

# WildCard

Wireless LAN 802.11a/b/g Controller  
ADM8262



WildCard, ADM8262 is the latest addition to Infineon's family of high speed wireless NIC controllers. Designed for 802.11a/b/g wireless client and server applications, WildCard caters to PCI, mini-PCI and Carbus interfaces.

With low power consumption, hard-wired compact size and the flexibility to adapt to a variety of RF designs, system designers can easily incorporate WildCard into a wide range of wireless applications.

With minimal CPU utilization, support for multiple operating systems including Windows Native WiFi and Antenna Diversity design, WildCard delivers low cost solutions for high-speed wireless applications. Combined with Infineon's Dual Band RF/PA technology, a complete end-to-end, 802.11a/b/g wireless solution can be realized.

## Applications

- 802.11 a/b/g PCI and Carbus NICs
- PC and Notebook on-board 802.11a/b/g
- PCI and mini-PCI client modules
- 802.11a/b/g Access Points, Routers and Gateway Server Applications

## Features

- IEEE 802.11a/b/g WMAC and BBP single chip
- State machine design for WMAC, no external memory needed
- Hard-wired WEP/TKIP/AES-CCM design for 802.11i standard and WiFi WPA compatible
- Supports 802.11e, 802.11h and 802.11d
- Supports Infrastructure, Ad-hoc mode under DCF
- Supports AP / STA / STA converter / AP repeater modes
- Supports Packet Burst mode for higher TX/RX performance
- Flexible designs for various Radio Front End designs, Airoha and Infineon solutions compatible
- Provides Antenna Diversity design

## Interfaces

- 32-bit PCI
- Mini-PCI
- Carbus

## Supported Operating Systems

- Microsoft® Windows® 98/ME/2000/XP Native WiFi
- Win CE®
- Linux®
- MAC® OS

## Physical Characteristics

- CSM CMOS, 0.18  $\mu$ m, 1P5M Process
- 128-pin LQFP Package
- On chip 3.3 V ~ 1.8 V regulator controller
- 3.3 V power supply with 5 V/3.3V I/O tolerance

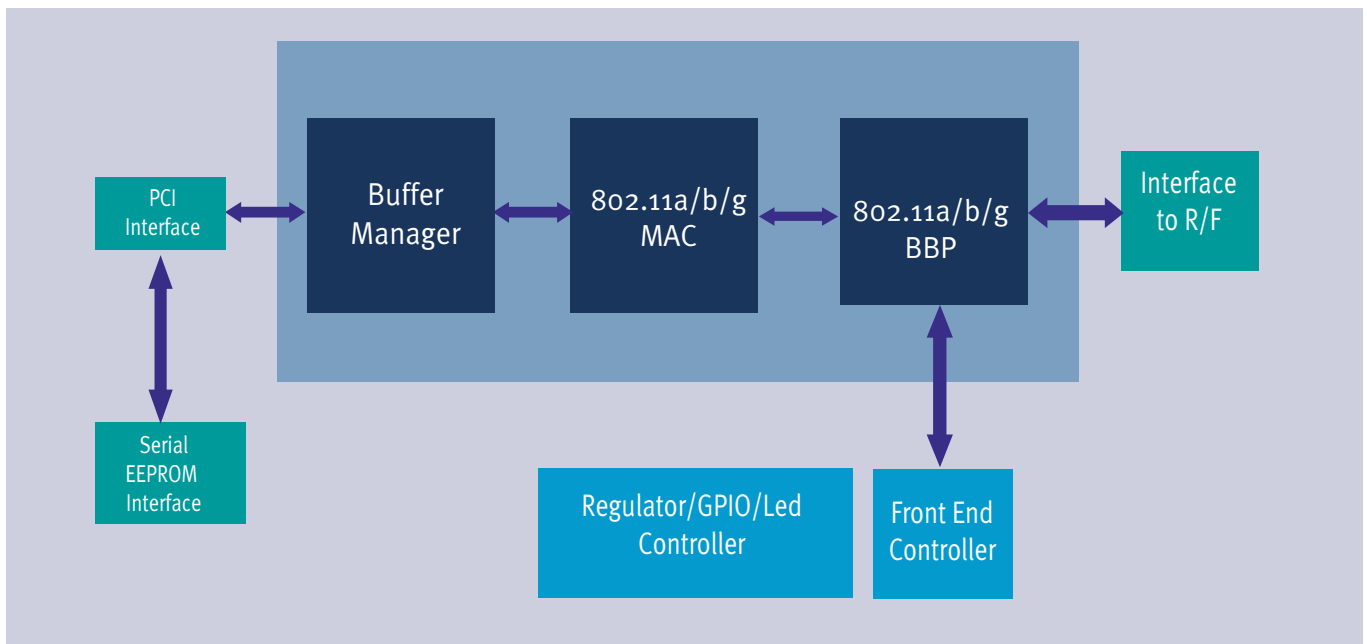
[www.infineon.com/products](http://www.infineon.com/products)

