CIR415A Bluetooth® Contactless Smart Card Reader

User Manual

Driver installation Procedure

* Driver signed by Microsoft and WHQL, user can install the driver with Window Update. In case that cannot install via Window Update, please process the below steps to Manual installation
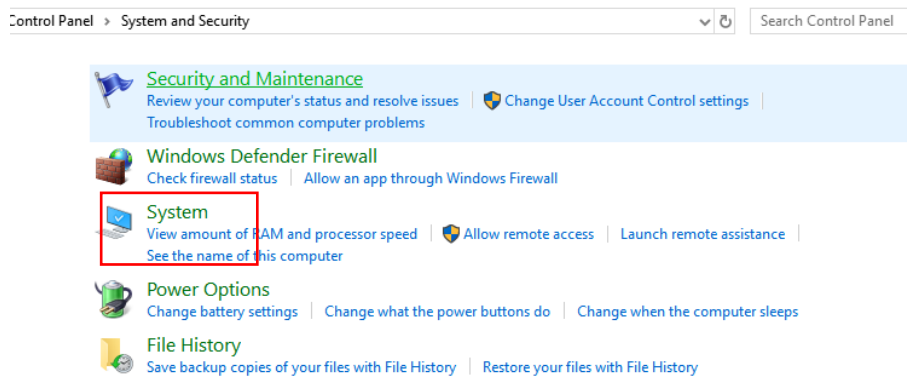
Hardware requires:

- ❖ CIR415A
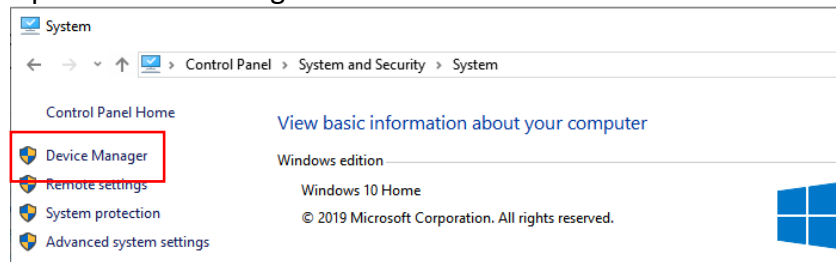- ❖ PC with OS windows 7 or above

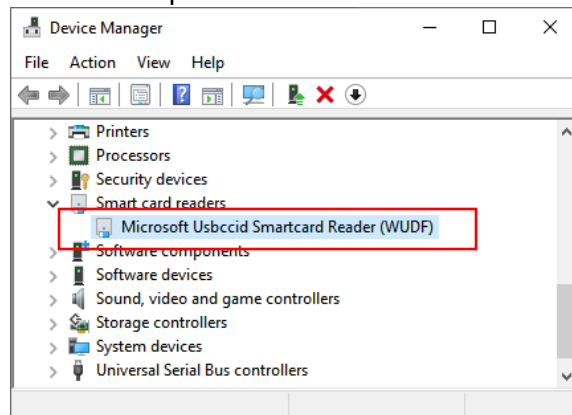Software requires:

- ❖ CIR415 Driver Package

Steps:

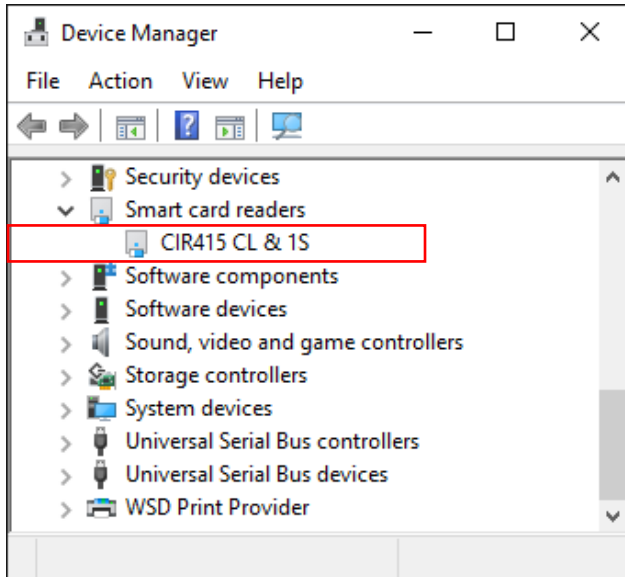1. Connect CIR415A to PC
2. On PC, open "Control Panel > System"
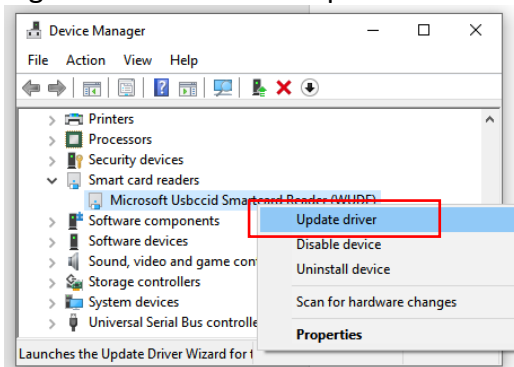

