Hisense

HM518 Mobile POS Tablet System

System Integration Manual

Document version 1.0

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Part 1. System Introduction

01. Safety Notices Before Installation or Use

⚠️ **Caution:**

☆ It is required grounded well and the supply voltage shall be stable, and you must confirm that the voltage of the outlet provides shall be in line with the voltage marked on the label of the unit.

☆ Be sure not to sprinkle any liquid or fall any object into the unit.

☆ Be sure not to keep heavy, strenuous movement, shake & heavy strike away from the POS.

☆ Do not switch on or off the host frequently, because it is easy to result in damage on the machine.

☆ Be sure not to unplug or plug in any live part or external device when they are in energized state, and the connecting cables of the POS between parts shall be connected securely.

☆ Be sure neither to lengthen cable nor to replace parts at your will, if you have any demand, please contact with the reseller.

☆ The unit shall be used under dry, ventilated & clean environment away from sunlight.

☆ In case of safety fault, such as peculiar smell, abnormal sound, leakage and other faults, you must switch off the power supply at once and then contact with reseller.

☆ The RJ11 port at the back of the host is connected with the cash drawer, as it is not a communication port, users shall not use the port for dial-up networking.

☆ The product is a Level B one, it may cause radio interference in living environment. In such case, users may need to take practical & feasible measures against the interference.

☆ When the POS is not in use, you shall switch off power supply.

☆ Static may damage to the integrated circuit in the host machine.

☆ Please use common USB Cable or original charger, Otherwise, It may result to danger. When you use a charger for charging, adapter shall be installed near the equipment and shall be easily accessible.

☆ This product conforms with standard EN50332. Use careful with the earphone maybe possible excessive sound pressure from earphones and headphones can cause hearing loss.

☆ The product shall only be connected to a USB interface of version USB2.0，this interface can provide maximum current of 500mA.

☆ Extreme Operating Temperature : 40℃

☆ The device complies with RF specifications when the device used at 10mm from your body.

☆ Declaration Of Conformity Hereby, This Tablet POS is in compliance with the essential requirements and other relevant provisions of directive 1995/5/EC.

CAUTION: RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.

DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

⚠ **Warning:**

1. For continued protection against risk of electrostatic, it can result in system or POS terminal damaged

2. Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type as recommended by the manufacturer, Discard used batteries according to the manufacturer's instructions.

3. Do not remove the peripheral device before turn off the system.

Turn on the system after turning on peripheral device, and turn off peripheral device after turn off the system

FCC Warning:

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 to this device not explicitly approved by manufacturer could void your 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.

The manufacturer has the right to modify contents of the instruction book but without prior announcements!

02. System Introduction

The exterior design and specifications of product can be changed without prior notice in order to improve quality.

03. General Specifications

Item			Description
CPU			Intel Baytrail-M N2807 1.58GHz
Memory			2G Byte RAM
Storage			32GByte eMMC
System			Win8.1 Embedded/with Bing
Operating Temperature			0℃ ~ +40℃
Operating Humidity			10%～90%
Display	TFT LCD		10.1"TFT LCD，1280*800
	Brightness		330cd/m²
	Touch Screen		Multi-touch capacitive touch panel(10 points)
Port	Tablet	MSR	3 Tracks
		Scanner	1x1D Scanner
		Camera	Rear:5MP, AF focus
		NFC	Supports MIFARE one and MIFARE CPU card
		IC Card Reader	1 x IC Card Reader
		Micro SD	1 x Micro SD slot
		SIM Card	1x SIM slot (WCDMA）
		Audio	Built-in 1W speaker ; Microphone; 1 x 3.5-mm stereo headphone(OMTP)
		USB	1x USB2.0 Host
		WIFI	Wi-Fi® 802.11a/b/g/n/ac 2.4GHz/5GHz
		BT	BT 4.1
		DC input	1 x DC jack (12V)
	Docking station	VGA	1 * VGA reserved for 2nd display
		USB	3x USB2.0 Host
		LAN	1 * RJ-45 (100Mbps LAN)

	Cash Drawer	1 * RJ-11 12V/24V for cash drawer(24V default)
	Serial Ports	2* RS-232 COM， COM1(RX/TX/GND),COM2(RX/TX/GND/DTR/DSR)
	DC input	1 x DC jack (12V)
Power adapter(tablet, docking station)		AC 100-240V / DC 12V 3.33A
Battery		4000mAh 7.4V
Dimensions	Tablet（mm）	276 x 193 x 23.8
	Tablet Weight（kg）	1.0
	Docking station（mm）	280 x 170.8 x 72.3
	Docking station Weight(kg)	0.8

04. Front View

05. Back View

Triple-Track MSR

5MP Rear Camera

1D Barcode Scanner

Scan Button

Sturdy Hand Strap

Convenient Cable Management Slots

Lift Panel to Access Docking Station's Ports

06. Dimension

280

164.8

179.4

164.8

45°
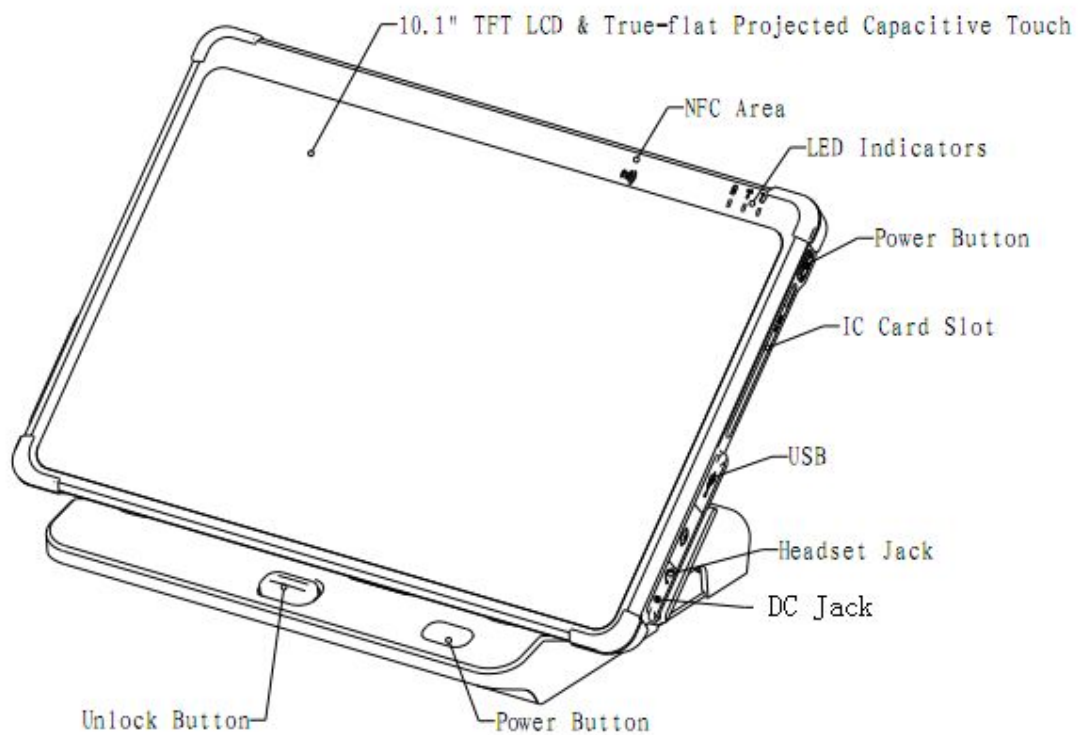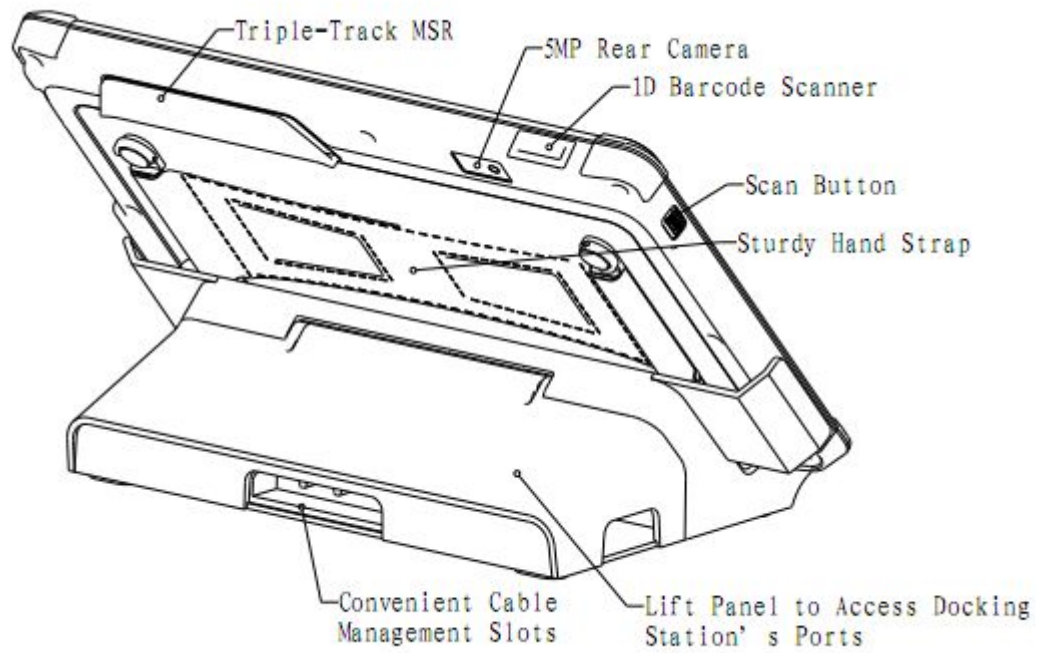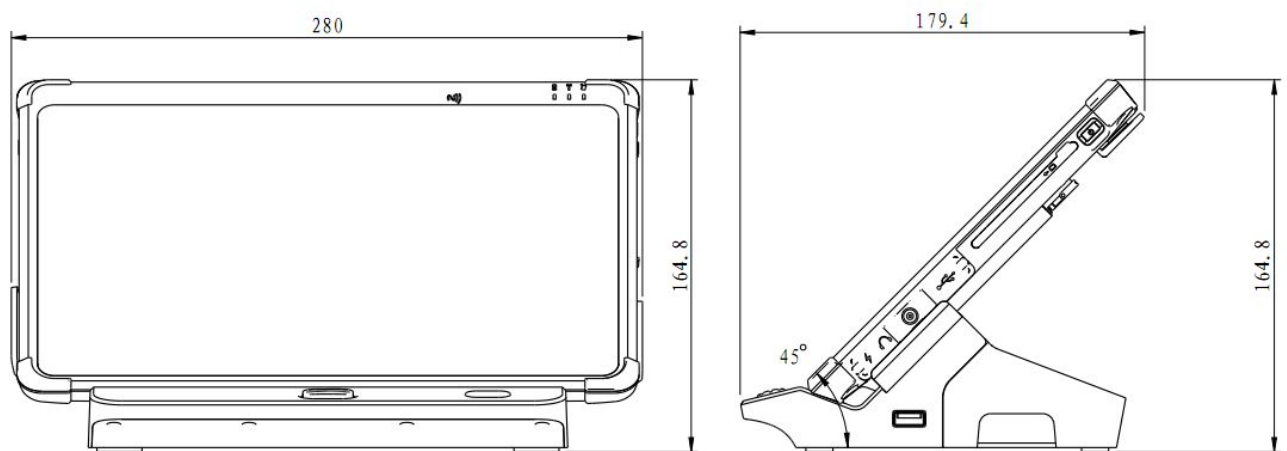
07. I/O View
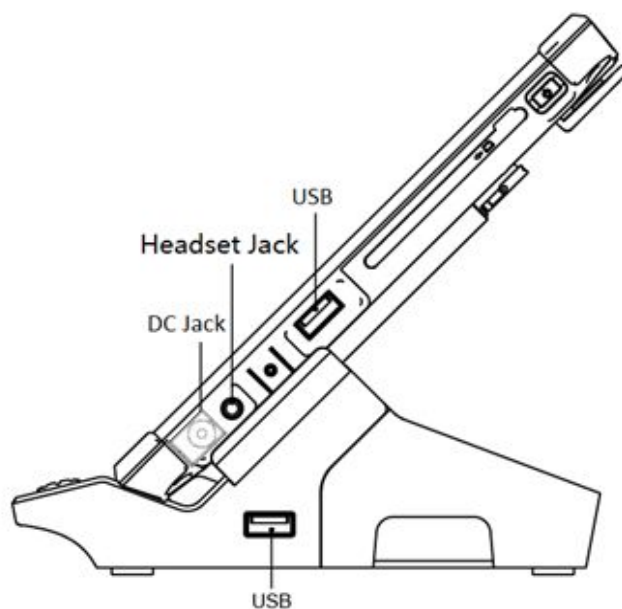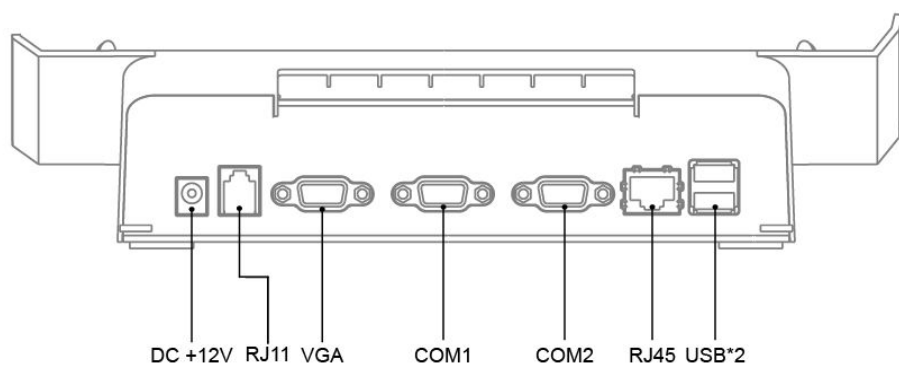
IO interface function：

NO.	Name	Description
1	DC +12V	+12V Power input
2	RJ11	For cash drawer
3	VGA	For 2nd display
4	COM1	COM1(RX/TX/GND)
5	COM2	COM2(RX/TX/GND/DTR/DSR)
6	RJ45	100Mbps LAN

7	USB	USB2.0*2
8	DC Jack	+12V Power input
9	Headset Jack	Audio(OMTP)
10	USB	USB2.0*1

Part 2. System Installation

01. Checking the Location for Installation

It is important to choose a safe and secure place to install the terminal.

