

W3091MPCI - 802.11b/g Wireless Mini-PCI Module

PCD Global partners with world-class manufacturers and leading chip-set suppliers, to offer the latest technology solutions encompassing IEEE 802.11xx standards.

The W3091MPCI 802.11b/g Wireless Mini-PCI Module incorporates the Atheros AR2414 (Single-Chip CMOS MAC/Baseband/Radio), and supports Atheros XR™ eXtended Range Technology as well as Atheros Super G™ data rates. Lead-Free.



AR5005GS Chipset Specifications

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 Rates	1/2, 1/3, 1/4	
Hardware Encryption	AES, TKIP, WEP	
Quality of Service	802.11e draft	
Media Access Technique	CSMA/CA	
Host Interface	Mini PCI	
Communication		
Peripheral Interface	GPIOs, LEDs	
Memory Interface	EEPROM	
Supported Data Rates		
IEEE 802.11b, 802.11g Standard Mode	1 to 11Mbps (802.11b) / 1 to 54 Mbps (802.11g)	
Atheros Super G Mode	Up to 108 Mbps	
Chip Specifications	AR2414	
Operating Voltage	1.8V +/-5% 3.3V +/-10%	
Operating Temperature	0C to +75C	

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Specifications		802.11g	802.11b
TX Power (dBm)			
	Typical	17dBm	18dBm
	Turbo Mode	16dBm	
Transmitted Spectrum (dBr)	11MHz offset	-20 Max	-30 Max
dB relative to sin(x)/x peak	20MHz offset	-28 Max	-50 Max
	30MHz offset	-40 Max	
Frequency Range (MHz)		2412 - 2484	2412 - 2484
Receive Sensitivity (dBm)			
@ 11g 54Mbps PER < 10%		-65dBm	
@ 11b 11Mbps PER < 8%			-82dBm
@ Turbo Mode 108Mbps PER < 10%		-62dBm	
Antenna Port Impedance	50 ohms (Typ)		
Power Consumption (Current) at 3.3V	Sleep mode	20mA	20mA
	RX mode	250mA	210mA
	RX Turbo	300mA	
	TX mode	360mA @ 17dBm	420mA @18dBm
	TX Turbo	500mA @ 16dBm	

Operating System Support / Drivers	Windows XP / 2000
WHQL	Windows XP / 2000
Security	WEP (64 / 128 / 152) bit WPA2 – Wi-Fi Protected Access TKIP – Temporal Key Integrity Protocol AES – Advanced Encryption Standard
802.11e*	After ratified
802.11i*	After ratified
Interface	Mini-PCI Type IIIA Half
Antenna Type	Internal Diversity with connectors
Dimensions (WxLxH)	