3. Open "Device Manager"

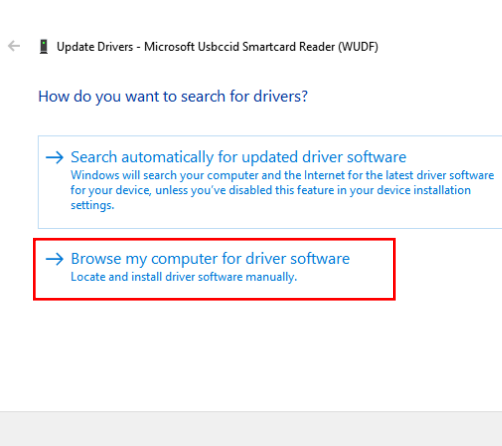

4. Select and open "Smart card readers"

if it is shown "Microsoft Usbccid ... (WUDF)", please continue with step 5)
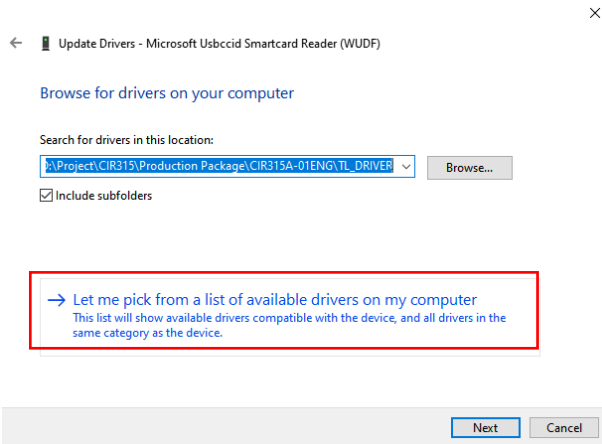
if it is shown "CIR415 CL & 1S" mean driver install completed

5.   Right click then select "Update driver"

6.   Select "Browse my computer for driver software…"

7.   選擇 "Let me pick from a list …"

8. Select "Have Disk…"
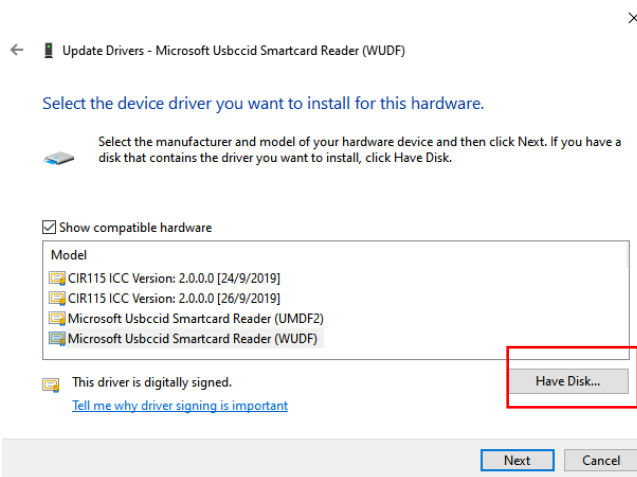
9. Select "Browse…"
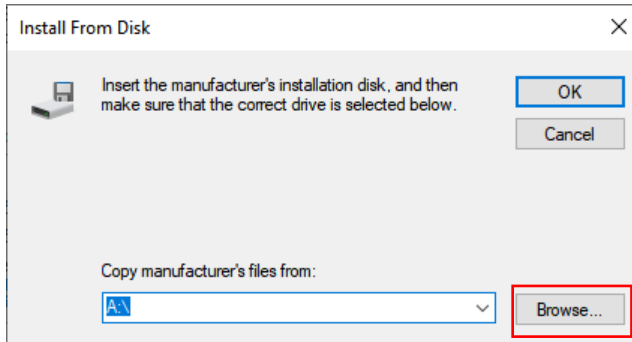
Select "CIR415.inf", then press "Open" and "OK"