•• Choose a desk or table big and strong enough to support the weight of the system and peripherals.

•• Choose a flat, hard surface. Carpeted area can generate static electricity that can alter memory or damage system components.

•• Make sure a system installed in a well-ventilated place and keep the space free around the system.

•• Choose appropriate environmental conditions such as cool and dry places. Avoid humid and dusty places. Also avoid direct sunlight, rapidly changing temperatures, or placing the system near heat sources.

•• Select the appropriate voltage. Connect all the equipment into an isolated outlet to prevent static electricity and short circuit.

•• where sufficient power outlets are available for printers and other peripheral devices.

•• Do not install near electromagnetic and electrical devices, such as phones and electric motors that can cause system damage.

•• The socket-outlet shall be installed near the equipment and shall be easily accessible.
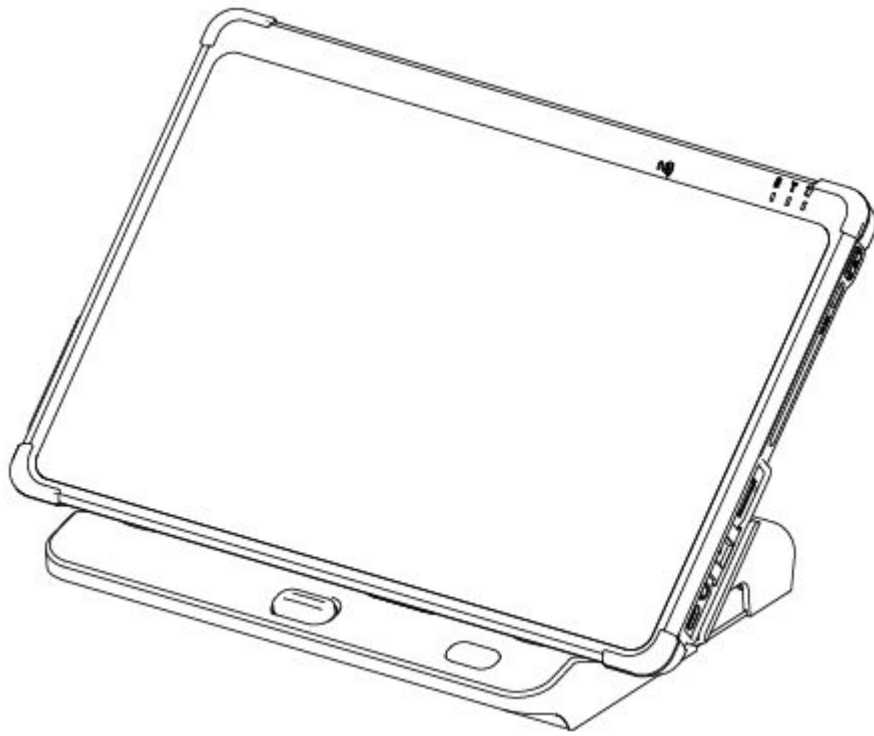
02. Before Connecting Peripherals

To connect peripherals first remove the 'Interface cover', which is in the bottom of the system.

Lift Panel to Access Docking Station Ports
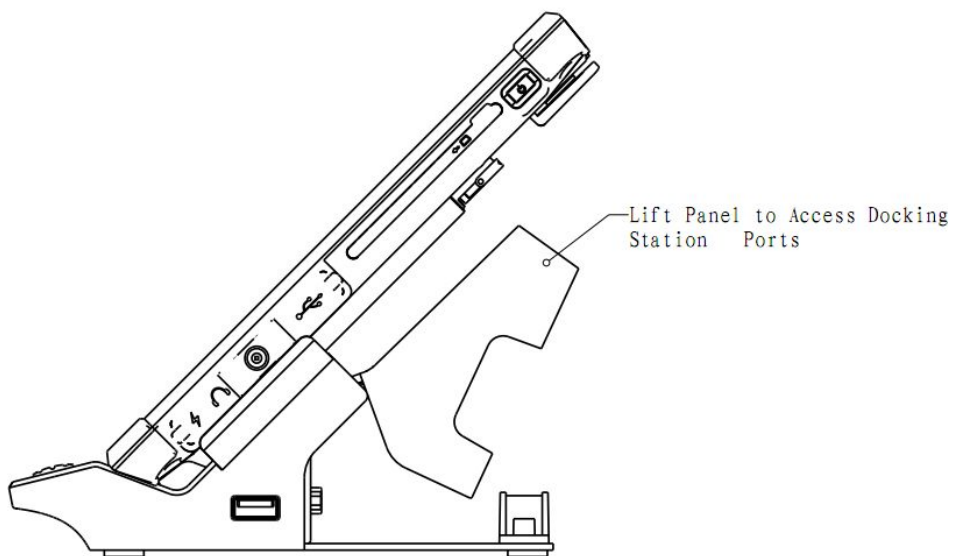
03. Connecting DC power supply cable

Docking station: Connect the DC power cable to the DC power input connector at the bottom of the system. (Adapter 100V - 240V free voltage of the system can be used.)

> ⚠️ **Cautions**
> • Only manufacturer adapter should be used for this system.
> • Manufacturer wont take responsibility for damages caused by using products which not made by manufacturer.

Tablet : when using 12V adapter for tablet charging, Connect the DC power input cable to the DC power input Port at the side of the tablet.

04. Package

a. Docking station Package：

AC adapter, Power Cord, Docking station

b. Tablet Package：

AC adapter，Power Cord, Tablet
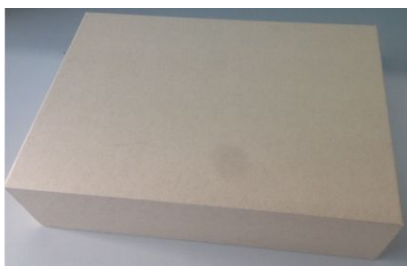
Part 3. Modules & functions

01. Docking station

Interface pin define

CASH DRAWER	Description
Connector type	RJ11　12V/24V for cash drawer(24V default)
PIN defined	1.GND　2.CD_OPEN　3.CD_SENSE　4.+24V　5.NC　　6.GND

VGA	Description
Connector type	DB15
PIN defined	1.R　2.G　3.B　4.NC　5.GND　6.GND　7.GND　8.GND　　9.NC　　10.GND 11.NC 12.DDC_SDA　13.HSYNC　14.VSYNC　15.DDC_SCL

COM1&2	Description
Connector type	COM1:DB9 ;2 line RS232 COM2:DB9 ;4 line RS232
PIN defined	COM1: 1.NC　2.RXD　3.TXD　4.NC　5.GND　6.NC　7.NC　8.NC　9NC COM2: 1.NC　2.RXD　3.TXD　4.DTR　5.GND　6.DSR　7.NC　8.NC　9NC

USB & LAN	Description
Connector type	USB:　　3*Standard USB2.0 RJ45:　1 * RJ-45 (100Mbps LAN)

02. 3G function

1. Please keep tablet in shutdown mode, put in the WCDMA3G SIM card into the SIM card socket.

2. In system you should be have the information of CHN-UNICOM(HSPA)
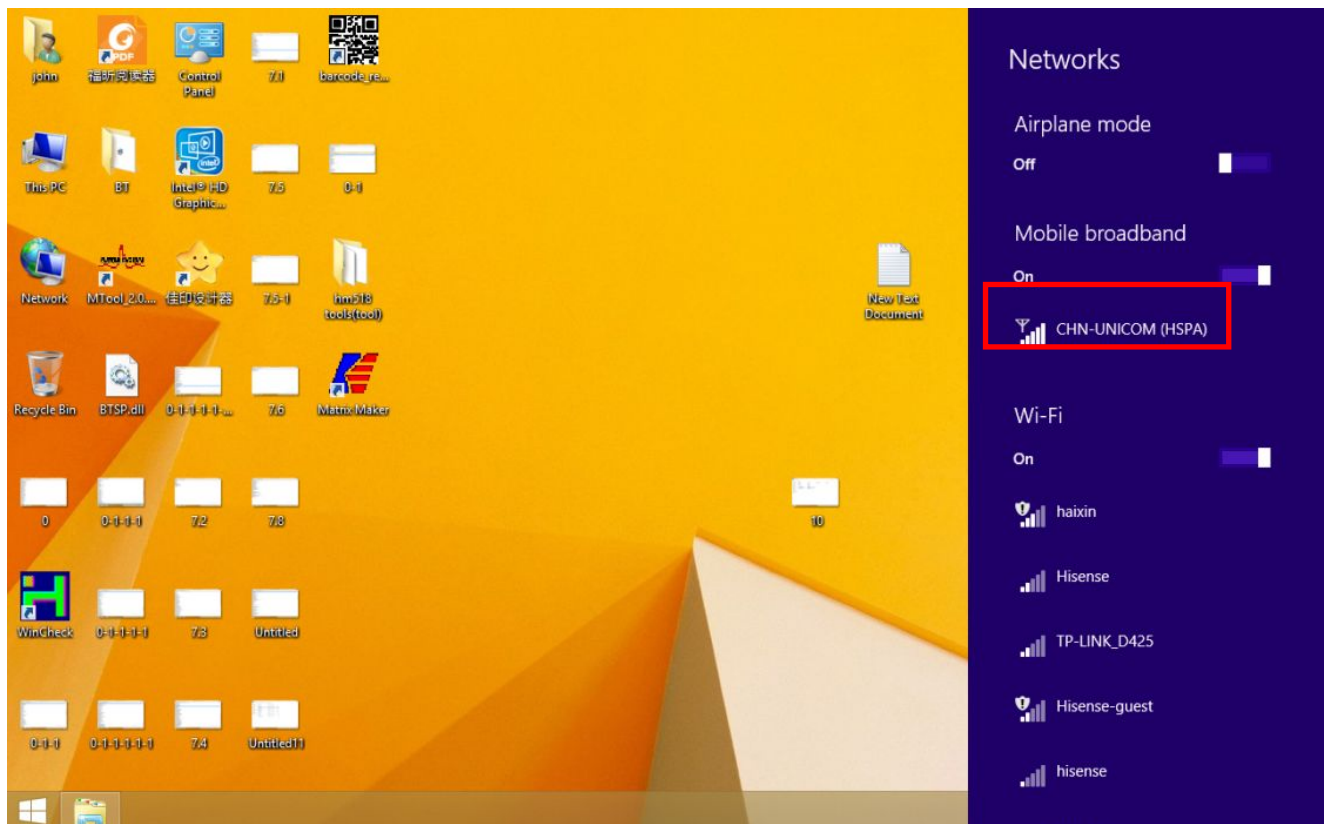
3. Connect automatically or Roam automatically are optional setting.
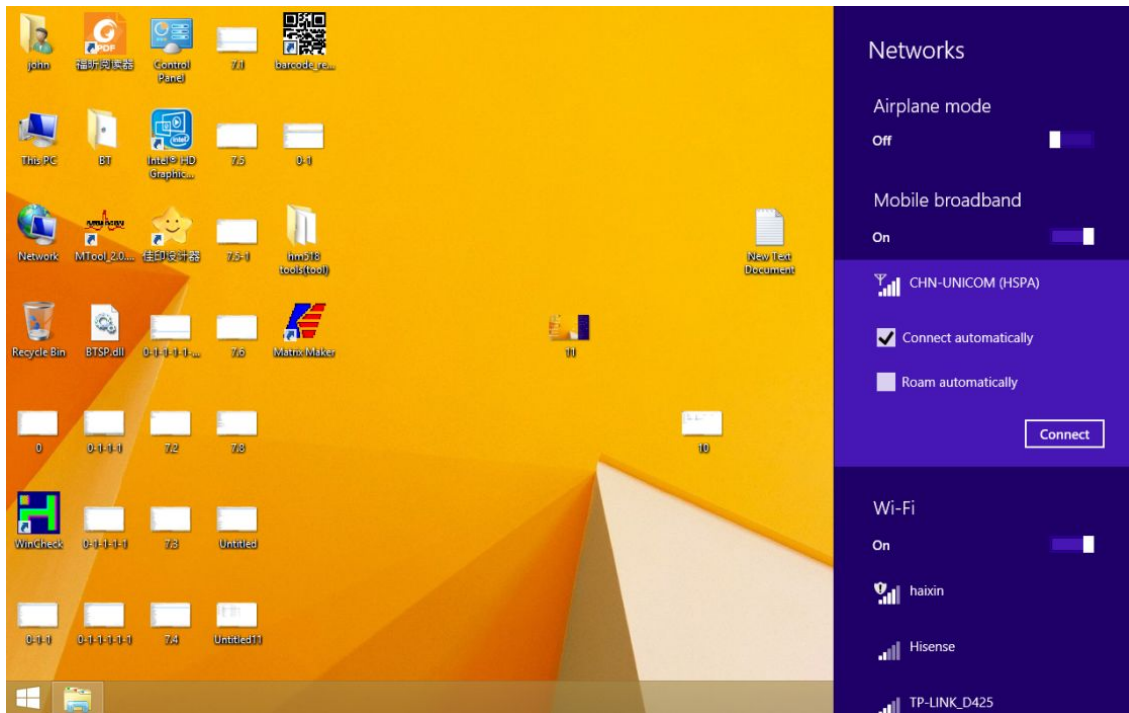
03 Using WiFi

