


ASUS®
RTL8852CE11ax
Combo Module



ASUS RTL8852CE11ax Combo Module User Manual

[Home](#) » [Asus](#) » ASUS RTL8852CE11ax Combo Module User Manual 

Contents

- [1 ASUS RTL8852CE11ax Combo Module](#)
- [2 Product Usage Instructions](#)
- [3 Installing the Wireless PCIe NGFF2230 module](#)
- [4 Un-installing the Wireless PCIe NGFF2230 module](#)
- [5 Un-installing the Wireless PCIe NGFF2230 module](#)
- [6 FAQ](#)
- [7 Documents / Resources](#)
 - [7.1 References](#)
- [8 Related Posts](#)



ASUS RTL8852CE11ax Combo Module



Specifications:

- **Model:** RTL8852CE
- **Type:** 802.11ax RTL8852CE Combo module
- **Manufacturer:** ASUSTeK Computer Inc.
- **Operating Relative Humidity:** 5-90% (non-condensing)
- **Storage Temperature:** Relevant Humidity
- **MTBF Calculation:** Over 150,000 hours

Product Usage Instructions

Environmental Guidelines:

Ensure operating relative humidity is maintained between 5-90% to prevent condensation. Store the module in appropriate temperature and humidity conditions.

FCC Compliance:

Follow FCC guidelines to prevent interference. Do not co-locate the device with other transmitters unless in compliance with FCC multi-transmitter procedures.

Frequency Restrictions:

Operate in the 5.15-5.25GHz band indoors only. Use the frequency 5850-5895MHz indoors, except for large aircraft above 10,000 feet.

Radiation Exposure:

Maintain a minimum distance of 20cm between the device and your body. For portable use, ensure compliance

with FCC portable RF exposure rules.

OEM Integration:

This module is intended for OEM integrators only. Follow FCC guidelines for usage conditions and compliance testing.

ASUSTeK Computer Inc.

- 1F., No. 15, Lide Rd., Beitou Dist., Taipei City 112 Taiwan
- **Tel.:** +886-2-28943447.
- **Fax:** +886-2-28987364

ENVIRONMENTAL

- **Operating**

Operating Temperature: -20°C to +70 °C Relative Humidity: 5-90% (non-condensing)

- **Storage**

- **Temperature:** -40°C to +80°C (non-operating)
- **Relevant Humidity:** 5-95% (non-condensing)

- **MTBF calculation**

Over 150,000hours

Warning

Federal Communication Commission Interference Statement

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.

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 and its antenna(s) must not be co-located with any other transmitters except in accordance with FCC multi-transmitter product procedures. Referring to the multi-transmitter policy, multiple-transmitter(s) and module(s) can be operated simultaneously without C2PC.

- Operations in the 5.15-5.25GHz band are restricted to indoor usage only. FCC regulations restrict the frequency 5850-5895MHz operation of this device to indoor use only.
- The operation of this device is prohibited on oil platforms, cars, trains, boats, and aircraft, except that operation of this device is permitted in large aircraft while flying above 10,000 feet.
- This device meets all the other requirements specified in Part 15E, Section 15.407 of the FCC Rules.
- 15.407(d)(2) Operation of transmitters in the 5.925-7.125 GHz band is prohibited for control of or communications with unmanned aircraft systems.

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 module is intended for OEM integrators only. Per FCC KDB 996369 D03 OEM Manual v01 guidance, the following conditions must be strictly followed when using this certified module:

KDB 996369 D03 OEM Manual v01 rule sections:

- **List of applicable FCC rules**

This module has been tested for compliance to FCC Part 15

- **Summarize the specific operational use conditions**

The module is tested for standalone mobile RF exposure use condition. Any other usage conditions such as co-location with other transmitter(s) or being used in a portable condition will need a separate reassessment through a class II permissive change application or new certification.

- **Limited module procedures**

Not applicable.

- **Trace antenna designs**

Not applicable.

- **RF exposure considerations**

This equipment complies with FCC mobile radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body. If the module is installed in a portable host, a separate SAR evaluation is required to confirm compliance with relevant FCC portable RF exposure rules.

- **Antennas**

The following antennas have been certified for use with this module; antennas of the same type with equal or lower gain may also be used with this module. The antenna must be installed such that 20 cm can be maintained between the antenna and users.

