Mini PCIe 11agn

Industrial Embedded Wireless Modules

IEEE 802.11 a/b/g/n PCI Express Mini Card

CE FCC abg WiFi n 3x3

Product Overview

Preliminary release the fastest Industrial transmission wireless module, which is compliant with IEEE 802.11 b/g/n standard. The Mini PCIe card design with 3 x 3 MIMO for high throughput performance. It also supports frame data transfer to and from the host using PCI Express 1.1 interface to provide interrupt generation and reporting, power save, and status reporting function.

Mini PCIe 11agn is which supports double 802.11n bandwidth, allows the reliable real-time delivery of video, voice, and data. Multi-redundant links guarantee that WLAN networks will always be in service, and fast secure roaming ensures seamless connectivity during mobility.

Finally, Industrial Embedded Wireless Modules provides unparalleled reliability under extreme conditions, allowing you to extend your network wherever it is required. Vertical application includes Bus, underground mining, onshore drilling, Power utility, and smart grid.

Embedded Wireless Modules

Key Features

- Compatible with IEEE 802.11a/b/g/n dual-band (2.4 & 5 GHz) standard
- Supports 3Tx/3Rx MIMO
- Transmission up to 450 Mbps data rate for 40 MHz channels
- Supports WEP,TKIP, AES ,and WAPI hardware Encryption
- Harsh operating temperature: -40 to 75° C
- Compatible OS with Windows and Linux

Specs

Model	Mini PCIe 11agn
Brand Name	Delta
Form Factor	Full Size Mini PCIe Card
Wireless Standard	IEEE 802.11 a/b/g/n
Chipset	Atheros AR9590
Signal Protocol	PCIe Differential
Antenna	3 x U.FL connectors (3T/3R)
Operating Voltage	DC 3.3V ± 5%
Operational Temperature	-40 ~ 75°C (Wide Temperature)
Dimensions (L x W x H)	50.8 x 29.85 x 3.25 mm
Security	Supports 64/128 WEP, WPA, WPA2, 802.1x/RADIUS, TKIP and AES
MIMO	3T x 3R
Data Rate	450 Mbps
O.S Supported	O.S Win XP/ 7/8, Linux
Host Type	PCIe Mini card
Warranty	5 years

Ordering Information

Purchase Items

- Mini PCIe 11agn: One IEEE 802.11 a/b/g/n PCI Express Mini Card

Package Content

- One Module
- Three External 2dBi Antenna (Option)
- One SDK Guide (Option)

Miscellaneous

- Certification: CE , FCC
- Support Client: Microsoft Windows XP/7/8 or Linux
- Box Shipping Weight: TBD
- Dimension : TBD

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Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:
-Reorient or relocate the receiving antenna.
-Increase the separation between the equipment and receiver.
-Connect the equipment into an outlet on a circuit different from that
to which the receiver is connected.
-Consult the dealer or an experienced radio/TV technician for help.
FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
Operations in the 5.15-5.25GHz band are restricted to indoor usage only.

IMPORTANT NOTE:

Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. Country Code selection feature to be disabled for products marketed to the US/CANADA.

This device is intended only for OEM integrators under the following conditions:

1). The antenna must be installed such that 20 cm is maintained between the antenna and users, and
2). The transmitter module may not be co-located with any other transmitter or antenna,
3). For all products market in US, OEM has to limit the operation channels in CH1 to CH11 for 2.4G band by supplied firmware programming tool. OEM shall not supply any tool or info to the end-user regarding to Regulatory Domain change.
As long as 3 conditions above are met, further transmitter test will not be required. However, the OEM integrator is still responsible for testing their end-product for any additional compliance requirements required with this module installed

IMPORTANT NOTE

In the event that these conditions can not be met (for example certain laptop configurations or co-location with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID can not be used on the final product. In these circumstances, the OEM integrator will be responsible for re-evaluating the end product (including the transmitter) and obtaining a separate FCC authorization.

End Product Labeling

This transmitter module is authorized only for use in device where the antenna may be installed such that 20 cm may be maintained between the antenna and users. The final end product must be labeled in a visible area with the following: “Contains FCC ID: 2ACG2DVWW0001”.

Manual Information to the End User

The OEM integrator has to be aware not to provide information to the end user regarding how to install or remove this RF module in the user’s manual of the end product which integrates this module.
The end user manual shall include all required regulatory information/warning as show in this manual.

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NCC警語：

經型式認證合格之低功率射頻電機，非經許可，公司，商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。
低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。
前項合法通信，指依電信法規定作業之無線電通信。 低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

無線傳輸設備 (UNII)
在 5.25-5.35 秭赫頻帶內操作之無線資訊傳輸設備，限於室內使用。
無線資訊傳輸設備忍受合法通信之干擾且不得干擾合法通信；如造成干擾，應立即停用，俟無干擾之虞，始得繼續使用。
無線資訊傳設備的製造廠商應確保頻率穩定性，如依製造廠商使用手冊上所述正常操作，發射的信號應維持於操作頻帶中。

本模組於取得認證後將依規定於模組本體標示審驗合格標籤
系統廠商應於平台上標示「本產品內含射頻模組: CCAFXXLPXXXXTX)」字樣

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