

Build Your Wireless Freeway

IEEE 802.11a/b/g MiniPCI Wireless LAN Card



AG-623C

Features

- With Atheros AR5414 (AR5006x 802.11a/g MiniPCI reference Design with SuperA/G)
- Compatible with IEEE 802.11a/b/g
- MiniPCI Compliant Interface
- 108Mbps High Transmit Data Rate
- Low Receiving Sensitivity
- Multi-Antenna-Connector Supported

Description

Fully compatible with IEEE 802.11a/b/g and working at 2.4G and 5.8GHz, AG-623C is ideal for most wireless devices and system. Typically, Custom-Made RFMD RF5824 as its PA chip lead good reliability and stability to the AG-623C.

Compatible with IEEE 802.11a/b/g

Whether configured to support single 802.11b, single 802.11g, single 802.11a, dual-mode 802.11a/g, or tri-mode 802.11a/b/g, the Z-com AG-623C is Wi-Fi compliant. Specially, frequency from 4.92 to 5.00 GHz in New Japan Standard supported.

Multi-Antenna-Connector Supported

With two antenna-connectors, U.FL or SMA is at your disposal for each connector. By default, SMA connector is specified as Primary; U.FL is as Second.

Streamline Your Development

The standard MiniPCI interface tailors its usages to Embedded system. Further, we'll provide you with the standard Windows/Linux Device Driver.

Application

Build the wireless network



Build the wireless life



Specification

Product Description				
IEEE 802.11a/b/g MiniPCI Wireless LAN Card				
Host Interface				
32-bit miniPCI				
Operating Voltage				
DC3.3V ± 5%				
Chipset				
MAC / BB Processor	Atheros AR5006x 802.11a/g Mini PCI Reference Design with Super A/G			
PA Chip	RF5824 RFMD			
Power Consumption				
11a	TX: ≤ 550 mA		RX: ≤ 450 mA	
11b	TX: ≤ 550 mA		RX: ≤ 450 mA	
11g	TX: ≤ 550 mA		RX: ≤ 450 mA	
Radio				
Antenna connector	Primary : one SMA connector (MMCX/U.FL optional) Secondary :one U.FL connector (SMA/MMCX optional)			
Output Power	IEEE802.11a	Min.	Typical	Max.
	54Mbps	11	12	13
	6Mbps	15	16	17
	IEEE802.11g	Min.	Typical	Max.
	54Mbps	15	16	17
	6Mbps	18	19	20
	IEEE802.11b	Min.	Typical	Max.
	11/1Mbps	19	20	21

Sensitivity	IEEE 802.11a / Super A¹ Sensitivity @ Packet Error Rate: 10%	IEEE 802.11g / Super G² Sensitivity @ Packet Error Rate: 10%	IEEE 802.11b Sensitivity @ Packet Error Rate: 8%
	54/108 Mbps: \leq -72dBm 48 Mbps: \leq -73dBm 36 Mbps: \leq -77dBm 24 Mbps: \leq -81dBm 18 Mbps: \leq -84dBm 12 Mbps: \leq -86dBm 9 Mbps: \leq -88dBm 6 Mbps: \leq -90dBm	54 /108 Mbps: \leq -74dBm 48 Mbps: \leq -75dBm 36 Mbps: \leq -79dBm 24 Mbps: \leq -83dBm 18 Mbps: \leq -86dBm 12 Mbps: \leq -88dBm 9 Mbps: \leq -90dBm 6 Mbps: \leq -91dBm	11Mbps: \leq -87dBm 5.5Mbps: \leq -92dBm 2Mbps: \leq -93dBm 1Mbps: \leq -95dBm
Modulation	IEEE 802.11a (OFDM/DSSS) 48/54 Mbps (QAM-64) 24/36 Mbps (QAM-16) 12/18 Mbps (QPSK) 6/9 Mbps (BPSK)	IEEE802.11g (OFDM/DSSS) 48/54 Mbps (QAM-64) 24/36 Mbps (QAM-16) 12/18 Mbps (QPSK) 6/9 Mbps (BPSK)	IEEE 802.11b (DSSS) 5.5/11 Mbps (CCK) 2 Mbps (DQPSK) 1 Mbps (DBPSK)
Range Coverage (Typical range in open environment with 0 dBi Antenna)	IEEE 802.11a 54Mbps: \geq 60 meter 48Mbps: \geq 70 meter 36Mbps: \geq 80 meter 24/18Mbps: \geq 120 meter 12/9/6Mbps: \geq 120 meter 11Mbps: \geq 80 meter	IEEE 802.11g 54Mbps: \geq 60 meter 48Mbps: \geq 70 meter 36Mbps: \geq 80 meter 24/18Mbps: \geq 120 meter 12/9/6Mbps: \geq 120 meter 11Mbps: \geq 80 meter	IEEE 802.11b 11Mbps: \geq 80 meter 5.5Mbps: \geq 120 meter 2Mbps: \geq 200 meter 1Mbps: \geq 300 meter
Operating Frequency	IEEE 802.11a ISM Band USA(FCC): 5.15GHz ~ 5.25GHz; 5.25GHz ~ 5.35GHz ; 5.47GHz ~ 5.725GHz ; 5.725GHz ~ 5.825GHz; 5.825GHz ~ 5.850GHz Europe(ETSI): 5.15 GHz ~ 5.35GHz; 5.47GHz ~ 5.725GHz Japan(TELEC): 5.15GHz ~ 5.25GHz; 5.25GHz ~ 5.35GHz; 4.90GHz ~ 5.00GHz; 5.03GHz ~ 5.09GHz		
	IEEE 802.11b/g ISM Band USA(FCC): 2.412GHz ~ 2.462GHz (CH1 ~ CH11) Europe(ETSI): 2.412 GHz ~ 2.472GHz (CH1 ~ CH13) Japan(TELEC): 11b :2412GHz ~2484GHz (CH1 ~ CH14) 11g : 2.412GHz ~ 2.472GHz (CH1 ~ CH13)		
Software Specification			
Supported OS	Identical to Atheros Latest Version		
Security	Identical to Atheros Latest Version		
Physical Specification			
Dimension	59.6mm(L) * 46.2mm(W) * 4.15mm(H) (include connector)		
Weight	\leq 50 g		
Environment Specification			
	Temperature (Ambient)	Humidity (non-condensing)	
Operating	-10 ~ 65 °C	10~90%	
Storage	-40 ~ 85 °C	5 ~ 95%	
Warranty			
12 months			