Ant	Brand	Model Name	Antenna Type	Gain (dBi)		
				WLAN 2.4GHz	WLAN 5GHz / 6GHz	Bluetooth
1	ARISTOTLE	RFA-27-JP378-4B-200	Monopole	3.38	4.86	3.38
2	ARISTOTLE	RFA-27-JP326-MHF4300	PIFA	3.50	5.00	3.50
3	ARISTOTLE	RFA-27-C38H1-MHF4300	Dipole	3.00	5.00	3.00
4	ARISTOTLE	RFA-57-JP697-4B-300	Monopole	—	-5.00	—

- **Label and compliance information**

The final end product must be labeled in a visible area with the following: “Contains FCC ID: MSQ-RTL8852CE”. The grantee’s FCC ID can be used only when all FCC compliance requirements are met.

- **Information on test modes and additional testing requirements**

This transmitter is tested in a standalone mobile RF exposure condition and any co-located or simultaneous transmission with other transmitter(s) or portable use will require a separate class II permissive change re-evaluation or new certification.

- **Additional testing, Part 15 Subpart B disclaimer**

This transmitter module is tested as a subsystem and its certification does not cover the FCC Part 15 Subpart B (unintentional radiator) rule requirement applicable to the final host. The final host will still need to be reassessed for compliance to this portion of rule requirements if applicable. As long as all 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.

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.

OEM/Host manufacturer responsibilities

OEM/Host manufacturers are ultimately responsible for the compliance of the Host and Module. The final product must be reassessed against all the essential requirements of the FCC rule such as FCC Part 15 Subpart B before it can be placed on the US market. This includes reassessing the transmitter module for compliance with the Radio and EMF essential requirements of the FCC rules. This module must not be incorporated into any other device or system without retesting for compliance as multi-radio and combined equipment

Industry Canada statement:

This device complies with ISSED’s licence-exempt RSSs. 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.

Radiation Exposure Statement:

This equipment complies with ISSED radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with greater than 20cm between the radiator & your body.

This device is intended only for OEM integrators under the following conditions: (For module device use)

1. The antenna must be installed and operated with greater than 20cm between the antenna and users, and
2. The transmitter module may not be co-located with any other transmitter or antenna.

As long as 2 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 Canada authorization is no longer considered valid and the IC 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 Canada authorization.

End Product Labeling

This transmitter module is authorized only for use in device where the antenna may be installed and operated with greater than 20cm between the antenna and users. The final end product must be labeled in a visible area with the following: "Contains IC: 3568A-RTL8852CE"

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.

Caution :

1. the device for operation in the band 5150-5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;
2. for devices with detachable antenna(s), the maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall be such that the equipment still complies with the e.i.r.p. limit;
3. for devices with detachable antenna(s), the maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits as appropriate;
4. where applicable, antenna type(s), antenna models(s), and worst-case tilt angle(s) necessary to remain compliant with the e.i.r.p. elevation mask requirement set forth in section 6.2.2.3 shall be clearly indicated.

This radio transmitter [IC: 3568A-RTL8852CE] has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

Ant.	Brand	Model Name	Antenna Type	Gain (dBi)		
				WLAN 2.4 GHz	WLAN 5GHz / 6GHz	Bluetooth
1	ARISTOTLE	RFA-27-JP378-4B-200	Monopole	3.38	4.86	3.38
2	ARISTOTLE	RFA-27-JP326-MH4300	PIFA	3.50	5.00	3.50
3	ARISTOTLE	RFA-27-C38H1-MH4300	Dipole	3.00	5.00	3.00

Installing the Wireless PCIe NGFF2230 module

Hardware

Installing PCIe NGFF2230 module to PCIe NGFF2230 connector and connect two external Wi-Fi antennas on I-PEX connectors.



Un-installing the Wireless PCIe NGFF2230 module

Hardware

Remove 2 external Wi-Fi Antennas from the Wireless PCIe NGFF2230 module board and remove the Wireless PCIe NGFF2230 module board from PCIe NGFF2230 connector port