1. According to haixi hotspot, choose connect automatically.
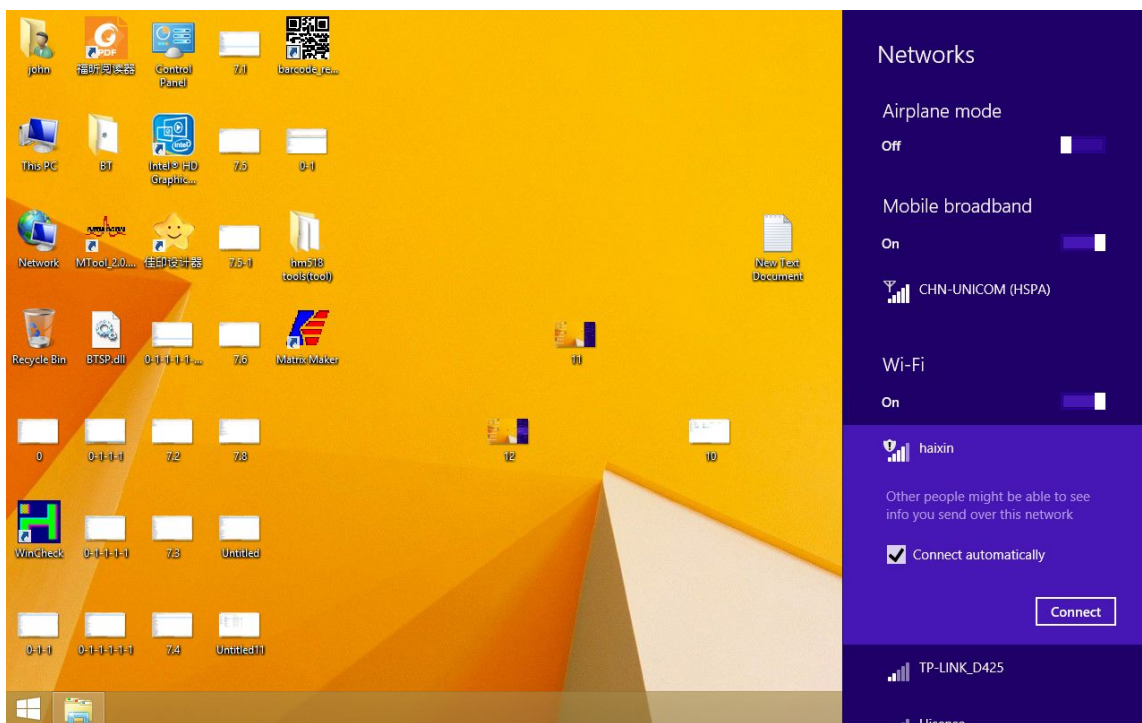
2. Connect successful
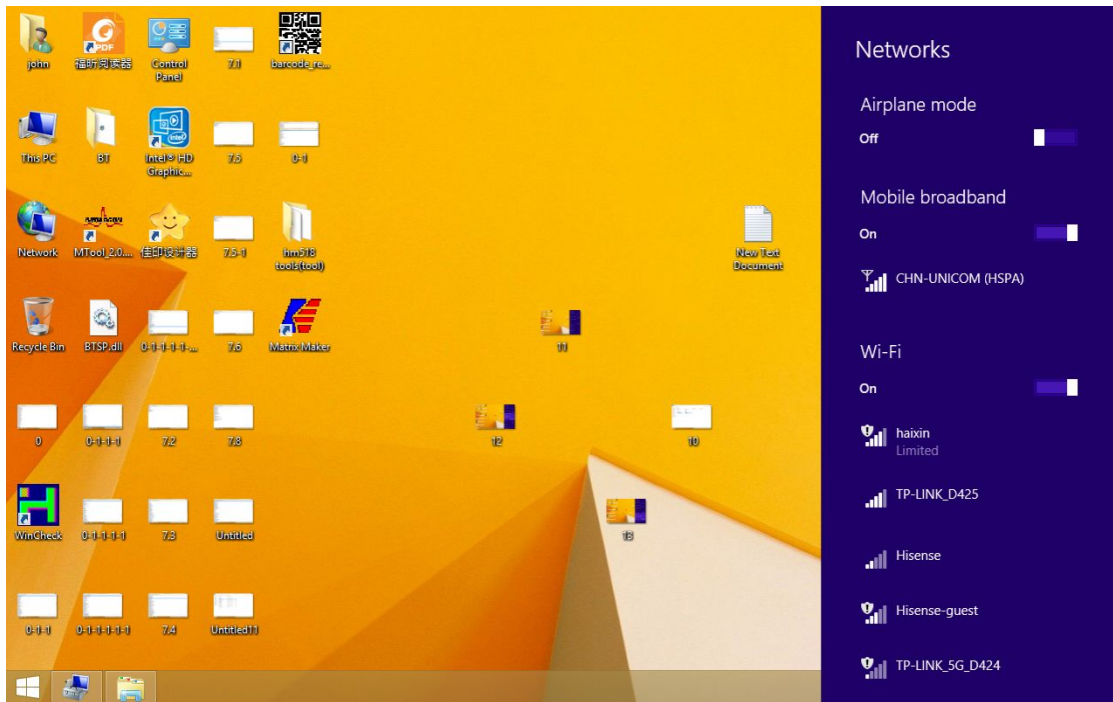
04. Using the Bluetooth

How to connect the tablet bluetooth?

1. Open the bluetooth icon on the lower right corner of desktop, see below pictures.
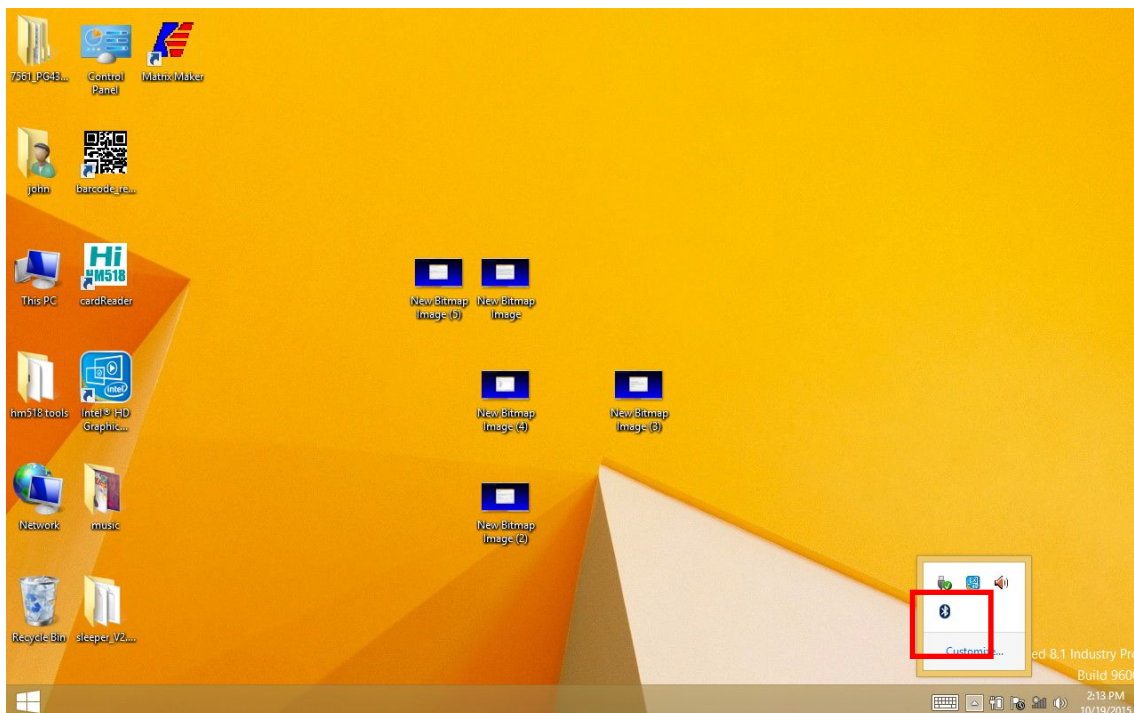
2. Choose the "show Bluetooth devices"
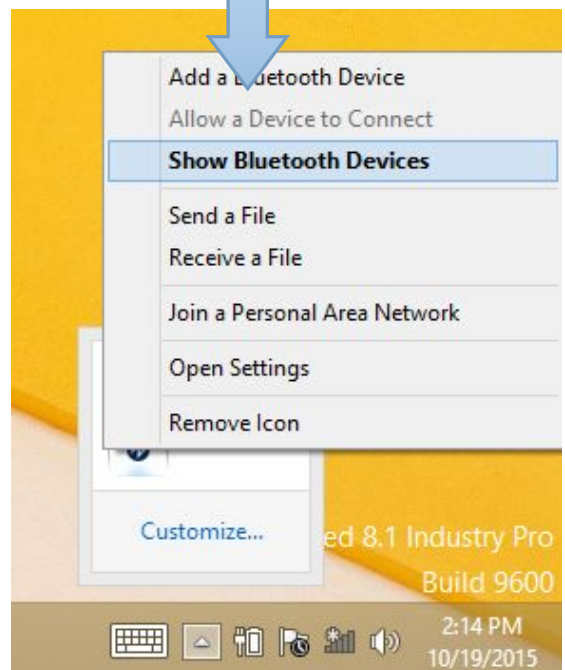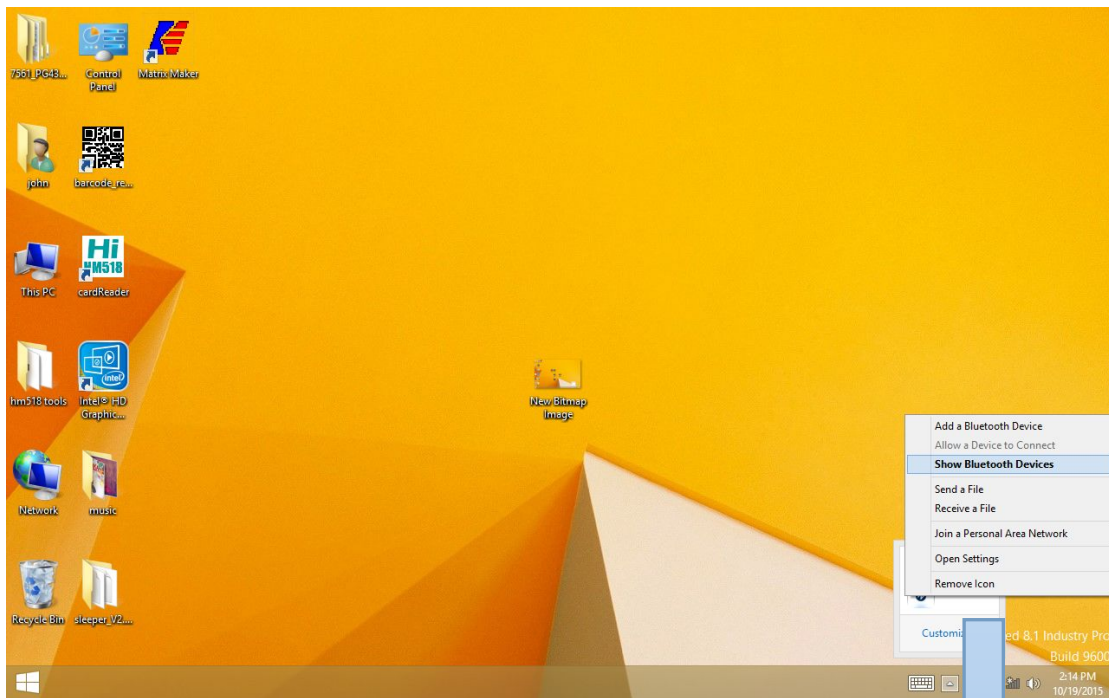
3. Find out the other proper bluetooth device.
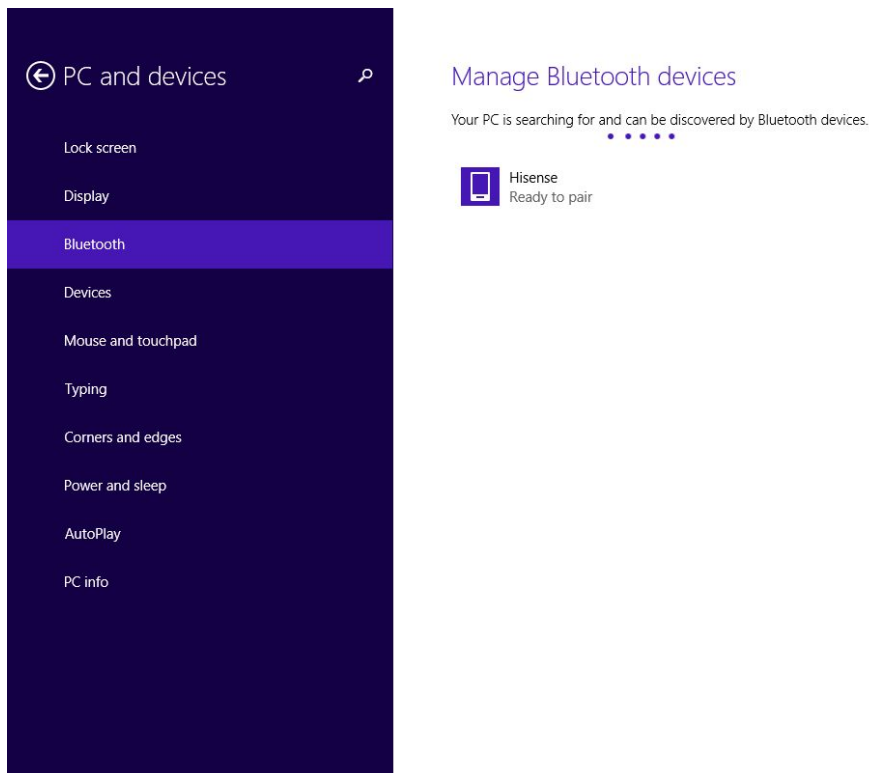
4. Ready to match with tablet.
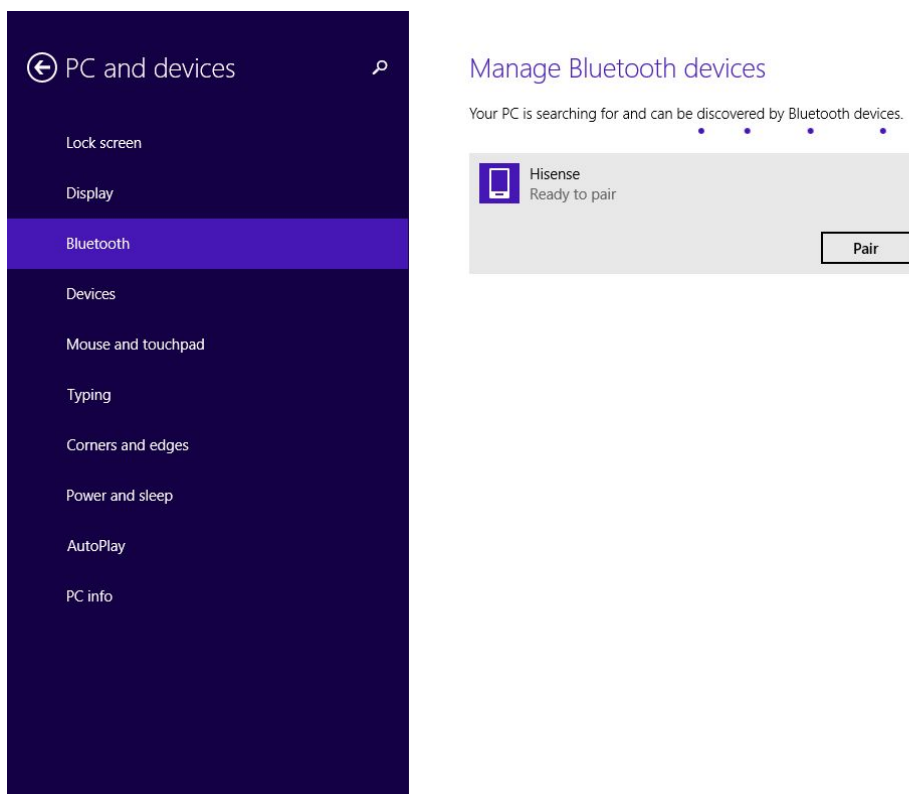
5. Connecting.
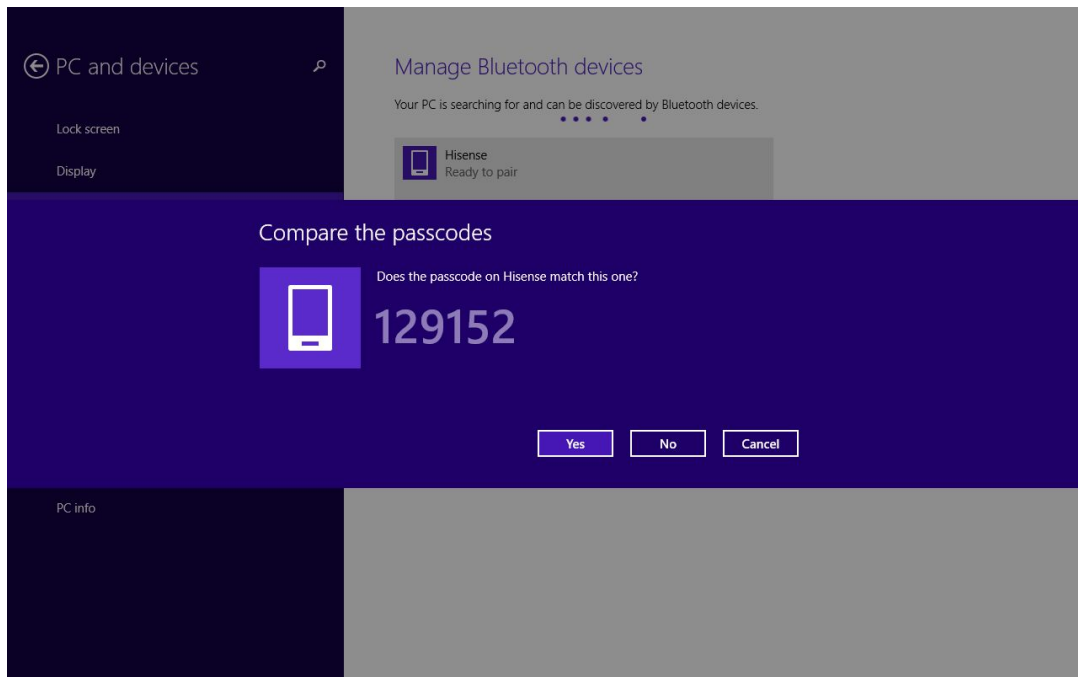
6. Connected successful
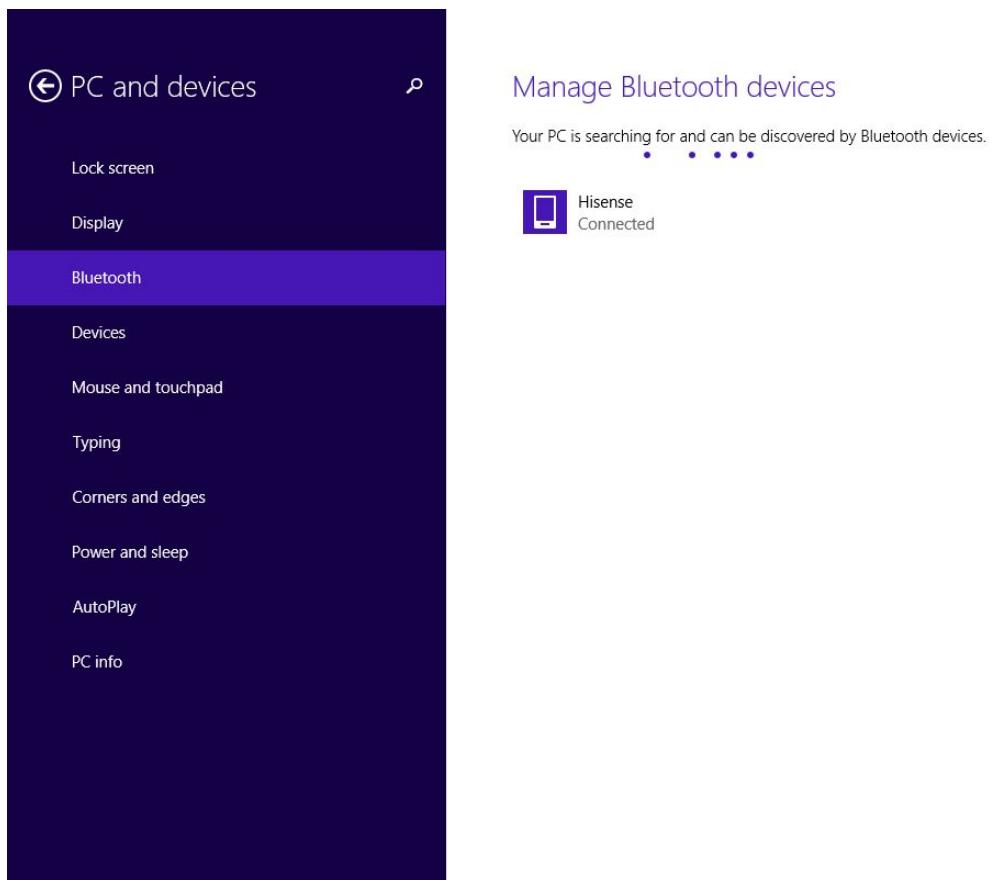
How to send file?