Wireline Communications



Never stop thinking.

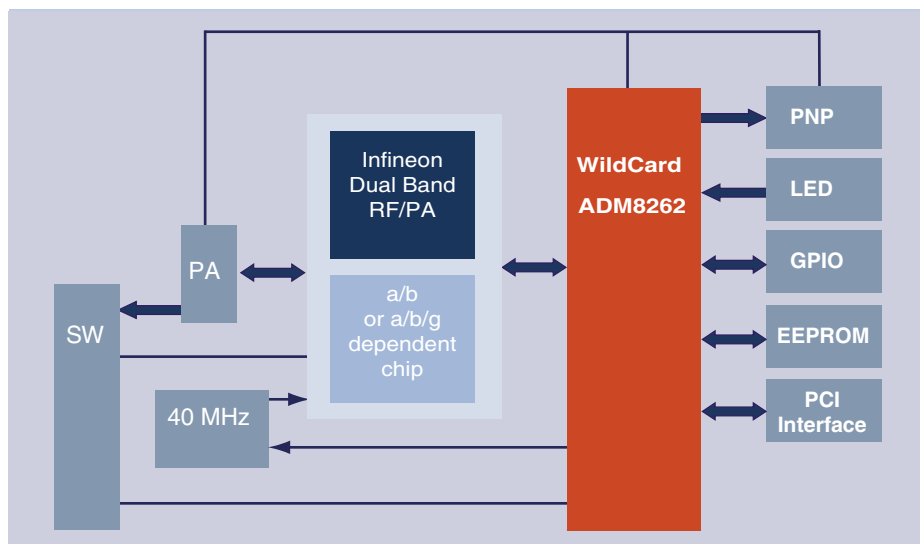
## WildCard 802.11a/b/g Controller Block Diagram



## Ordering Information

### IC

Product Sales Code	Description	Package
ADM8262	WildCard 802.11a/b/g PCI/Cardbus/Mini-PCI WLAN MAC/BBP Controller	LQFP-128



## Dual Band RF/PA Application Example

How to reach us:

<http://www.infineon.com>

Published by  
Infiniteon Technologies AG,  
St.-Martin-Strasse 53,  
81669 München

© Infineon Technologies AG 2004.  
All Rights Reserved.

Template: pb\_tmplt.fm/4

### Attention please!

The information herein is given to describe certain components and shall not be considered as a guarantee of characteristics. Terms of delivery and rights to technical change reserved.

We hereby disclaim any and all warranties, including but not limited to warranties of non-infringement, regarding circuits, descriptions and charts stated herein.

### Information

For further information on technology, delivery terms and conditions and prices please contact your nearest Infineon Technologies Office.

### Warnings

Due to technical requirements components may contain dangerous substances. For information on the types in question please contact your nearest Infineon Technologies Office.

Infiniteon Technologies Components may only be used in life-support devices or systems with the express written approval of Infineon Technologies, if a failure of such components can reasonably be expected to cause the failure of that life-support device or system, or to affect the safety or effectiveness of that device or system. Life support devices or systems are intended to be implanted in the human body, or to support and/or maintain and sustain and/or protect human life. If they fail, it is reasonable to assume that the health of the user or other persons may be endangered.