Installing the WLAN PCIe & Bluetooth USB NGFF2230 module Software

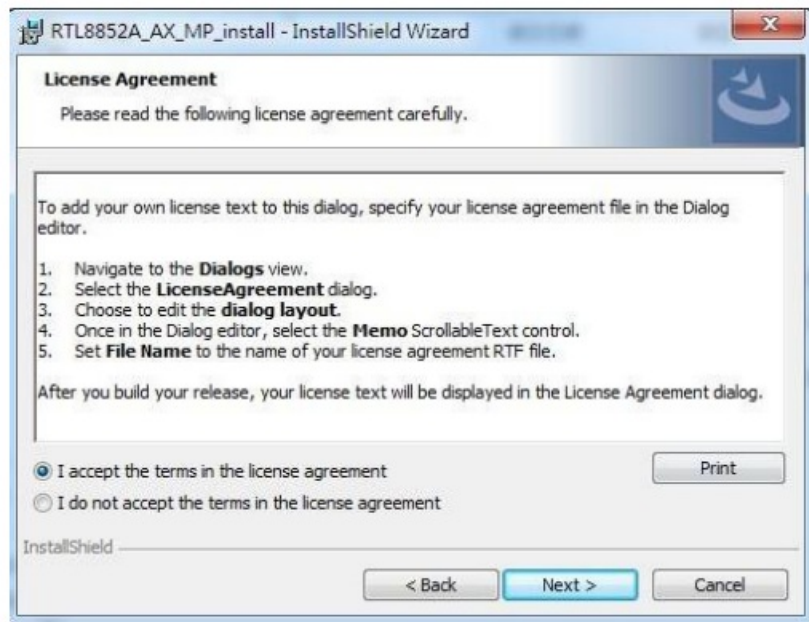
Before you proceed with the installation, please notice following descriptions.

Note 1: The following installation was operated under Windows 7. **Note2:** If you have installed the WLAN driver & utility before, please uninstall the old version first.

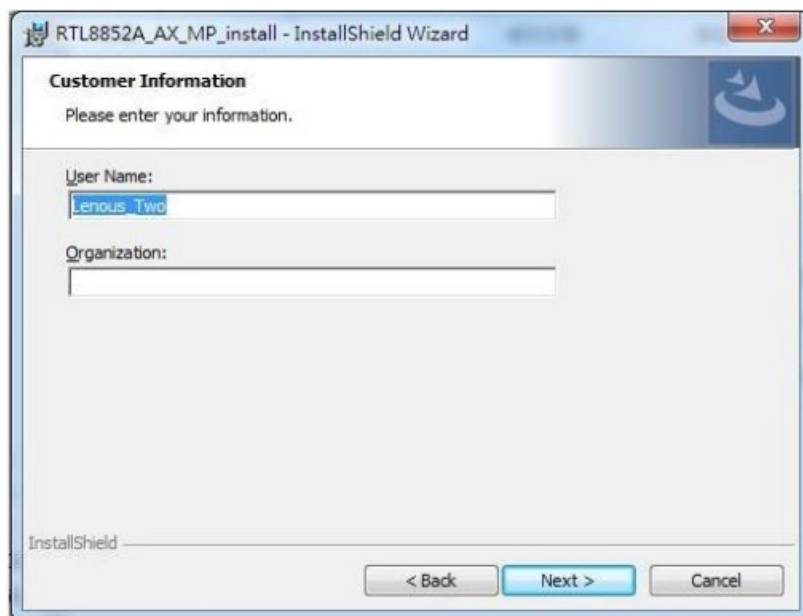
1. Execute the “setup.exe”, Click “Next” to process the installation



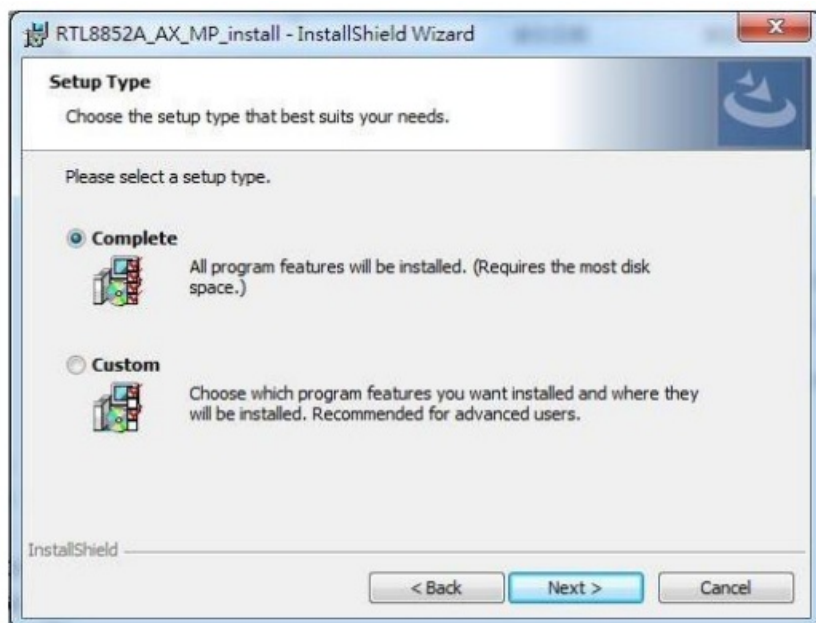
2. Select "I accept the terms in license agreement" and click "Next" to process the installation