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Version 0.00.02

info@abcircle.com
www.abcircle.com
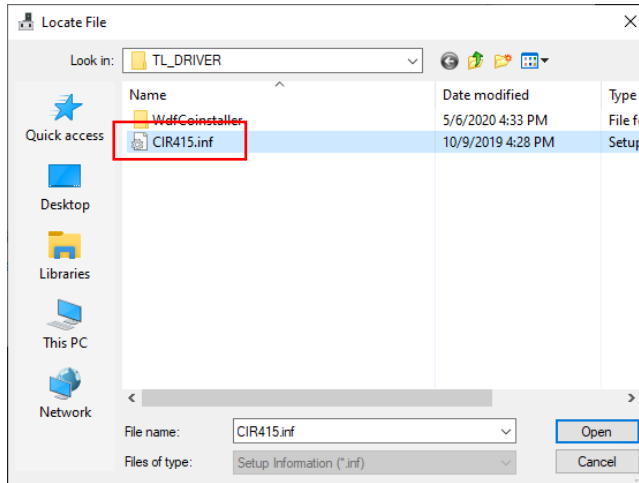
10. Select "CIR415 CL & 1S" then "Next"
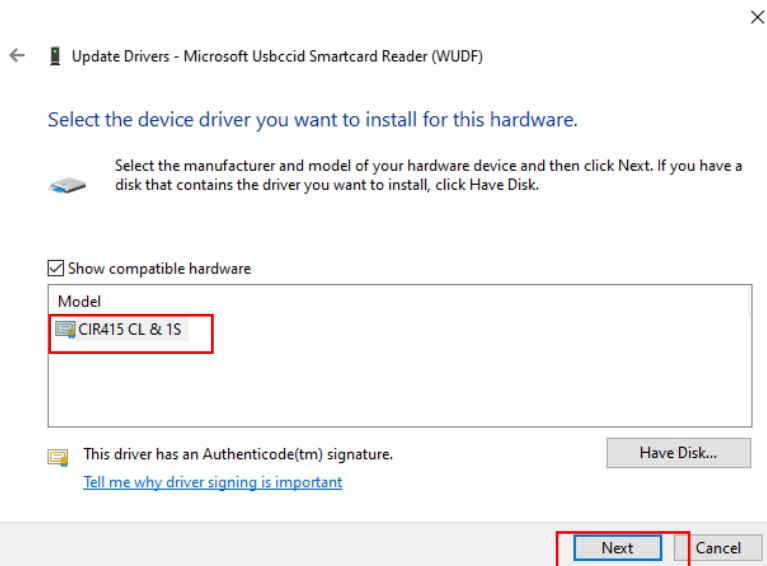
11. Waiting until below screen shown, Press "Close" to complete
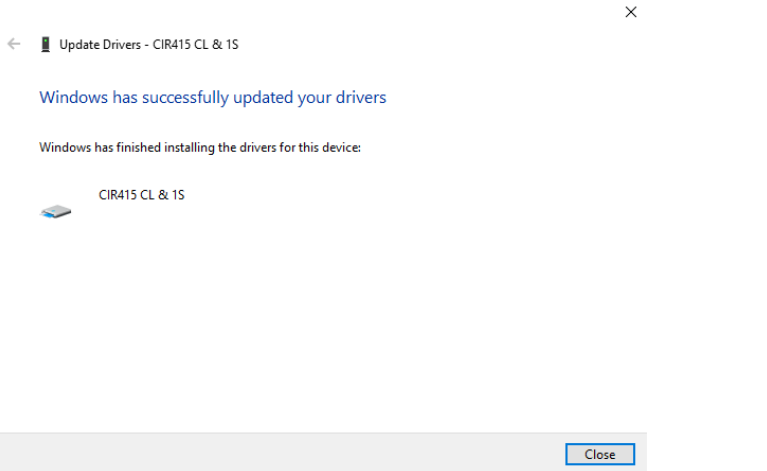
12. Double click to ensure the device changed to "CIR415 CL & 1S"
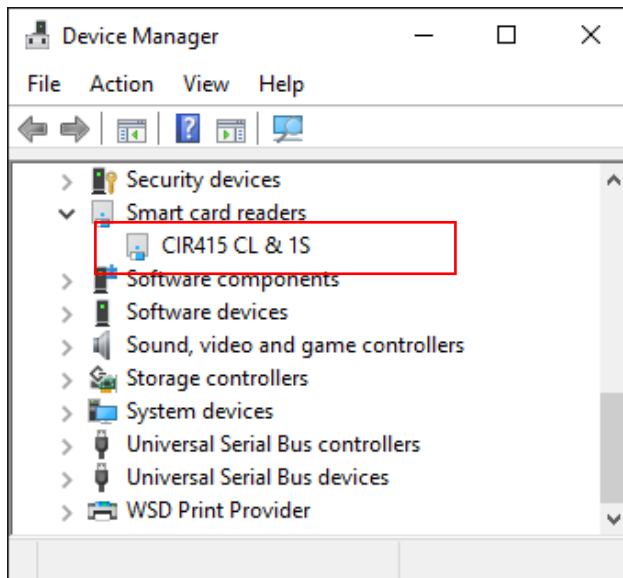
13.   Done

