

**W4070MPCI - 802.11a/b/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 W4070MPCI 802.11a/b/g Wireless Mini-PCI Module incorporates the Atheros AR5414 (Single-Chip CMOS MAC/Baseband/Radio), and supports Atheros XR™ eXtended Range Technology as well as Atheros Super AG™ data rates. Lead-Free.



**AR5006XS Chipset Specifications**

Frequency Band	4.900 to 5.850 GHz and 2.300 to 2.500 GHz	
Network Standard	802.11a, 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	
<b>Communication</b>		
Peripheral Interface	GPIOs, LEDs	
Memory Interface	EEPROM	
<b>Supported Data Rates</b>		
IEEE 802.11a, 802.11b, 802.11g Standard Mode	1 to 54 Mbps	
Atheros Super A/G Mode	Up to 108 Mbps	
<b>Chip Specifications</b>	AR5414	
Operating Voltage	1.8V +/-5%	
	3.3V +/-10%	
<b>Operating Temperature</b>	<b>0C to +70C</b>	

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Specifications		802.11a	802.11g	802.11b
<b>TX Power (dBm)</b>				
	Typical	17dBm	18dBm	18dBm
	Turbo Mode	16dBm	16dBm	
<b>Transmitted Spectrum (dBr)</b>	11MHz offset	-20 Max	-20 Max	-30 Max
<b>dB relative to sin(x)/x peak</b>	20MHz offset	-28 Max	-28 Max	-50 Max
	30MHz offset	-40 Max	-40 Max	
<b>Frequency Range (MHz)</b>		5150 - 5850	2412 - 2472	2412 - 2484
<b>Receive Sensitivity (dBm)</b>				
<b>@ 11a 54Mbps 108Mbps PER &lt; 10%</b>		-65dBm		
<b>@ 11g 54Mbps PER &lt; 10%</b>			-65dBm	
<b>@ 11b 11Mbps PER &lt; 8%</b>				-82dBm
<b>@ Turbo Mode 108Mbps PER &lt; 10%</b>		-62dBm	-62dBm	
<b>Antenna Port Impedance</b>	50 ohms (Typ)			
<b>Power Consumption (W)</b>	Sleep mode	20mA	20mA	20mA
	Idle mode	250mA	250mA	250mA
	Rx mode	260mA	260mA	250mA
	Tx mode	480mA	450mA	420mA

<b>Operating System Support / Drivers</b>	Windows XP / 2000
<b>WHQL</b>	Windows XP / 2000
<b>Security</b>	WEP ( 64 / 128 / 152 ) bit WPA2 – Wi-Fi Protected Access TKIP – Temporal Key Integrity Protocol AES – Advanced Encryption Standard
<b>802.11e*</b>	After ratified
<b>802.11i*</b>	After ratified
<b>Interface</b>	Mini-PCI Type III B
<b>Antenna Connector</b>	Dual diversity Antenna connectors (2 UFL type)
<b>Dimensions (WxLxH)</b>	59.6mm x 44.45mm x 4.8mm