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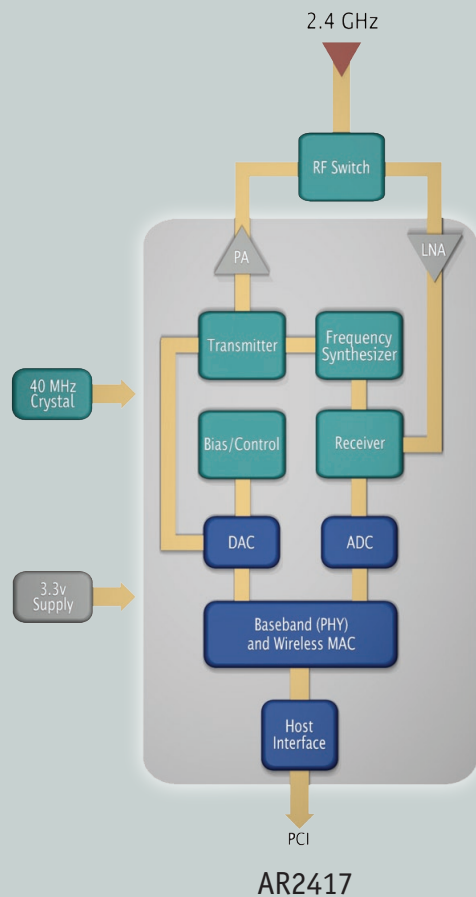
ATHEROS®
COMMUNICATIONS

AR2417 Product Overview

Introducing Atheros' AR2417, the industry's most integrated single-chip IEEE 802.11b/g WLAN solution designed for Mini-PCI and CardBus designs. The AR2417, the newest member of Atheros' family of AR5007 single-chip solutions offers significant enhancements over the previous generation AR5005G, Atheros' most popular-selling chip family to date. This new design reduces the total solution cost by integrating the 802.11b/g media access controller (MAC), baseband processor, 2.4GHz radio, low noise amplifier (LNA), power amplifier (PA) and selected RBOM components onto a low-cost, digital CMOS chip. With this high level of integration, the AR2417 significantly reduces the total BOM and manufacturing costs of mini-PCI and CardBus 802.11b/g products, compared to current generation solutions. The AR2417 is ideal for enabling carrier gateway designs with low-cost, wireless connectivity and for CardBus applications.

The AR2417 supports industry standard 802.11b, 802.11g, security and QoS. Full reference design support is available.

AR2417 System Architecture



AR2417

*Highly-integrated, single-chip 802.11g Solution
for Mini-PCI and CardBus Designs*



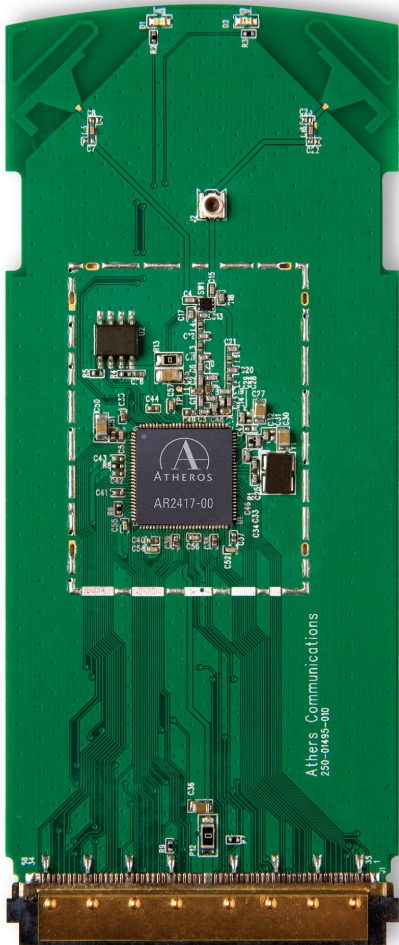
*Part of the AR5007
Family of Solutions*

AR2417 Solution Highlights

- Highly integrated, lowest cost 802.11b/g WLAN solution for Mini-PCI and CardBus designs
- Integrated WLAN MAC and baseband processing engine
- WLAN radio operates from 2.300-2.500GHz
- Integrated power and low noise amplifiers (PA and LNA)
- Innovative 2-layer mini-PCI design offers the industry's smallest form factor with half the height of existing solutions
- Eliminates all IF filters and most RF filters; no external voltage-controlled oscillators (VCOs) or surface acoustic wave (SAW) filters needed
- Integrated analog-to-digital and digital-to-analog converters
- Lower passive component count
- Requires only one external 3.3V power supply
- Compliant with IEEE 802.11b, 802.11g, 802.11d, 802.11e and 802.11i
- Supports Atheros JumpStart for Wireless™ secure configuration tool
- Available in lead-free RoHS compliant packaging

CB55 Reference Design Highlights

- Targeted for aftermarket WLAN client applications
- Windows drivers for Windows XP, Windows 2000 and Windows Vista
- PCMCIA CardBus 7.1 specification compliant single sided board design
- Worldwide regulatory compliant (country list available on request)



AR2417 Specifications

Performance & Power Consumption

Frequency Band	2.300 to 2.500 GHz
Network Standard	802.11b, 802.11g
Modulation Technology	OFDM with BPSK, QPSK, 16 QAM, 64 QAM; DBPSK, DQPSK, CCK
FEC Coding Rate	1/2, 2/3, 1/4
Hardware Encryption	AES, TKIP, WEP
Quality of Service	802.11e
Host Interface	Mini PCI, CardBus, PCI
Communication Interface	High speed UART
Peripheral Interface	GPIOs, LEDs
Memory Interface	EEPROM
Security	WPA, WPA2, 802.1x

Supported Data Rates

IEEE 802.11b	1 to 11 Mbps
IEEE 802.11g	6 to 54 Mbps

Chip Specifications

Operating Voltage	3.3V +/-10%
Package Dimensions	12 mm x 12 mm
Package	108 QFN

MB55 Reference Design Highlights

- Enables WLAN gateway and router applications
- Linux 2.6 AP/router driver reference code
- Half size mini-PCI 1.0 board design for lowest RBOM cost
- Worldwide regulatory compliant (country list available on request)



If you are interested in offering wireless LAN connections to your customers and wish for further information on Atheros products and potential business relationship opportunities, please contact your local Atheros sales office.

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