Operation Example

Hardware requires:

- ❖ CIR415A
- ❖ PC with OS windows 7 or above
- ❖ Mifare 1k Test Card

Software requires:

- ❖ Any PCSC Application (e.g. APDU.exe)

Steps:

1.   Plug in the reader into the PC

2. Open "APDU.exe"
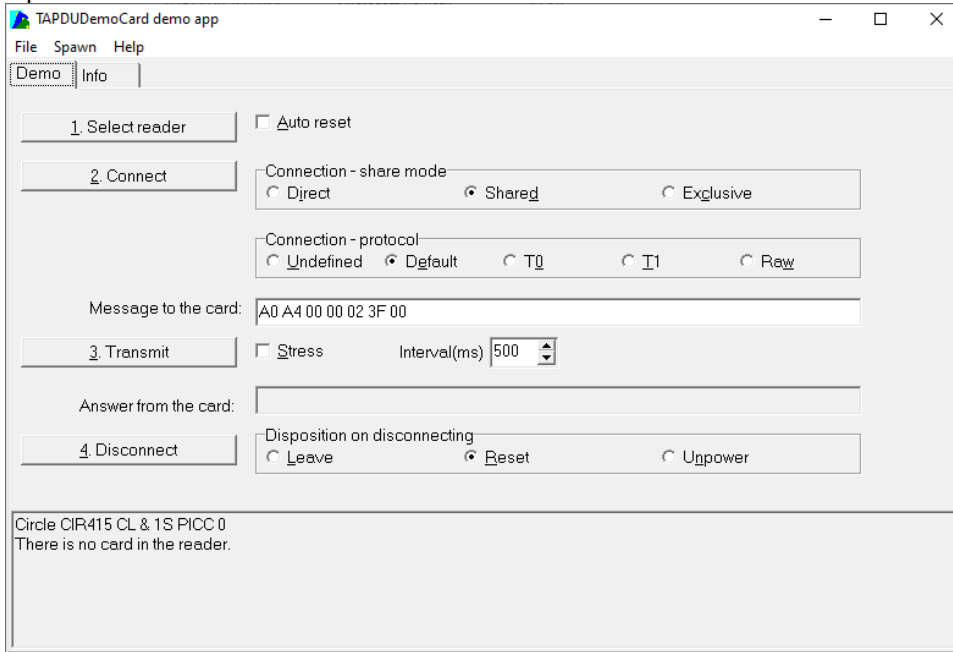
3. Click "1. Select reader", Chose "Circle CIR415 CL & 1S PICC 0", then click "OK"
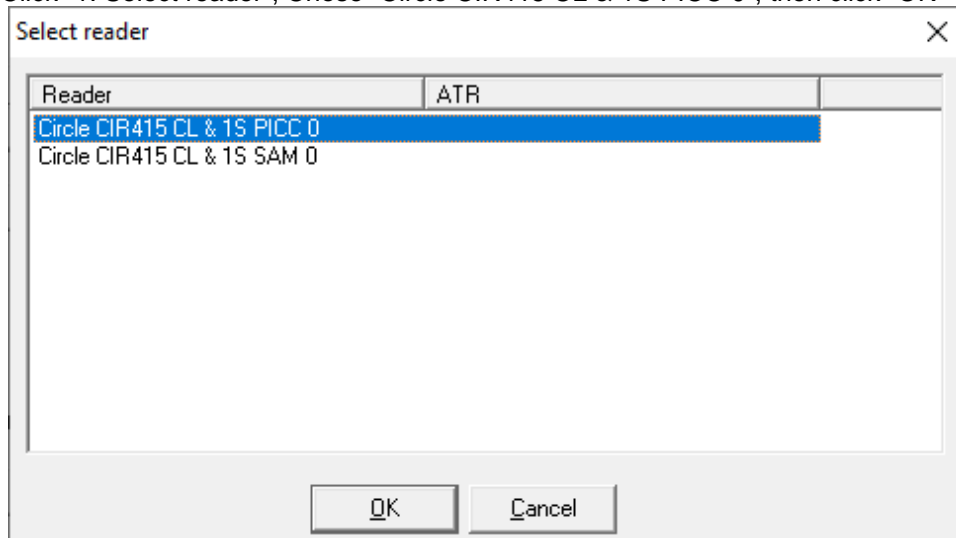
4. Tag ISO14443 Test card on CIR415A
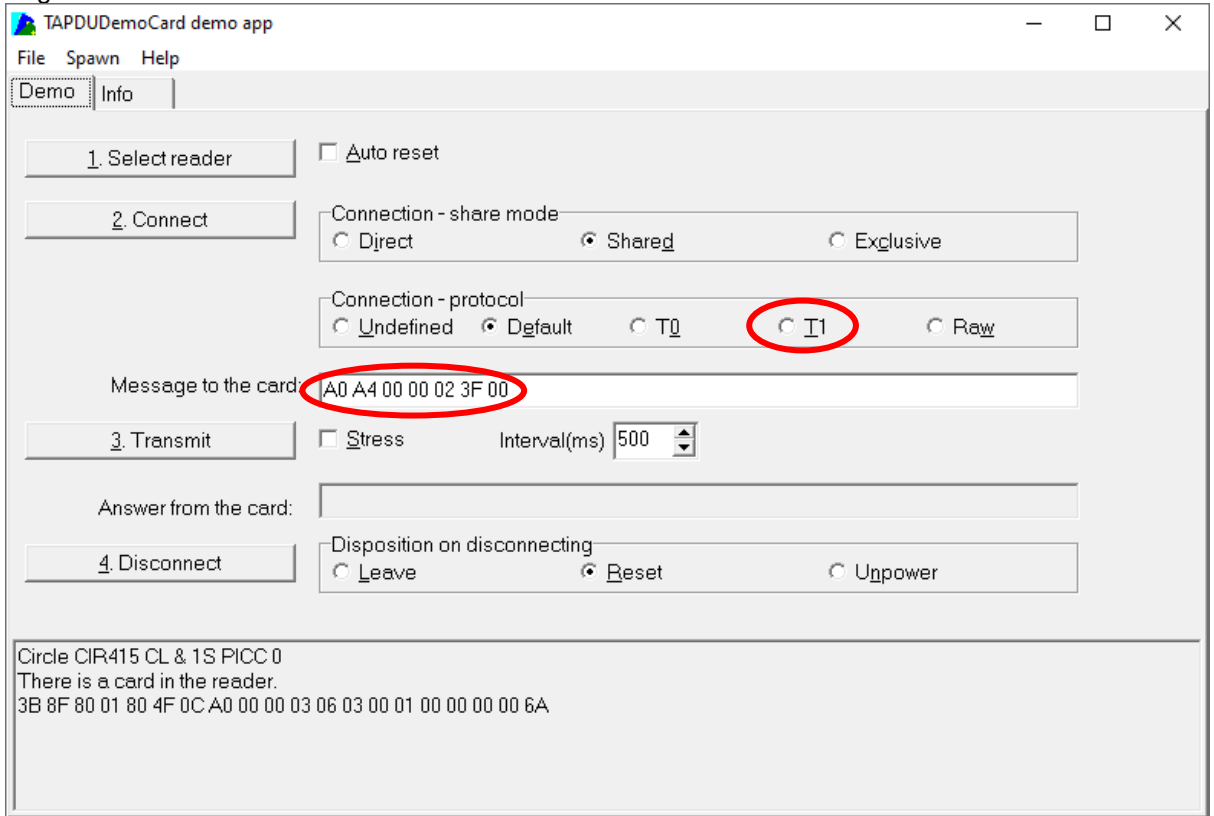
Select "T1", Message = "90 0a 00 00 01 00 00"