1. Data transfer
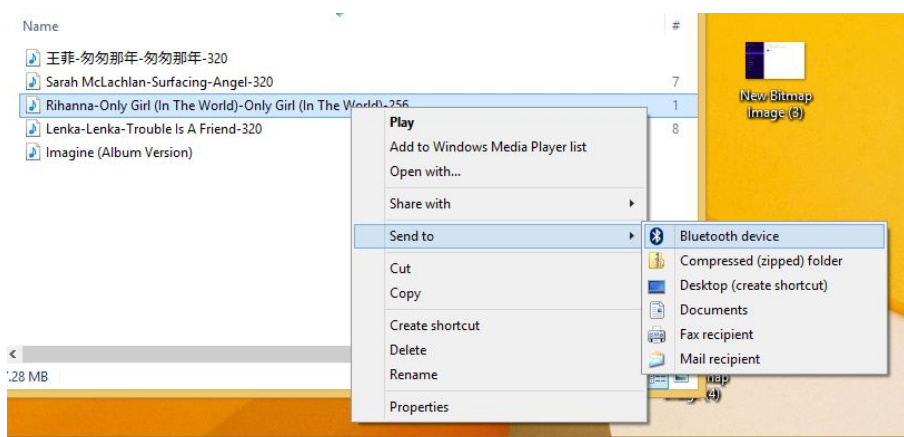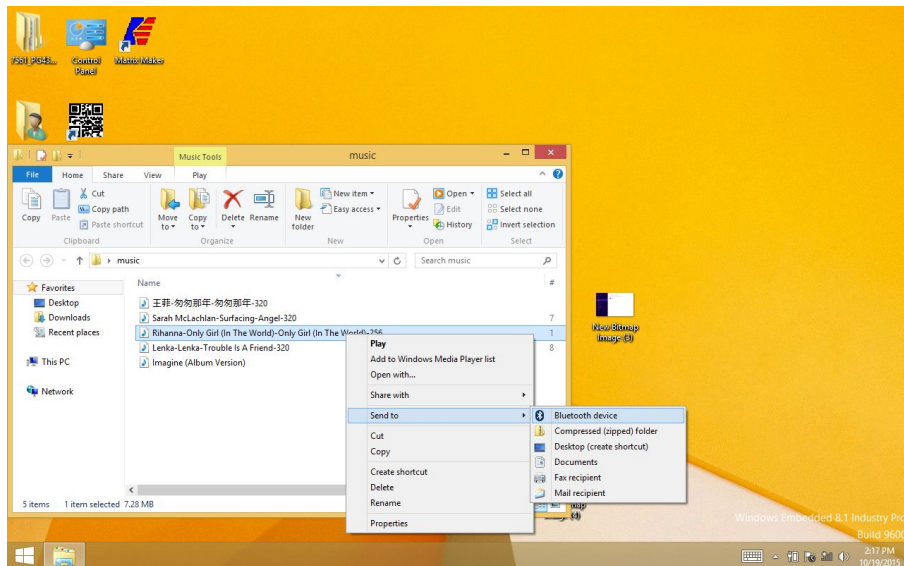
2. Find out the proper device.
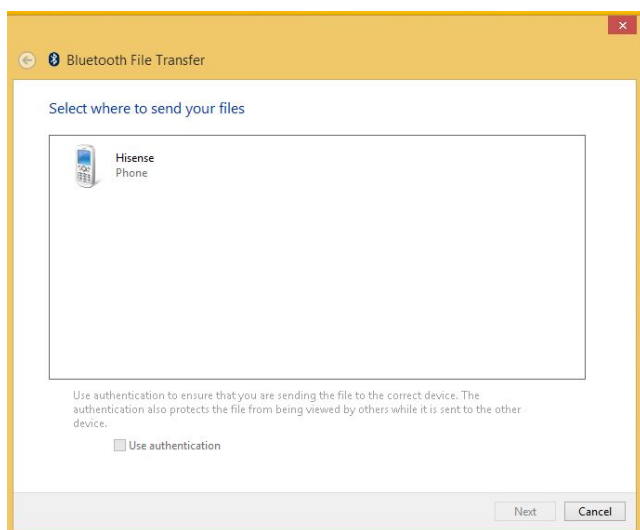
3. Data sending
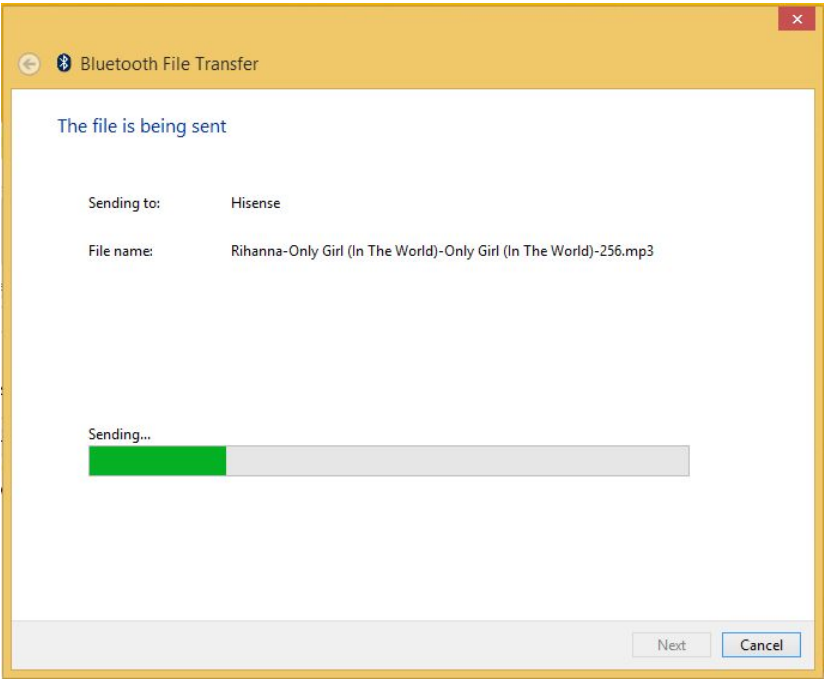
10. File successfully transferred
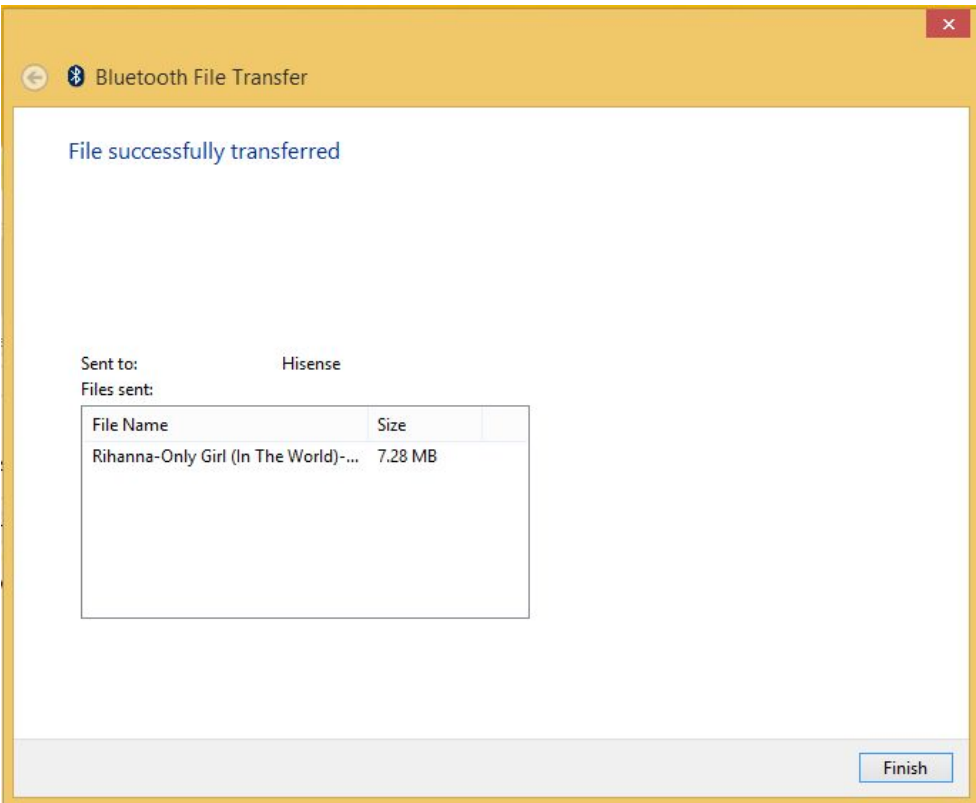
How to receive file?

