



BCM EvB

Application Guide

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Revision History

This section describes the changes that were implemented in this document. The changes are listed by revision, starting with the most current publication.

Revision 1.0

Revision 1.0 of this guide was published in September 2013. This was the first publication of the document.

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Chapter 1 Introduction

Safety:

1.1. Electric Safety

To avoid the suddenly electricity cause equipment damaged, please have all connectors linked before turn on the power.

1.2. Operate Safety

Please read this manual carefully before install.

Please confirm all wires are putting into the right place and linked well.

1.3. About this Guide

This product guide included all the information you need in the EvB test.

Examples of application designs and technologies are also provided to illustrate the points made and to demonstrate the flexibility offered in achieving the advanced NFC function performance improvement provided within the guide. Additional bonus recommendations point out other opportunities to incorporate greater performance improvement into the design of the application.

Feedback on the use of any of the guide is welcomed and encouraged by Smart Approach.

1.4 NFC Antenna module applications

NFC Antenna Module can be installed under the Touch Pad of notebook, ultrabook, AIO, and personal computers, it can achieve Wireless payment and to read NFC single in different NFC devices.

NFC can make the process of identify much easier, more accuracy, much safer, and more limpid. You can link all your electricity devices via NFC to make the information transiting much easier.



Figure 1 Application of Antenna Module

Chapter 2 Introduces of Antenna Module

- ① Module
- ② Antenna
- ③ Connector
- ④ Shielding

Combine above 4 elements, we named it “Antenna Module”, it is light, short, small and thin to integrate into NB, tablets and smartphones.

as pic below

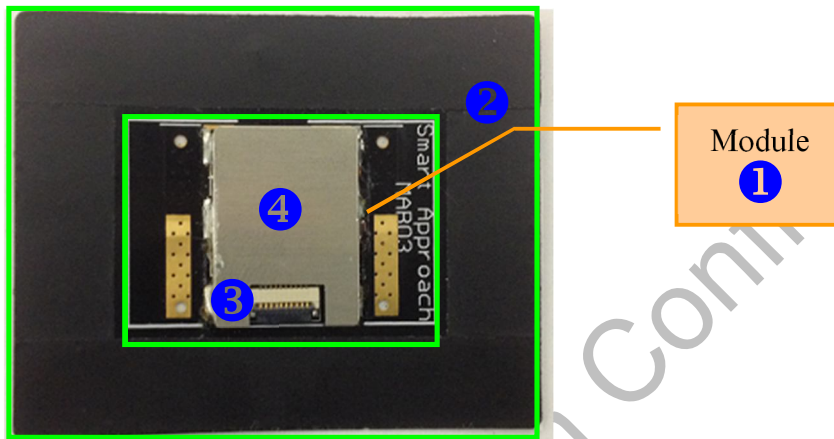


Figure 2 Antenna Module Front View

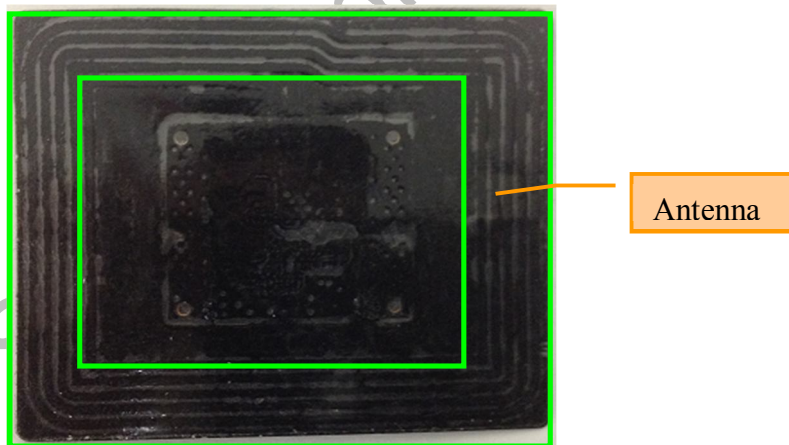


Figure 3 Antenna Module Rear View

Chapter 3: Antenna Module engaged and Installation

Electricity requirement of NFC Antenna Module.