5. Press "2. Connect"
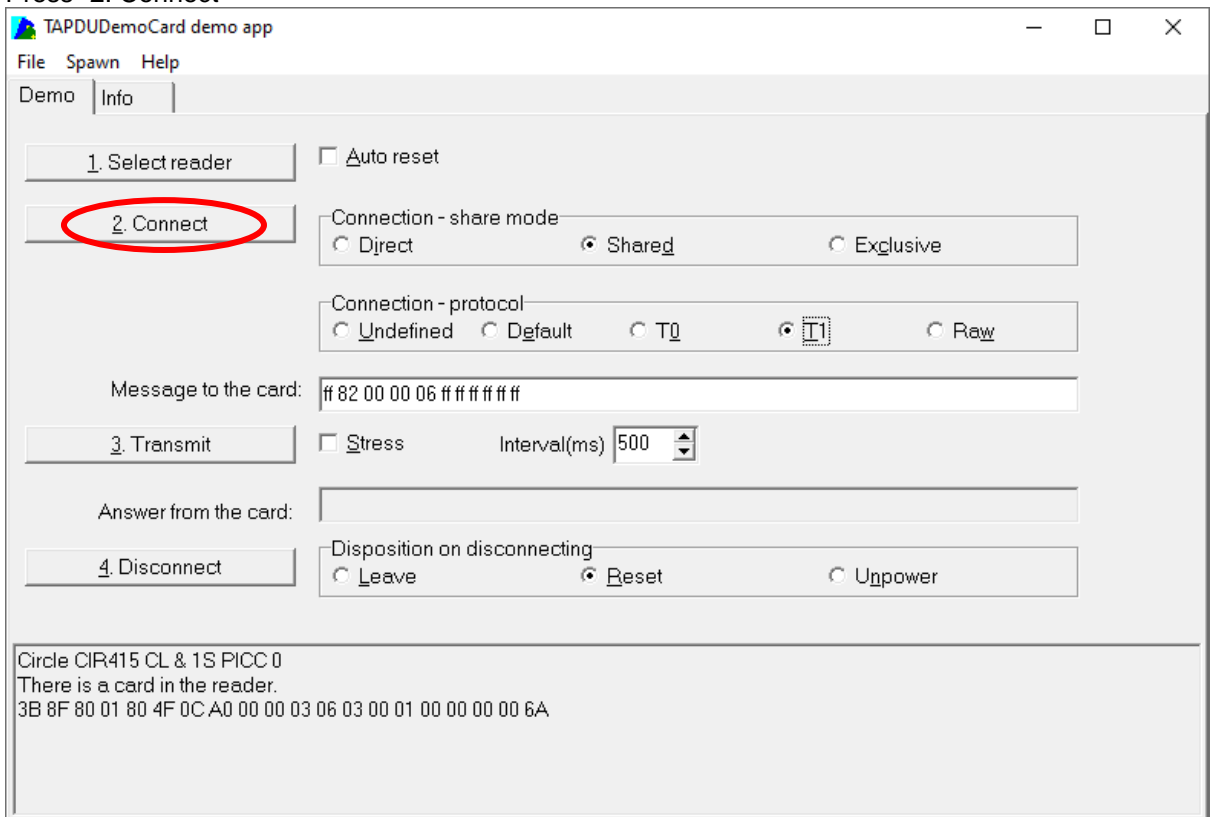
6. Press "3. Transmit"
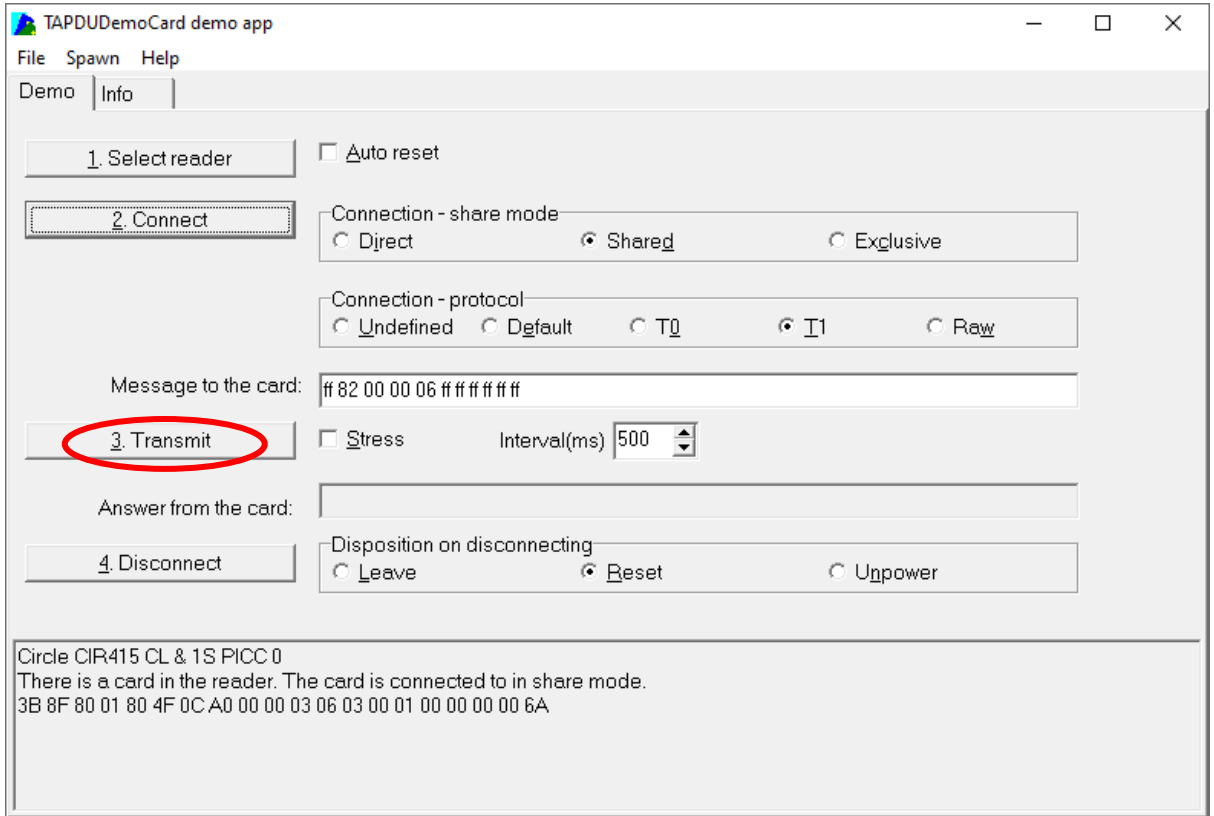
