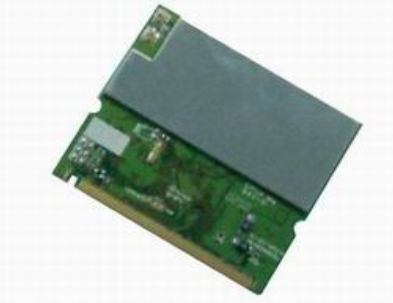
PRODUCT DATASHEET

Atheros 4th G Mini-PCI Adapter — 3054MP PLUS ARIES2(F)

2.4 GHz | 802.11b/g | 108 Mbps (Super G)

This IEEE 802.11b/g wireless mini-PCI adapter is a standard Type III A mini-PCI card that can be integrated for embedded systems or OEM projects. The high-speed wireless mini-PCI card operates seamlessly in both modes of 2.4GHz and 5GHz frequency spectrum supporting the 802.11g (54Mbps) wireless standards. To protect your wireless connectivity, the high-speed wireless mini-PCI card can encrypt all wireless transmissions through 64/128/152-bit WEP data encryption. The small form factor and light weight make it an ideal solution for embedded systems or OEM projects.



Features	Benefits
Flexible Design for Embedded Systems	Can be designed for OEM projects or embedded systems
2.4GHz IEEE802.11b/g standard compliant	Fully interoperable with IEEE802.11b/g compliant devices
Up to 54Mbps and 108Mps (Super G mode) high-speed data rates	Capable of handling heavy data payloads such as MPEG video streaming
Wi-Fi Protected Access(WPA) Client Support Up to 152-bit WEP data encryption	Powerful data security
802.11i Security and Advanced Encryption Standard (AES) IEEE802.1x Client support	Enhances authentication and security
Multi-country Roaming (802.11d) support	Automatically adjusts regulatory domain to operate in different countries

* Theoretical wireless signal rate based on IEEE standard of 802.11a, b, g chipset used. Actual throughput may vary. Network conditions and environmental factors lower actual throughput rate.

** All specifications are subject to change without notice. 9/19/2005

Technical Specifications

Data Rates

802.11g: 6, 9, 12, 18, 24, 36, 48, 54, 72, 96 & 108 (Super g) Mbps

802.11b: 1, 2, 5.5, 11Mbps

Standards / Compliance

WECA (Wi-Fi & Wi-Fi5 compliance), IEEE802.11, IEEE802.11g, IEEE802.11b, draft IEEE 802.11e standards, IEEE802.1x

Regulation Certifications

FCC Part 15/UL, ETSI 300/328/CE

Operating Voltage

3.3V

Current consumption

Tx Current ≦ 750mA

Rx Current ≦ 500mA

Link Current ≦ 600mA

Sleep Current ≦ 100mA

Drivers

Windows 98SE/ ME/2000/XP

RF Information

Frequency Band

U.S., Europe and Japan product covering 2.4 to 2.484 GHz, programmable for different country regulations

Media Access Protocol

Carrier Sense Multiple Access with Collision Avoidance (CSMA/CA)

Modulation Technology

DSSS (DBPSK, DQPSK, CCK)

Operating Channels

11 for North America, 14 for Japan, 13 for Europe,
2 for Spain, 4 for France

Receive Sensitivity (Typical)

802.11g:
-90dBm @ 6Mbps,
-72dBm @ 54Mbp
802.11b:
-93dBm @ 1Mbps
-89dBm @ 11Mbps

Available transmit power

802.11g:
18dBm +/-2dBm @ 6~24Mbps,
17dBm +/-2dBm @ 36 Mbps,
16dBm +/-2dBm @ 48 Mbps,
15dBm +/-2dBm @ 54 Mbps
802.11b:
18dBm +/-2dBm for all rates

Antenna

Two antenna connectors (U.FL)

Networking

Topology

Ad-Hoc, Infrastructure

Security

IEEE802.1x support for LEAP/PEAP

WPA – Wi-Fi Protected Access (64,128,152-WEP with shared-key authentication)

Physical

Form Factor

Mini-PCI type III A

Dimensions (LxWxH)

50.9mm x 59.6mm x 4.8mm (2.3in x 2in x 0.2in)

Weight

15g (0.53 oz)

Environmental

Temperature Range

Operating: -0°C to 55°C
Storage: -40°Cto 70°C

Humidity (non-condensing)

5% ~ 95% typical

Related Product(s)

11a/b/g Wireless Mini-PCI Adapter
NMP-8602 (802.11a/b/g) (26dBm)
5354MP PLUS ARIES2(F) (802.11a/b/g)
NMP-352 (802.11b/g)
NL-2511MP+ (802.11b)

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