1. Click the bluetooth icon, choose "receive a file"
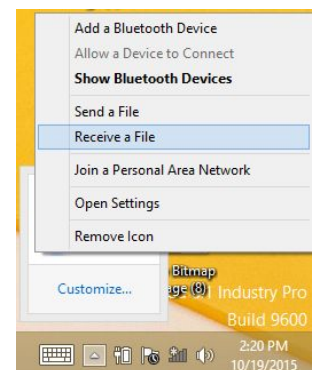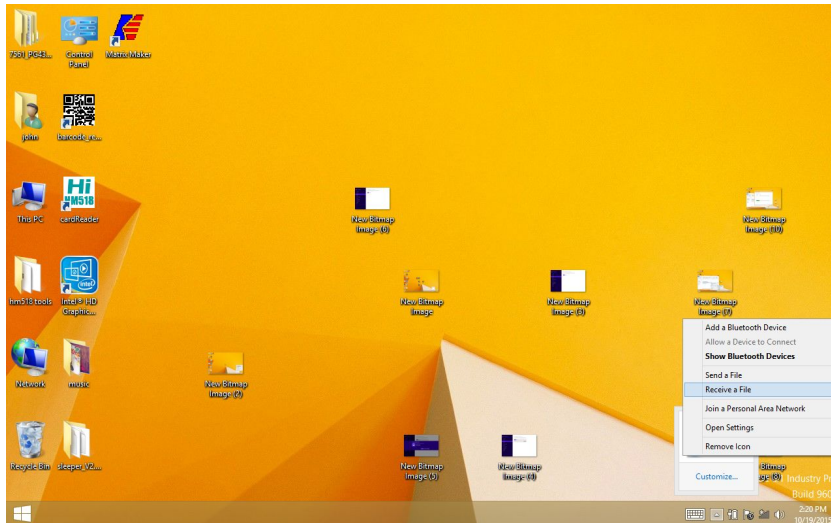
2. Waiting for receive file status.
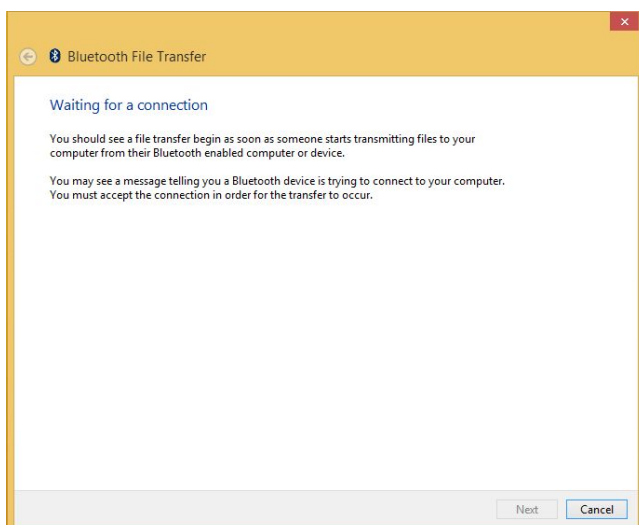
3. When the other bluetooth sending to tablet. It will be start to receive.
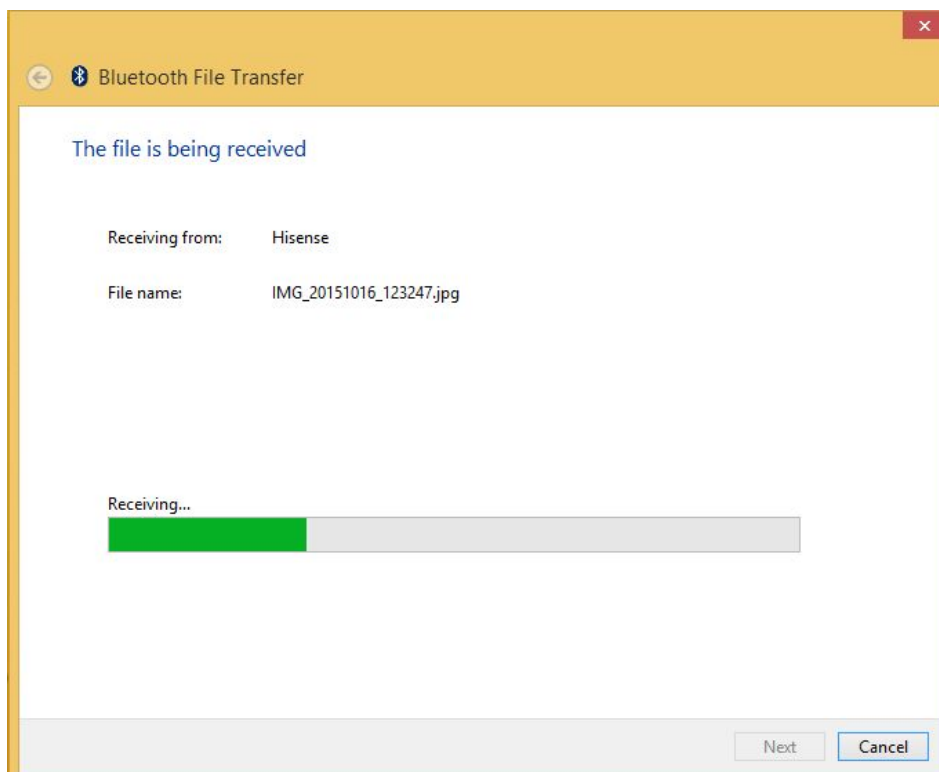
4. File received successful.
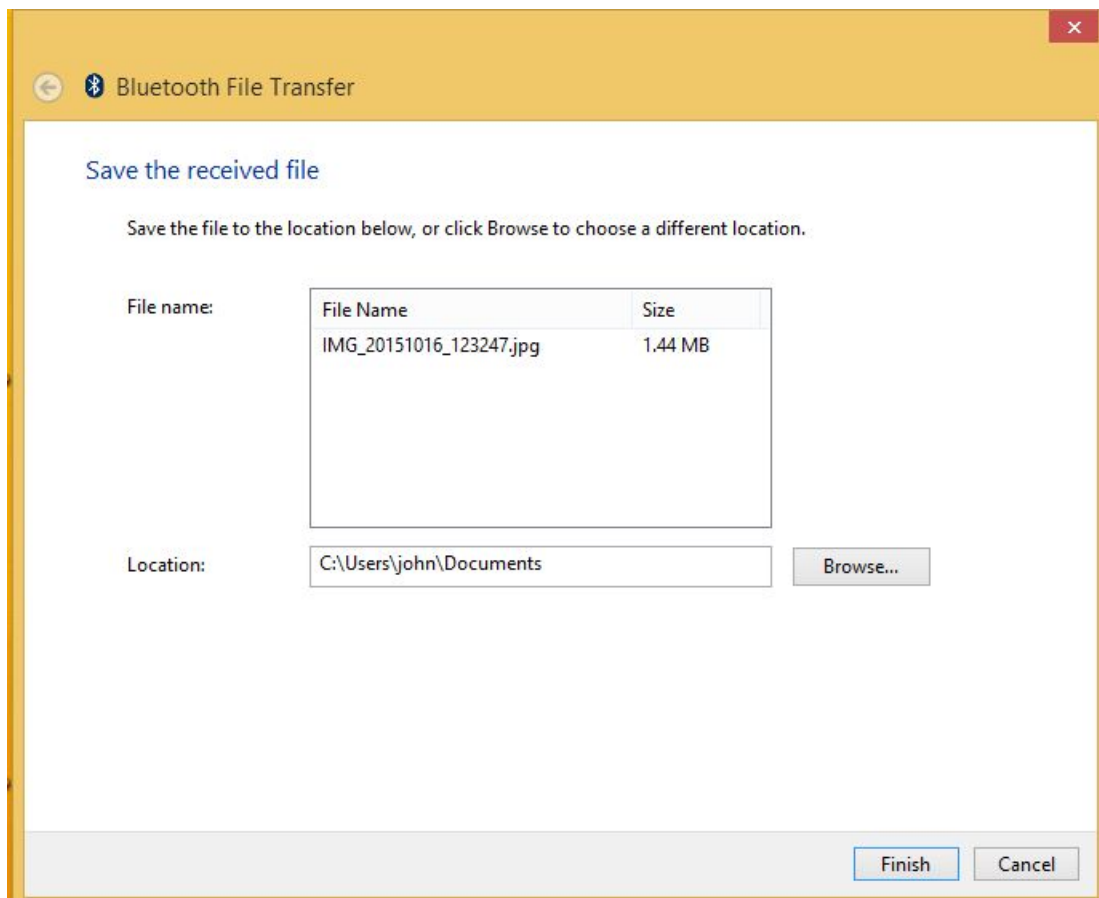
05. Using Card reader (MSR NFC IC)