7. Result will be shown on the "Answer from the card:"
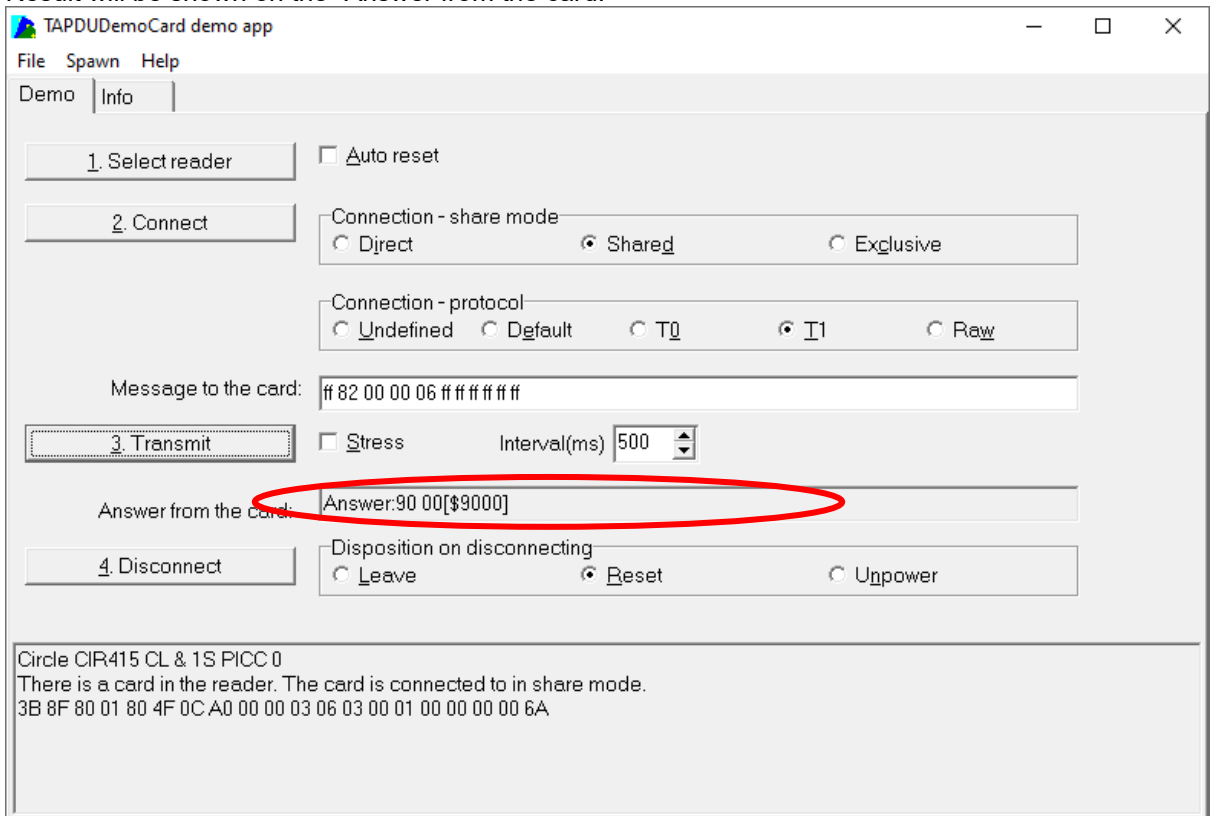
Parameter Sheet