Step/Item	ITEM NAME	Q'TY
①	Host(Simulates the computer MB)	1
②	Power Adapter(Supply electric to Host)	1
③	Wire	1
④	Antenna Module	1
⑤	Wire with Transition board (10 pin to 9 pin connection for Host)	1
⑥	Proximity Card (Type1 、 Type2 、 Type3 、 Type4)	1/each

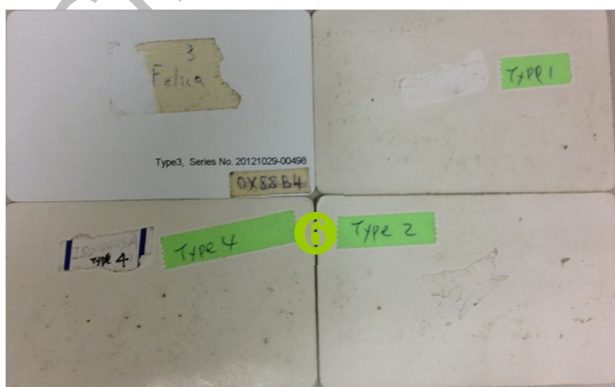
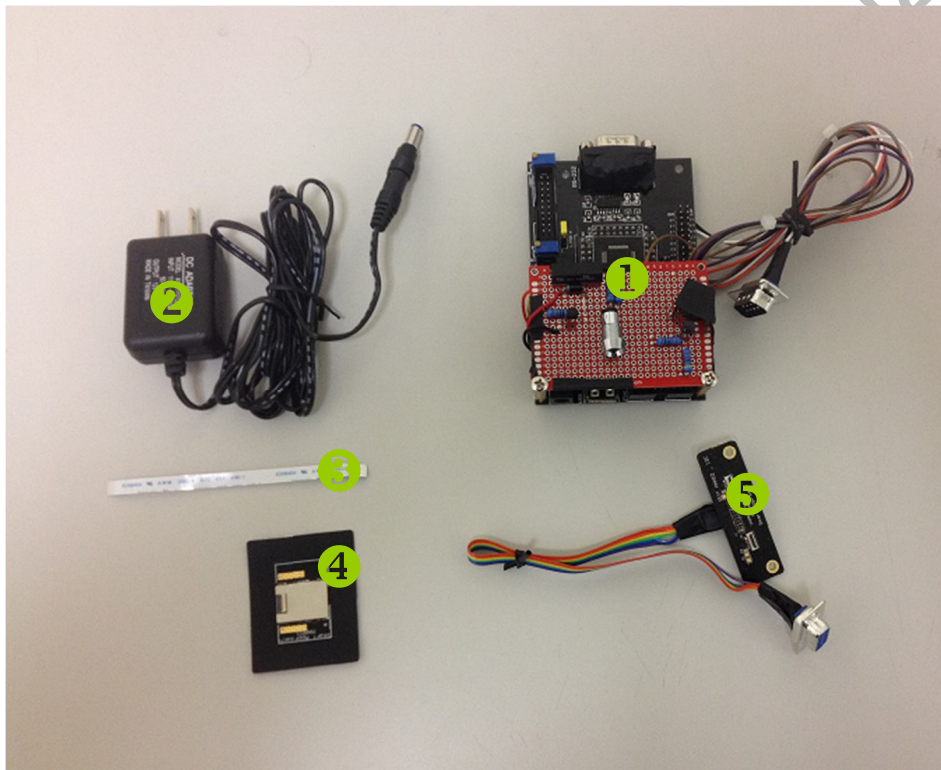


Figure 4 Application Components

3.1 Startup procedures

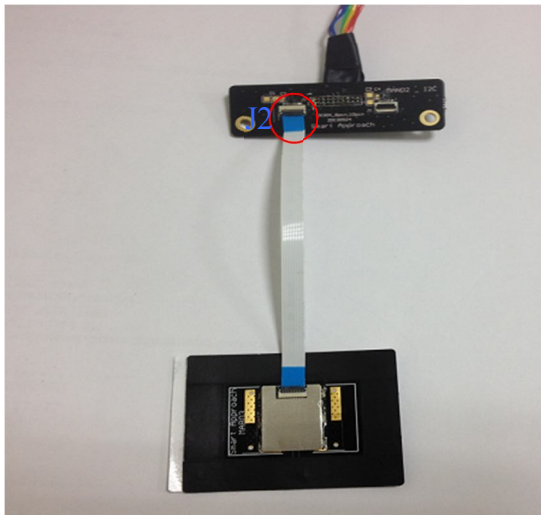
Step 1.

Insert the cable ③ to the Antenna Module Connector ④, shown as below:



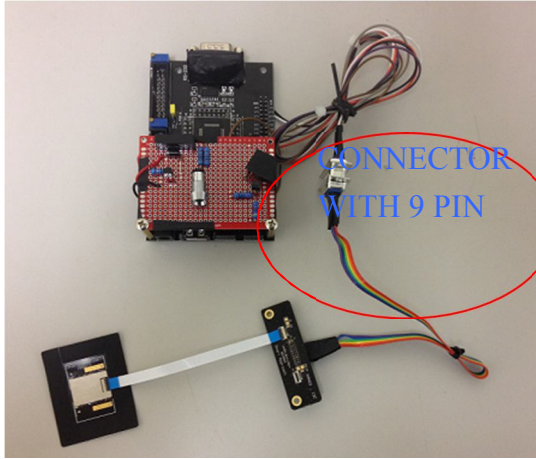
Step 2

The other end of the cable is inserted Wire ⑤ adapter plate and pressed on J2 Connector ranked carefully. Shown as below:



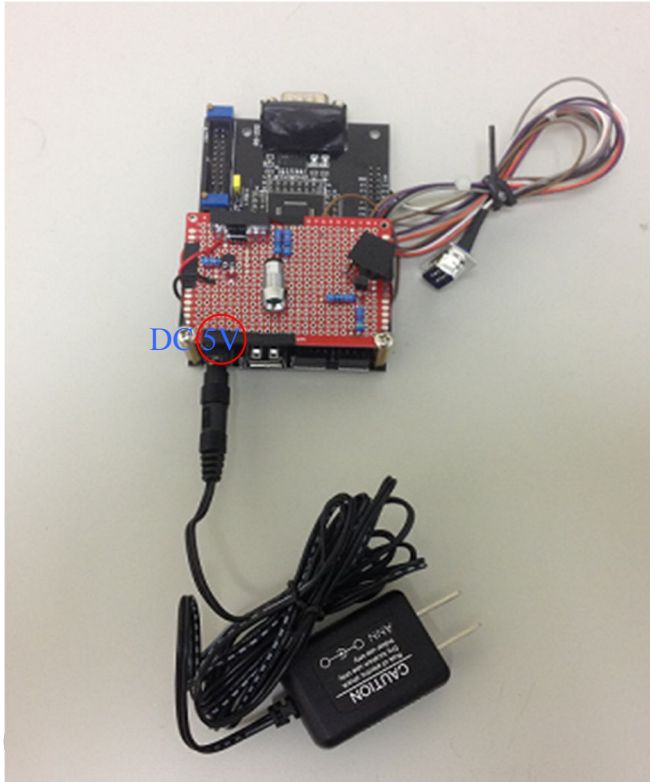
Step 3

The other end of the ⑤ wire Transition board to insert the connector with 9 pin at the host. Show as below:



Step 4

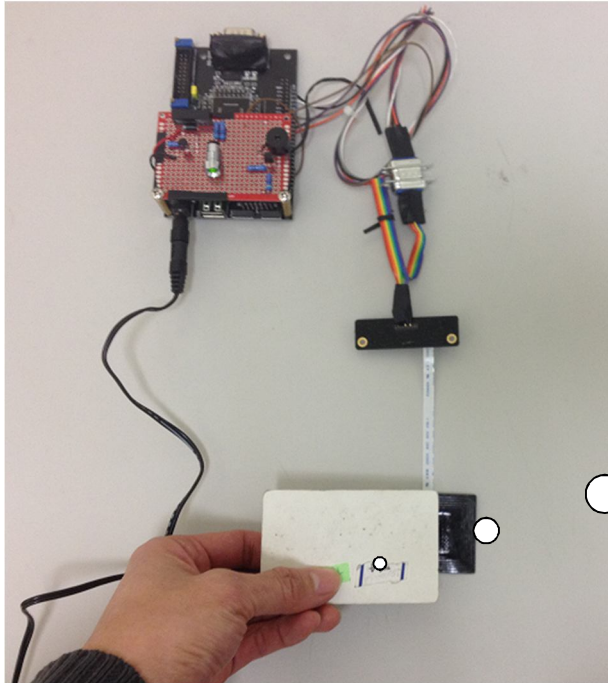
Insert the DC input connector into ❶ the Host DC 5V input terminal. Show as below.



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Step 5

Antenna Module induced the cards after Host power on.



Take ⑥ close to ④ Antenna Module

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FEDERAL COMMUNICATIONS 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 or more 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.

CAUTION:

Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the 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.

End Product Labeling

This transmitter module is authorized only for use in device where the antenna may be installed such that 20cm 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: 2AAYI-MAB03NFCAM " and "Contains IC: 11378A-MAB03NFCAM"

Information for the OEMs and Integrators

The following statement must be included with all versions of this document

supplied to an OEM or integrator, but should not be distributed to the end user.

- 1) This device is intended for OEM integrators only.
- 2) Please see the full Grant of Equipment document for other restrictions.

Canada, Industry Canada (IC) Notices

This Class B digital apparatus complies with Canadian ICES-003 and RSS-210.

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Canada, avis d'Industry Canada (IC)

Cet appareil numérique de classe B est conforme aux normes canadiennes ICES-003 et RSS-210.

Son fonctionnement est soumis aux deux conditions suivantes : (1) cet appareil ne doit pas causer d'interférence et (2) cet appareil doit accepter toute interférence, notamment les interférences qui peuvent affecter son fonctionnement.