Card reader test demo

1. Open the "HM518_cardReader_setup_EN.exe" file

2. Click "NEXT"
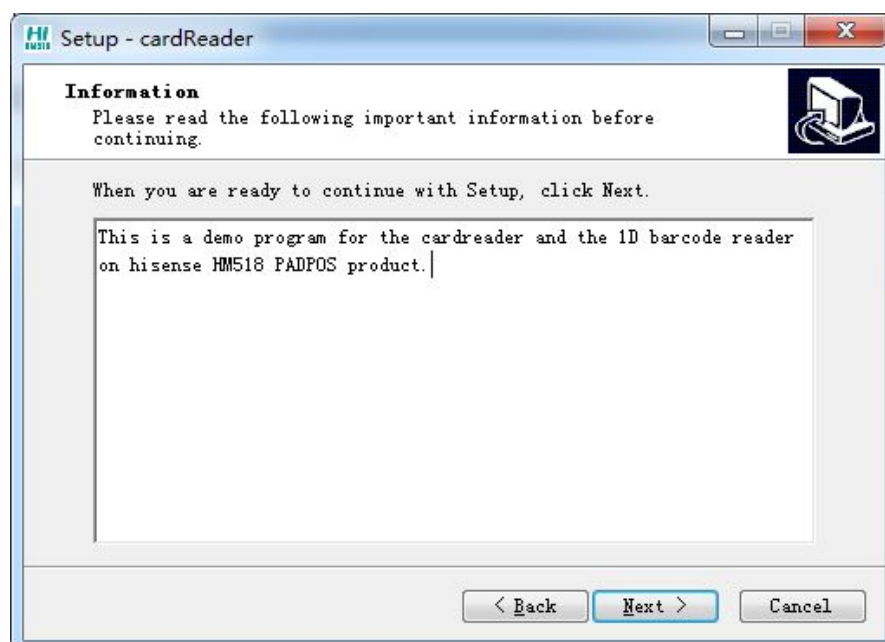
3. Click "NEXT", choose the default install path, and then click "next"
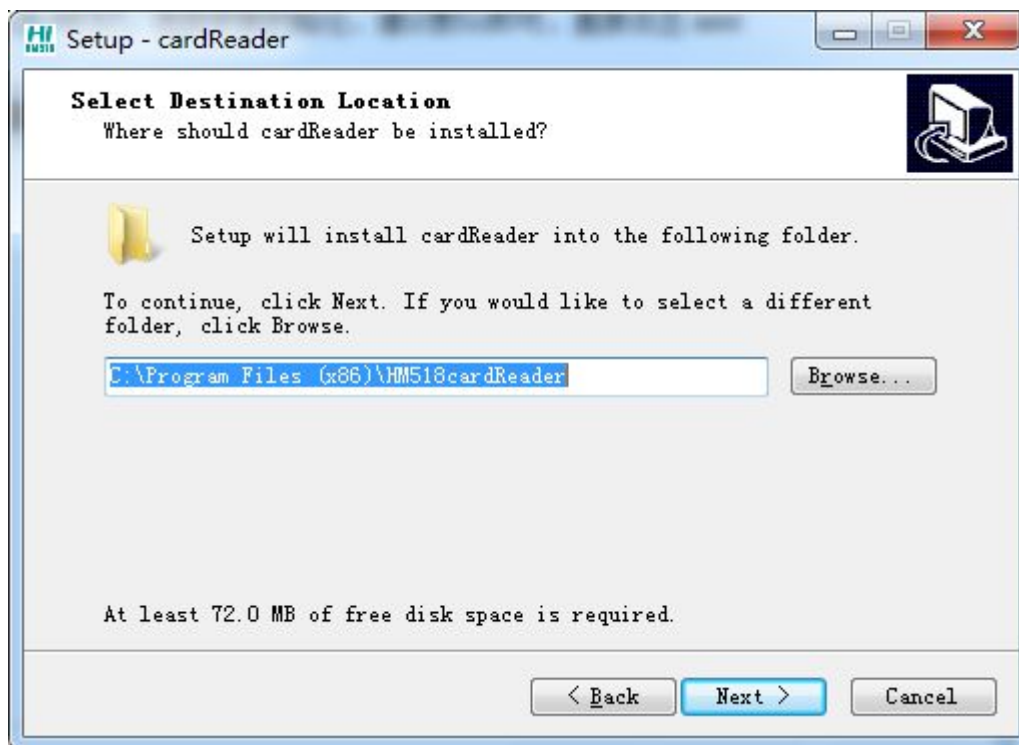
4. Choose default then click next
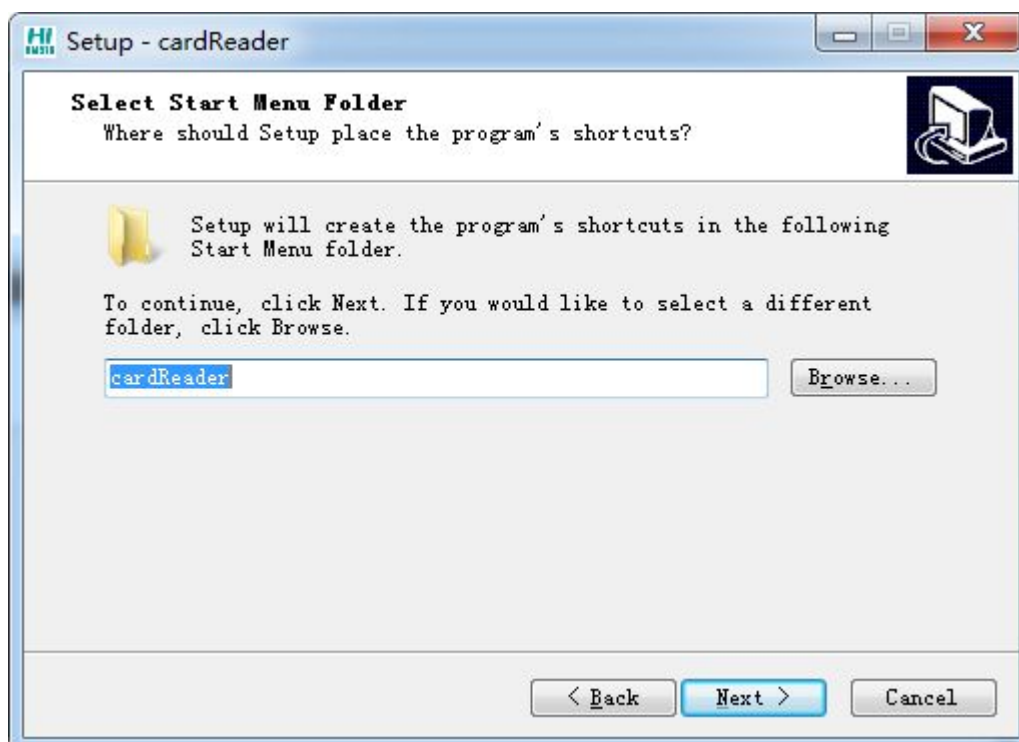
5. Select "create a desktop icon"，then next
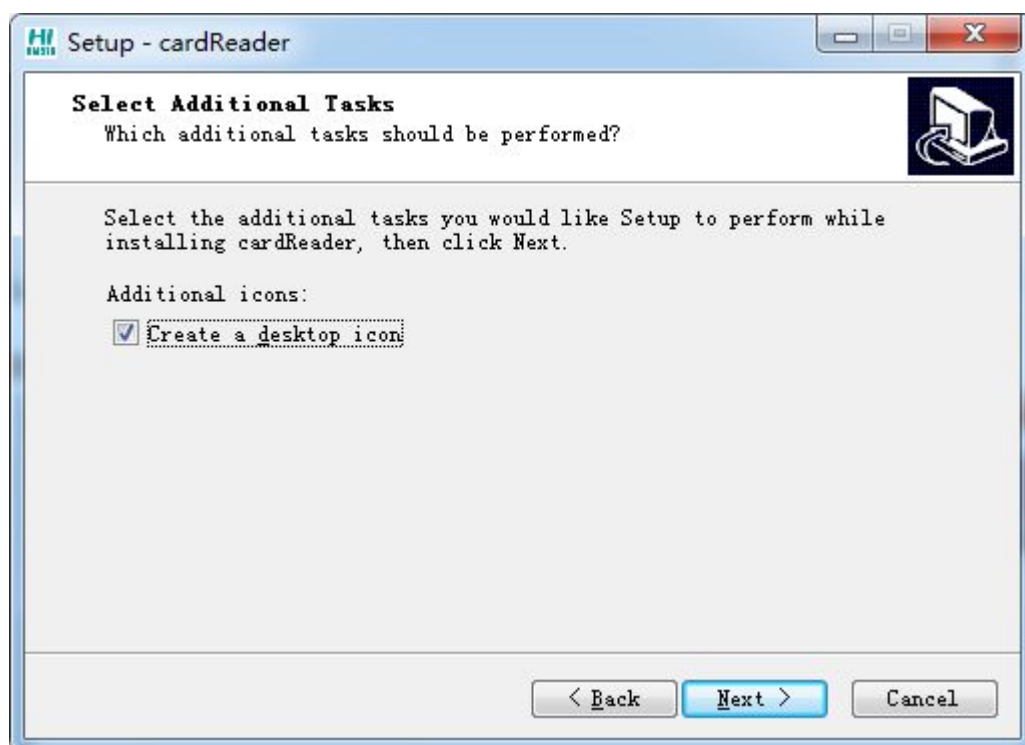
6. Click "Install"
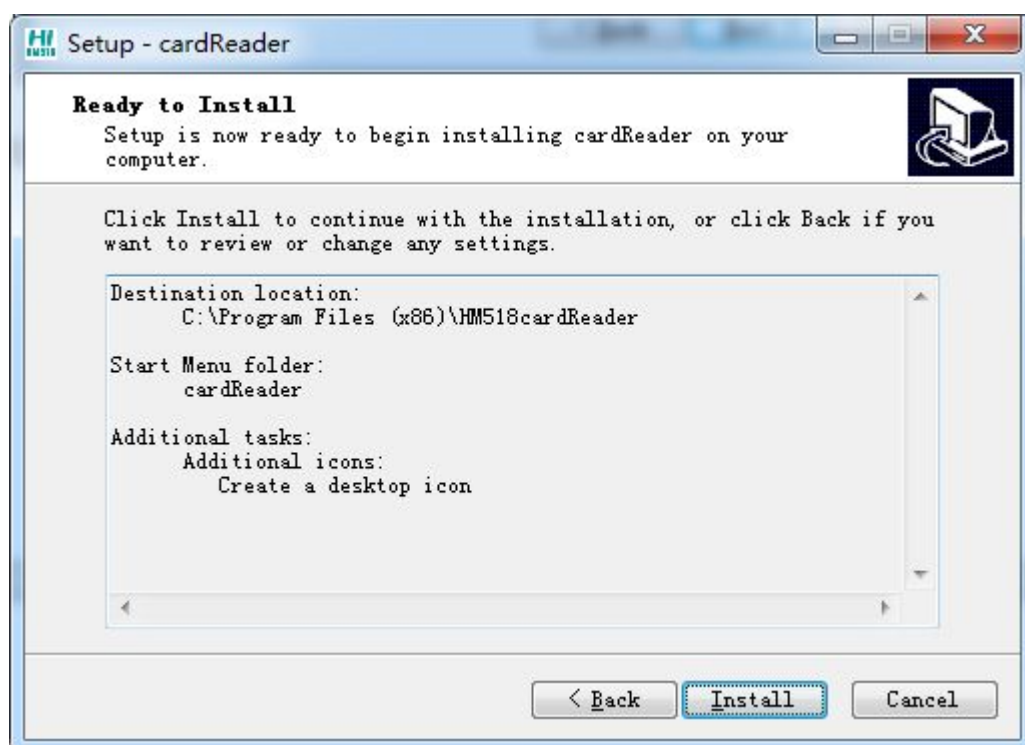
7. Click "NEXT"
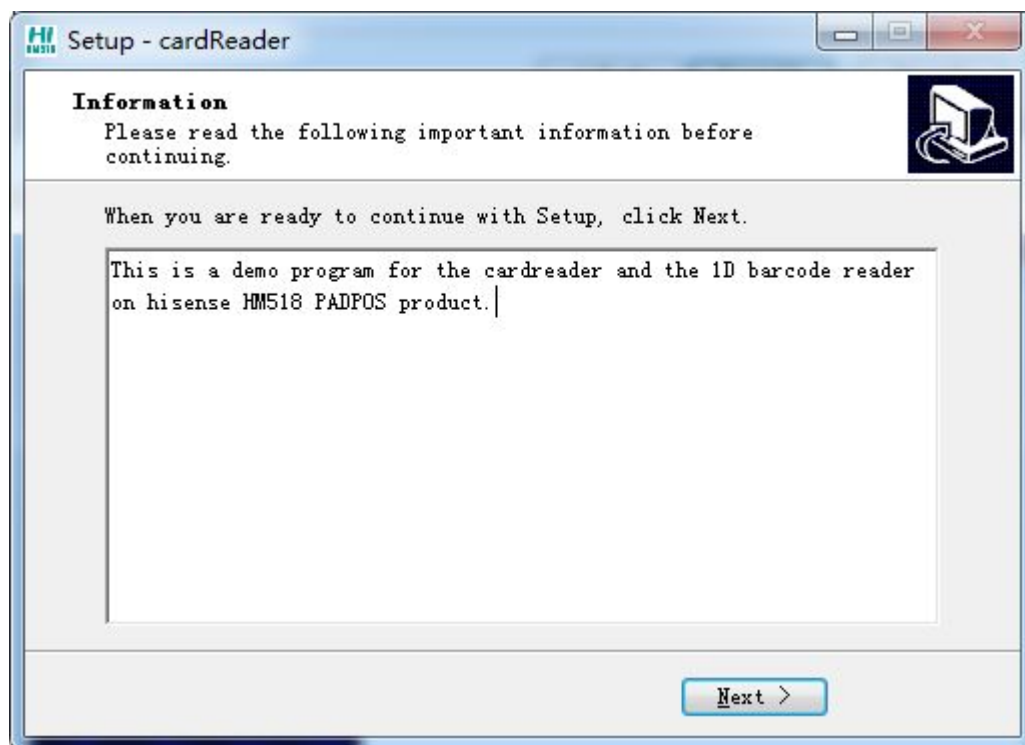
8. Click "finish"，if choose "launch cardReader", then it will be start the program immediately

Demo test

Open the demo software.
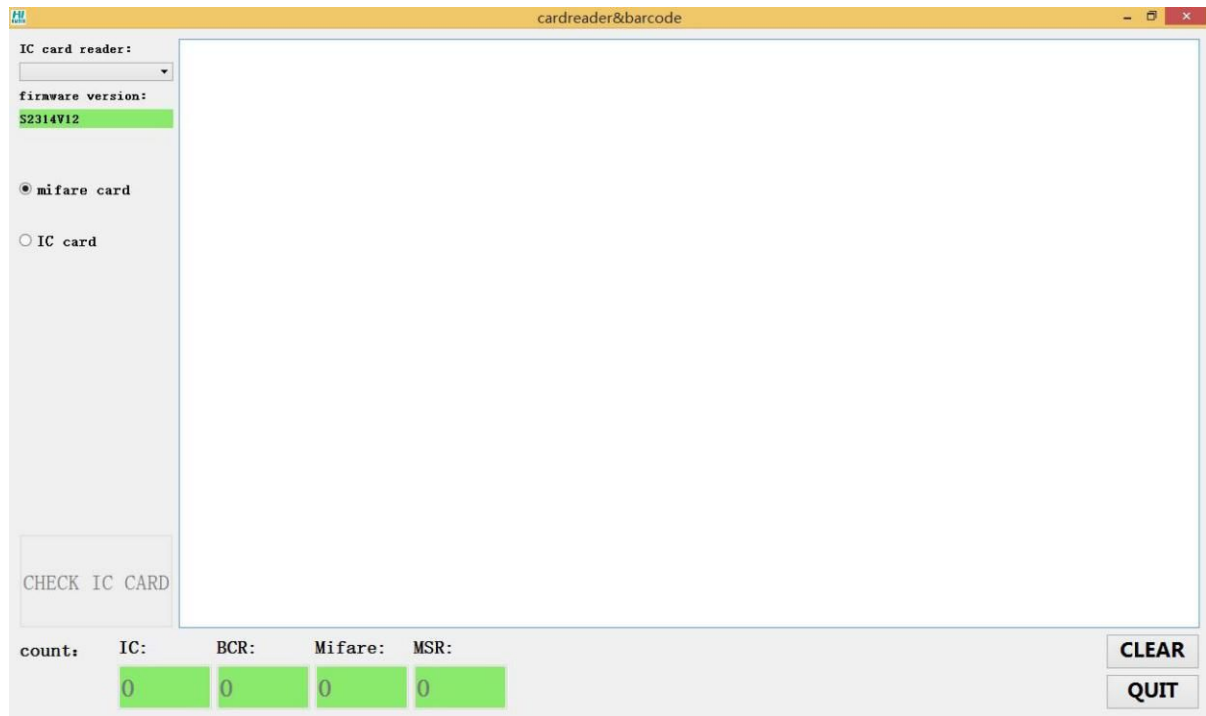
1. Using MSR

Reverse the card and make the back of the card to you.