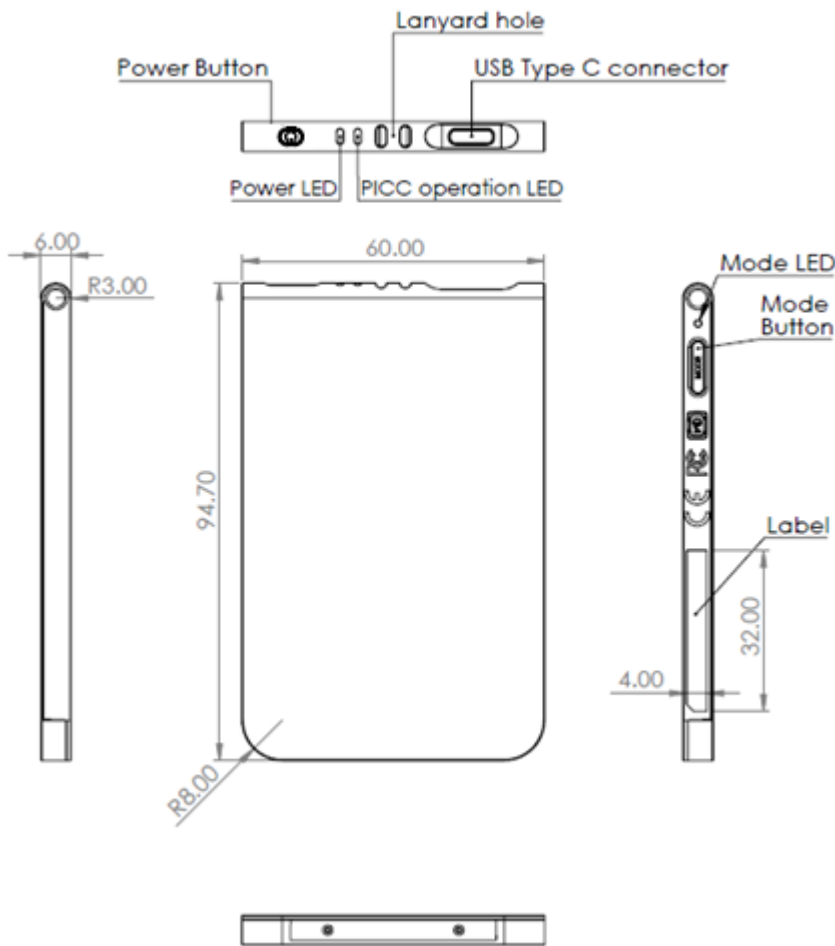
Physical Characteristics	
Dimensions	95.0 mm (L) x 61.0 mm (W) x 6.0 mm (H)
Casing	White PC

