products
PRISM® 2.5, 11Mbps
with Mini-PCI interface

Intersil's PRISM® 2.5 wireless networking chip set, utilizing the ISL3874 integrated Baseband Processor and Medium Access Controller, is optimized for smaller form factors and embedded WLAN applications. Embedded designs such as mini-PCI or Compact Flash® are installed within a product during assembly. This allows reduction of overall system size, requires no user installation, and is usually less prone to problems. The PRISM 2.5 solution incorporates sophisticated state-of-the-art silicon germanium (SiGe) and sub-micron CMOS technology to create highly-integrated, feature-rich WLAN silicon solutions for products operating in the 2.4 GHz Industrial Scientific and Medical (ISM) band at the IEEE 802.11b-compliant high-data-rate speed of 11 Megabits-per-second (Mbps). PRISM 2.5 consists of only four ICs and a companion voltage-controlled oscillator (VCO). PRISM 2.5-based products will provide users with wireless access to networks and the Internet for fast and efficient transmission of data, video and Voice over Internet Protocol (VoIP) services. Intersil is also developing a PRISM 2.5 mini-PCI Reference Design.

- ISL3984 - 2.4GHz Power Amplifier and Detector
- ISL3685 - 2.4GHz RF/IF Converter and Synthesizer
- HFA3783 - I/Q Modulator/Demodulator Synthesizer
- ISL3874A - Integrated MAC and Baseband Processor with PCI

SPECIFICATIONS

Variable Data Rates	11, 5.5, 2 and 1Mbps
Frequency Band	2.4GHz ISM Band
BER	1×10^{-5} at -83dBm
Dual Mode	IEEE802.11, 1 and 2Mbps
	5.5 and 11Mbps
Range	100m Indoors*
Power Consumption	Same as PRISM II

*Range test using AND-C-107 omnidirectional antenna.

PRISM 2.5, 11Mbps Chip Set Block Diagram (Mini-PCI)

UNLEASHING THE POWER OF CONNECTIVITY™