11i, e, j, h, s (IEEE802.11-2007)
Data Transfer Rate	IEEE 802.11b: 11, 5.5, 2, 1 Mbps; IEEE802.11g: 54, 48, 36, 24, 18, 12, 9, 6 Mbps
Frequency Range	2.4 - 2.497 GHz (ISM Band)
Output Power	WLAN IEEE 802.11 b: 18 dBm; IEEE 802.11 g: 15 dBm
Modulation	OFDM with BPSK, QPSK, 16-QAM, and 64-QAM; 802.11b with CCK and DSSS
Security Encryption	WEP 64/128 Bit-Key, WPA (TKIP, AES), WPA2 (CCMP, AES)
Host Interfaces	SDIO (4-bit), G-SPI
Antenna	QFN antenna pad
Management	According to IEEE802.11
Power Supply	Vcc 3.3 V and 1.8 V
Current Consumption	210 mA (max), 125 mA (avg) @ 3.3 V
Operating Temperature	-40 °C to +85 °C
Firmware	WLAN STA: infrastructure and ad-hoc mode
	WLAN µAP: micro access point mode supports up to 8 WLAN stations
	At system power-on firmware is downloaded from host
WLAN/Bluetooth Coexistence	Internal support
Certifications	CE R&TTE, FCC / IC Canada
Dimensions (L x W x H)	20 mm x 20 mm x 2.5 mm
Delivery	Tape & reel

CE FC IC RoHS

Ordering Information

WiBear 11g WLAN Module	AN00J97257
WiBear 11g Evaluation Board with Module	AN00977233

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ISO 9001 certified

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