Universal Serial Bus Interface	
Specification	USB 2.0 Type C
Type	Four lines: +5V, GND, D+ and D-
Speed	USB 2.0 Full Speed Device, 12 Mbps
Supply Voltage	Regulated 5V DC (Range from 4.75V to 5.25V)
Supply Current	<500mA
Cable Length	1m

Contactless Interface	
Standard	ISO14443, ISO18092, FeliCa®, ISO15693
Protocol	T=CL for ISO14443-4–compliant cards, T=CL Emulation for MIFARE Classic, ISO 18092, FeliCa and NFC tags

Carrier Frequency 13.56MHz

Operating Baud Rate ....106kbps, 212kbps, 424kbps, 848kbps (Default: 424kbps)

Antenna Size...53.0 mm x 32.0 mm

SAM Smart Card Interface	

Standard..ISO 7816 3/4 Class A

Protocol Support ....T=0 and T=1

Supply Current ....Max. 50mA

Smart Card Voltage...5V

Operating Baud Rat ....9600 – 125kbps

Clock Frequency ....4.0 MHz

Card Connector Type..Contact

Human Interface	

LED ....3 LED:

1 Red & Green Bi-colour (Power & Charging status)

1 Blue & Green Bi-colour (Bluetooth & USB mode)

1 Blue (PICC operation)

Buzzer ....Optional

Operating Conditions	

Temperature...0 – 60 ℃ (when battery is not charging)

0 – 45 ℃ (when battery is charging)

Humidity ....<85%

Compliances/Certifications	

Systems/ Standards ....USB 2.0 Full Speed, CCID, Microsoft® WHQL, Bluetooth 5.0

Regulatory/ Environmental................................EN 62368/IEC 62368, CE, FCC, VCCI, RoHS, REACH, MIC, TELEC

Operational Environment	

Compatible Operating System ....Windows® 7, 8, 8,1, 10, Linux®, Mac OS® 10.11 and above, Android™ 7.0 and above, IOS 8.0 and above

NOTE: 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.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user authority to operate the equipment.

NOTE: 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