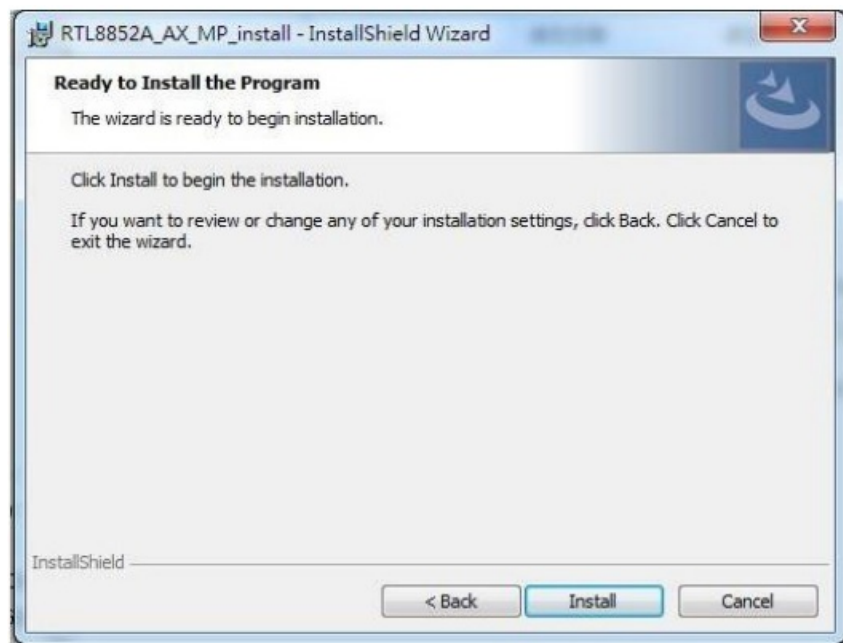
3. Click "Next" button.



4. Select "Complete" and click "Next" button



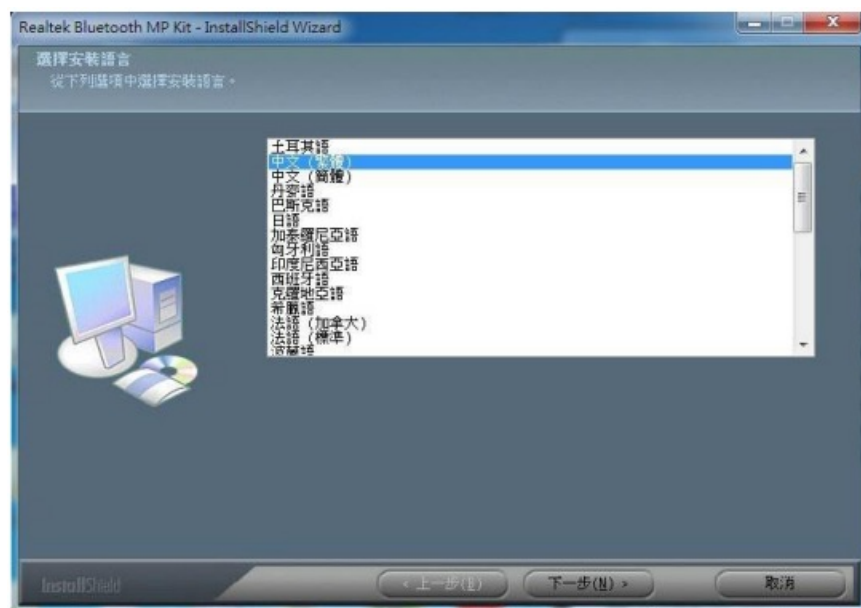
5. Click "Install" button.