Put the card into the slot which on the top of HM518.(Figure 1)

Swipe the card via the slot left-to-right or right-to-left .

Figure 1

First make the cursor in the white right frame. Swipe the magnetic stripe card, it will be shown the card information in the white right frame.
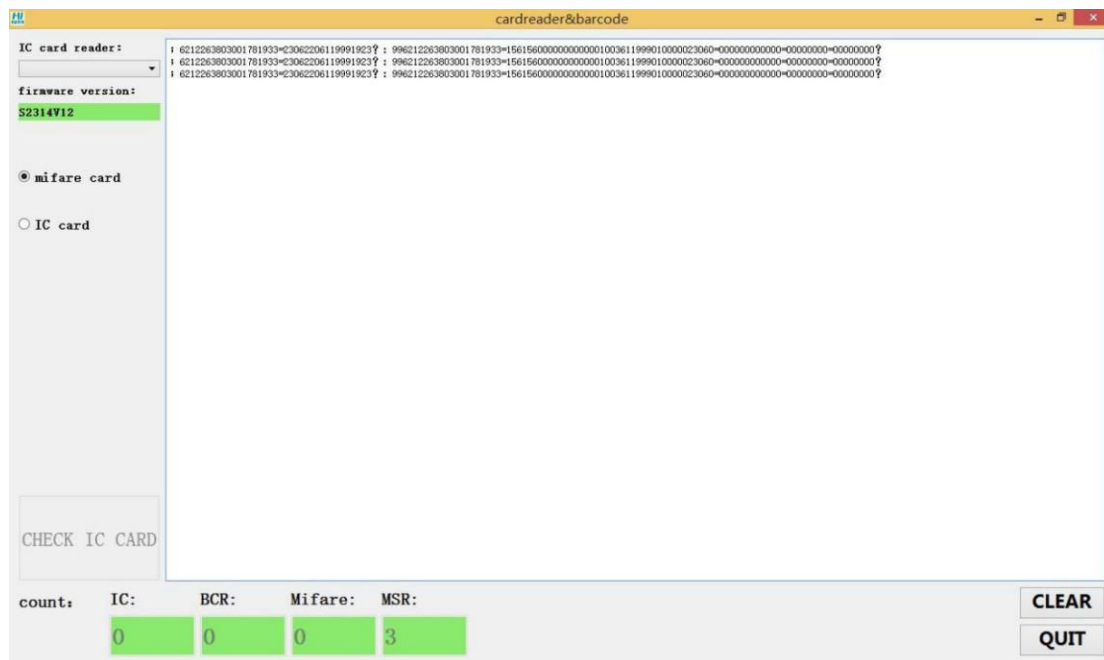
2. Using the NFC (Mifare card)
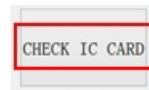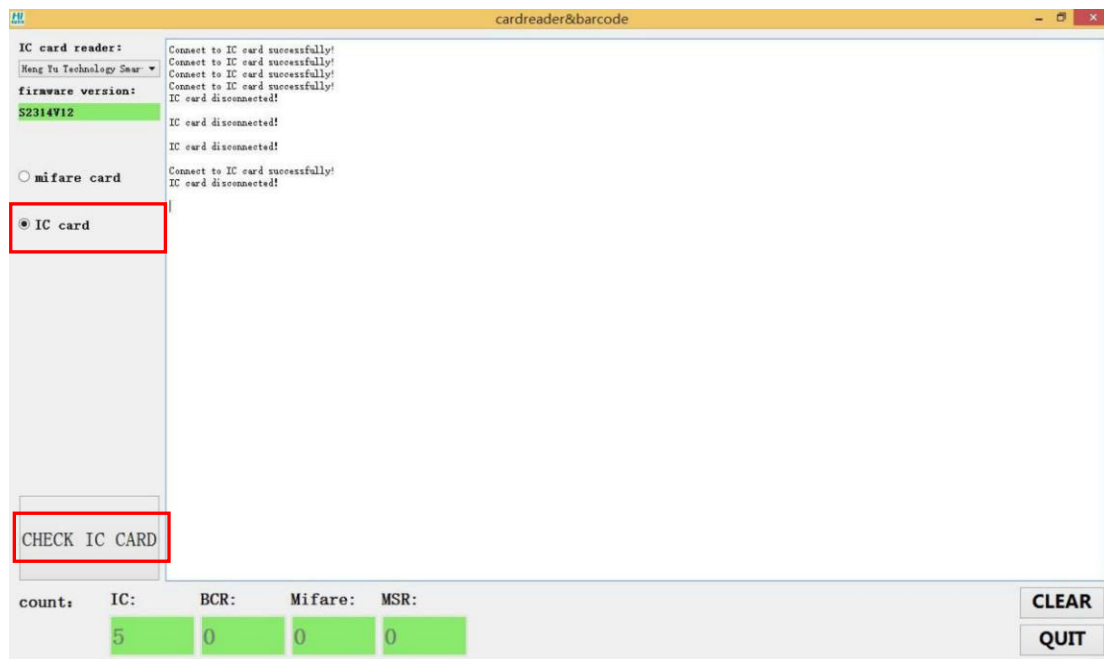
Put card in the proper position, choose " mifare card",

It will be always shown the card information in the white right frame.
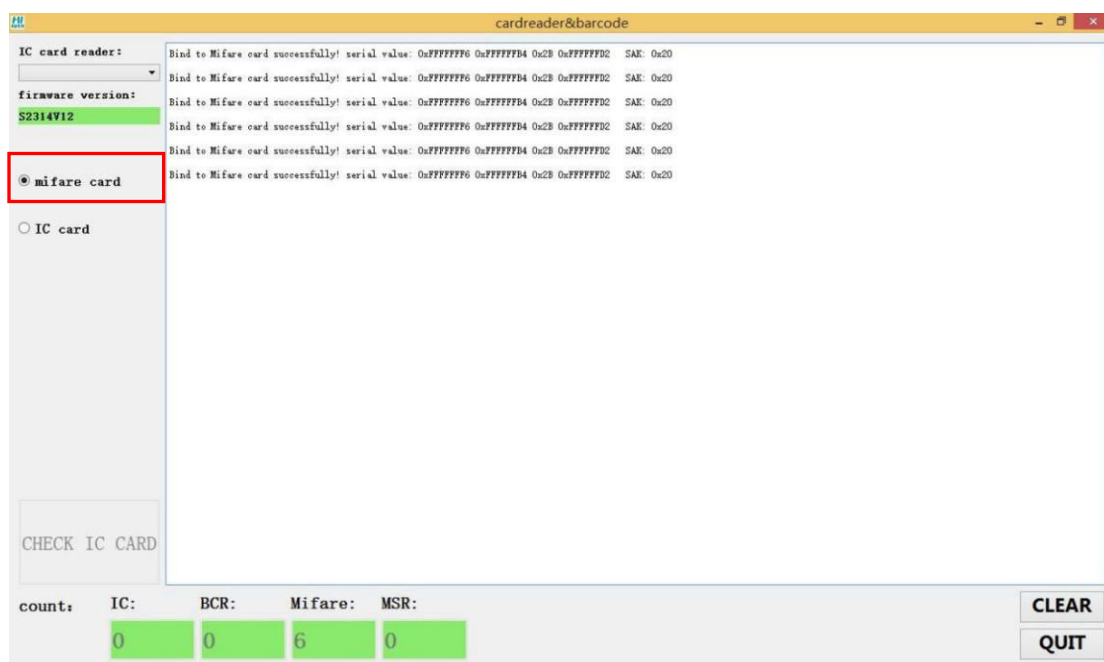
3. Using the IC card
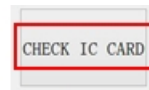
First choose the IC card in the left of test tool. Then the button named will be enabled.

At that time it can read the IC card information. And will show in the right frame.

Notice: normally for this card reader, the tool can read the firmware version, if not, you will see "get firmware failed". Then you need your Vendor to check

06. Using 1D Barcode scanner

To use 1D Barcode scanner: same test tool with card reader.

Make sure your device has 1D barcode scanner module.

Touch the scan button on the left of the device and confirm the red ray of light.

(Figure 1)

Scan the 1D barcode using the red ray of light and obtain the content. (Figure 2)

(Figure 1)

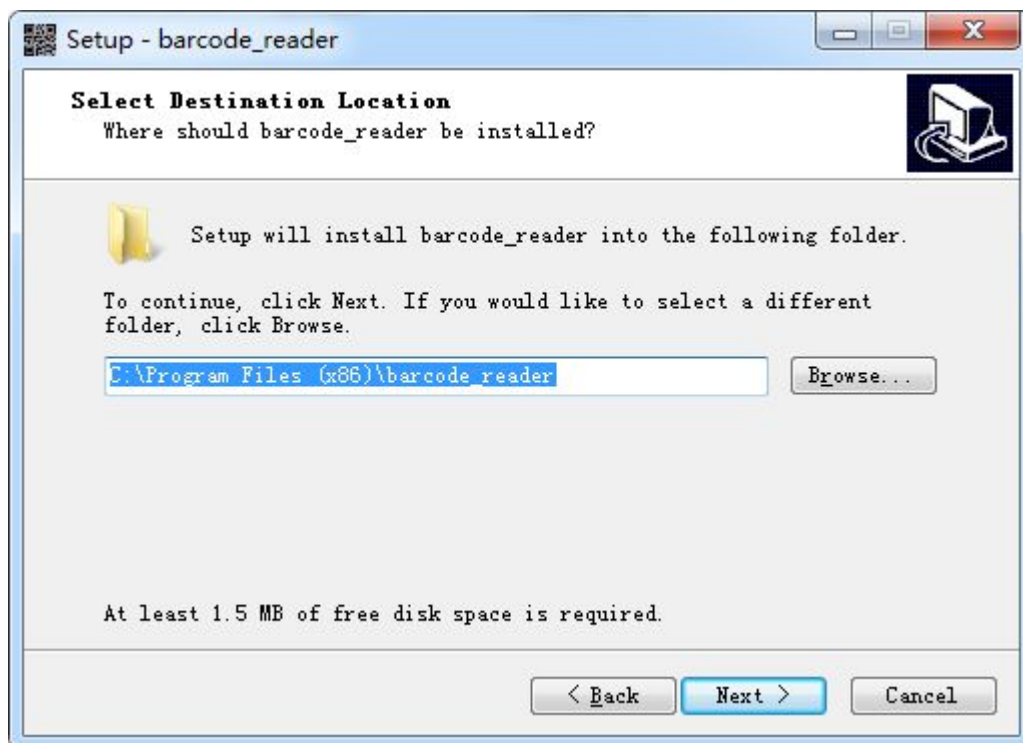(Figure 2)