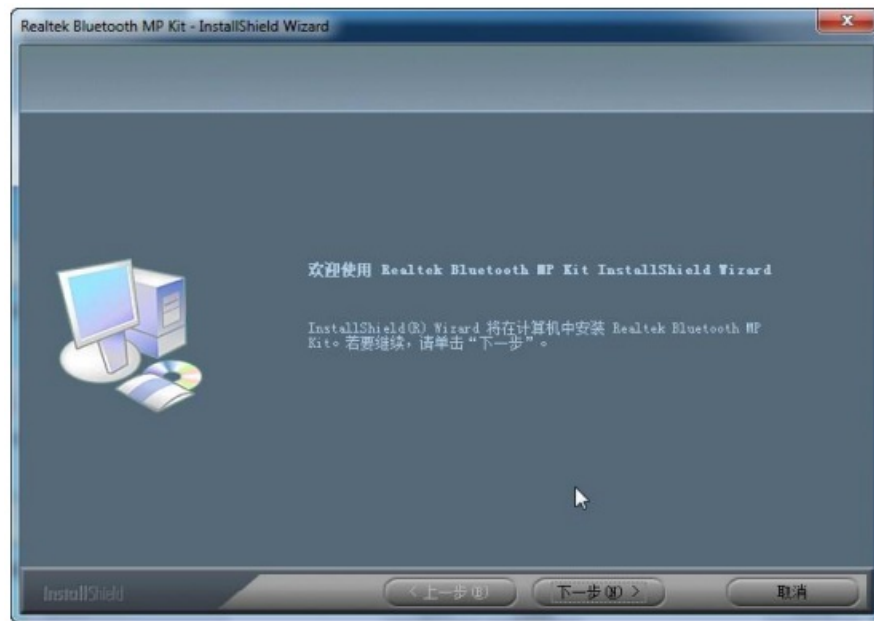
6. Click “Finish” button.



7. Please click “ ”to continue



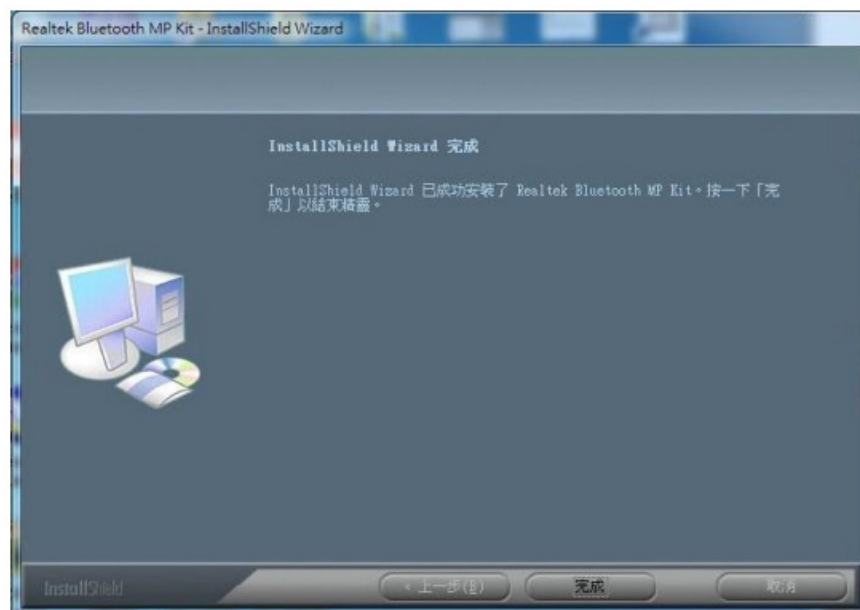
8. Please click “ ”to continue



9. Please click “ ”to start installation



10. Please click “ ”to finish the installation.



Un-installing the Wireless PCIe NGFF2230 module

Software

- Uninstall the RTL8852CE WLAN Driver from “Start”→ “Control Panel”→ “Programs”
- Please select items as below and click “Uninstall” to remove RTL8852CE WLAN, BT driver and MP UI.



FAQ


Q: Can the RTL8852CE module be used in outdoor environments?

A: No, operations in the specified frequency bands are restricted to indoor usage only as per FCC regulations.

Q: What should I do if I encounter interference issues with the device?

A: Try reorienting or relocating the receiving antenna, increasing separation from other equipment, or consulting a professional for assistance.

Documents / Resources

	ASUS RTL8852CE11ax Combo Module [pdf] User Manual RTL8852CE11ax Combo Module, RTL8852CE11ax, Combo Module, Module
---	--

References

- [User Manual](#)

Manuals+, Privacy Policy

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.