07. Using rear camera (1D/2D barcode reader function)

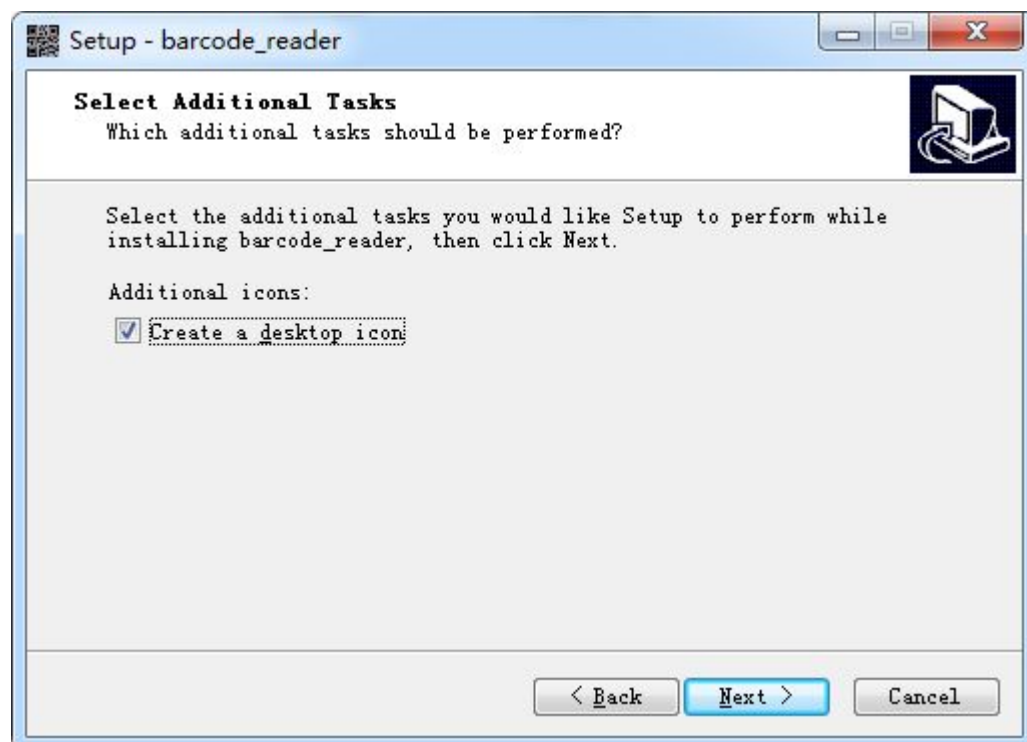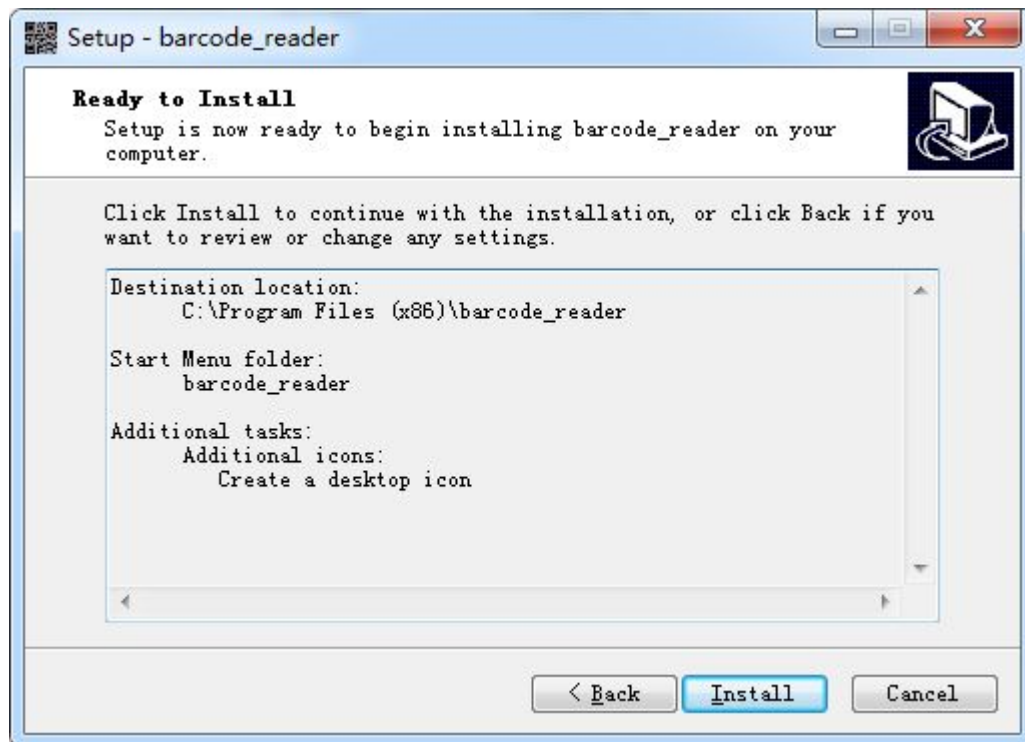1. Click on 2D barcode_reader_setup program ▦▦ 2Dbarcode_reader_setup_EN
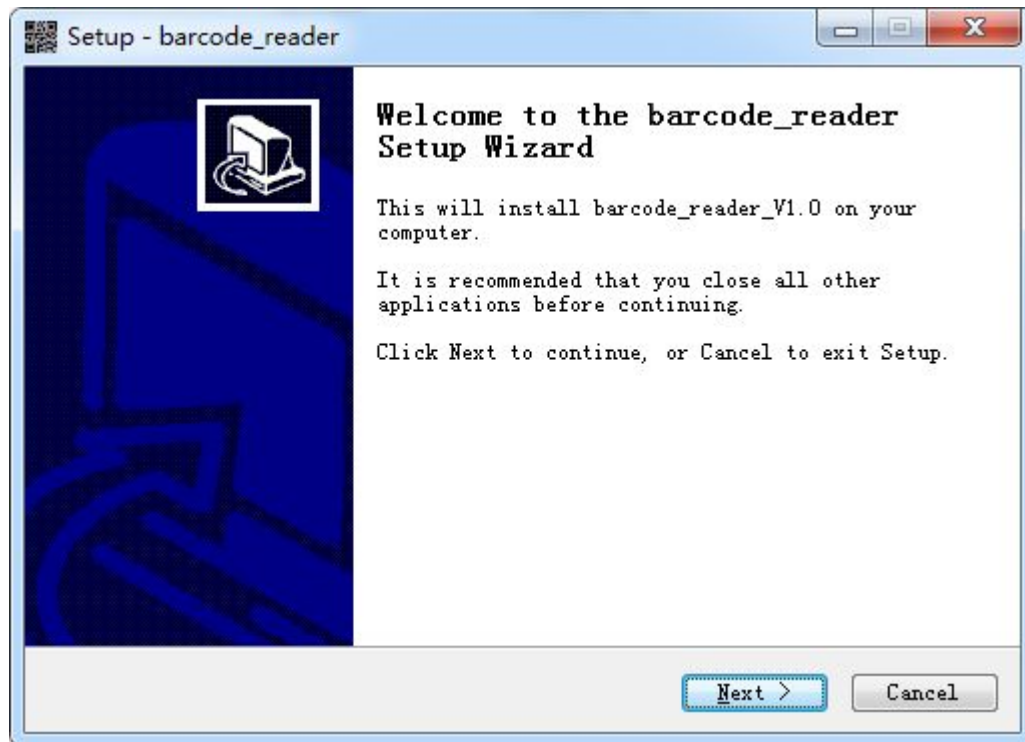
Next

Set default is ok, next

Selected "create a desktop icon"，then "next"
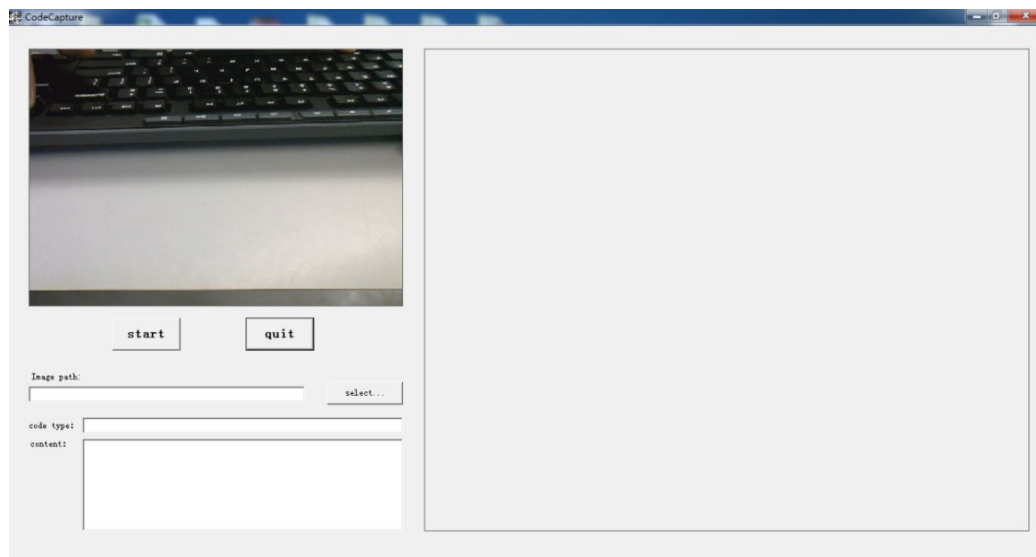

Choose "Install"

Click "finish ", if choose "launch barcode_reader, it will be open directly.

Test method：

1. Open this program if finish install

2. Choose "start" button, it will be show a 2D barcode in left the video frame. And start to analyze decoding. If can Identify successful, it will show same barcode picture on the right frame. And you will be see the barcode information on the left bottom.
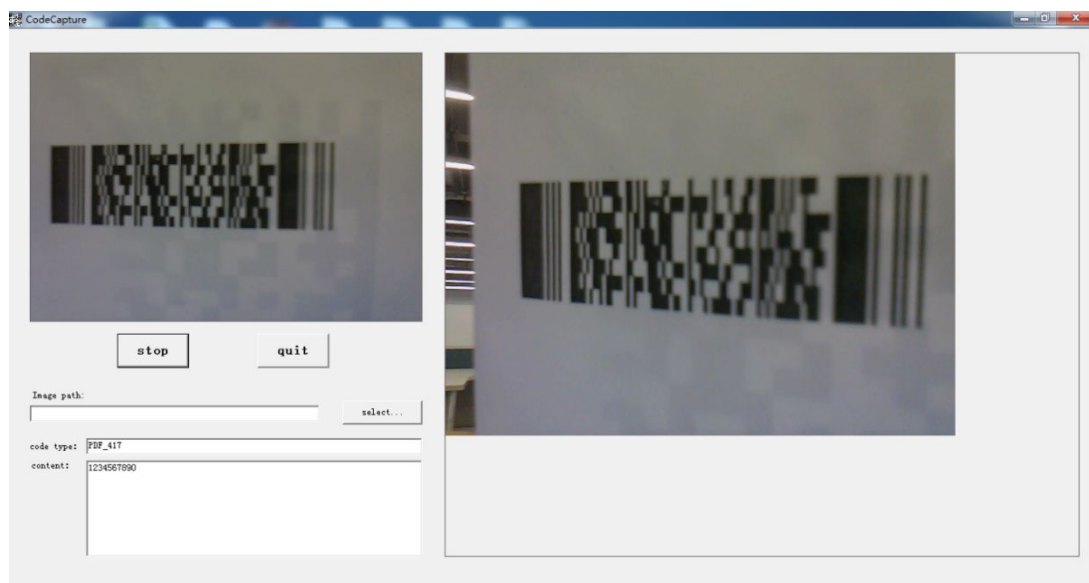

Image path

Client can select the local drive barcode image and analyze decoding. , also can test decoding function in Zxing library.
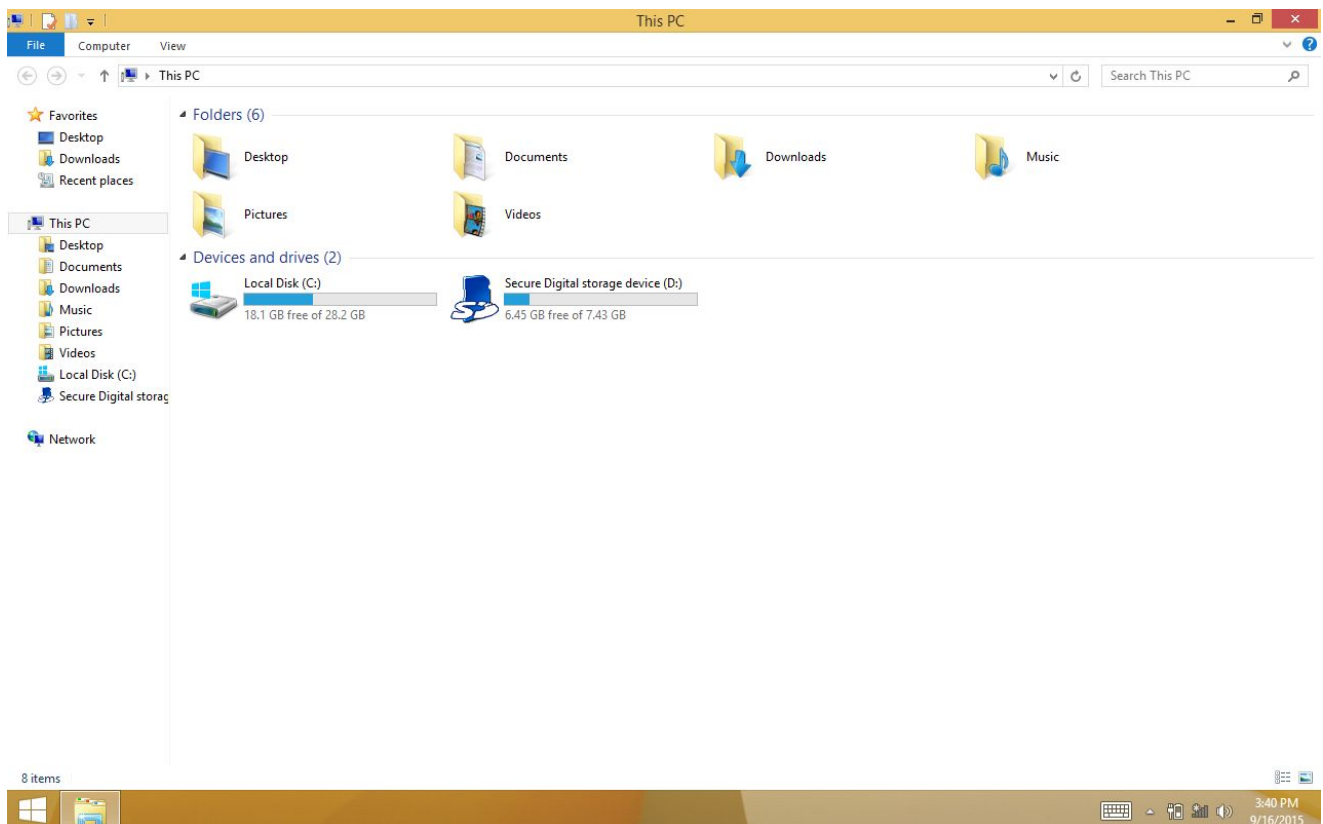

Finish.

08. Using the SD card.

1. Insert the micro SD card to the micro SD slot

2. In system, you will be got the micro SD card information as below:

3. Then the SD storage device can be read and write.