CIR315B Dual Interface Smart Card Reader with SAM

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
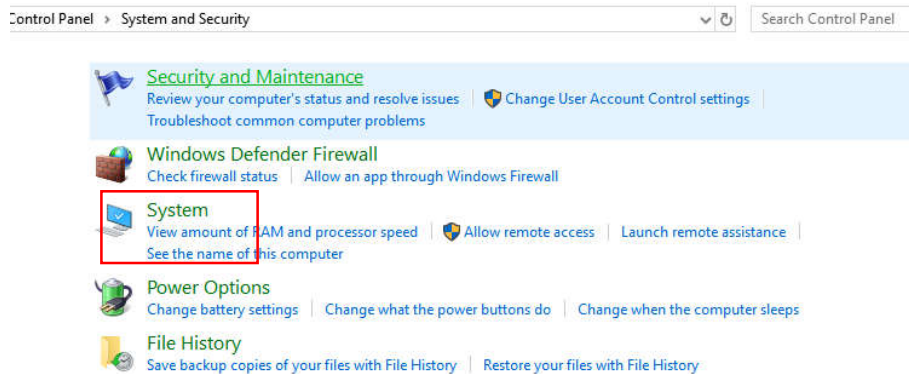
Hardware requires:

- ❖ CIR315B
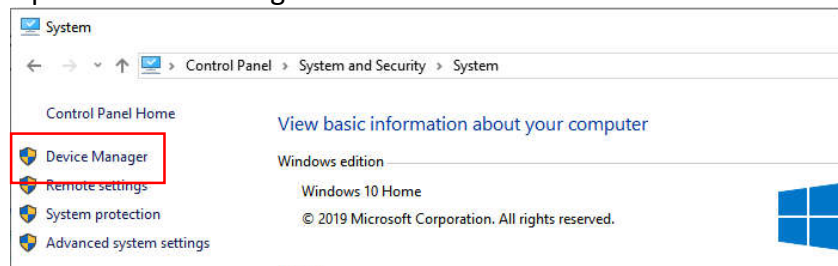- ❖ PC with OS windows 7 or above

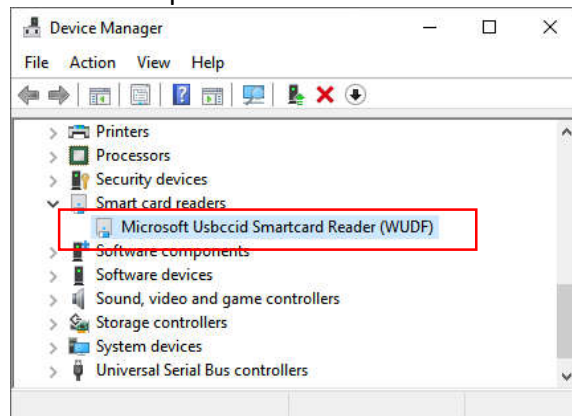Software requires:

- ❖ CIR315 Driver Package

Steps:

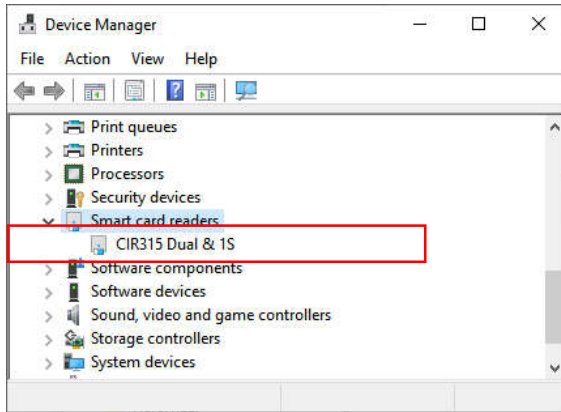1. Connect CIR315B to PC
2. On PC, open "Control Panel > System"

3. Open "Device Manager"
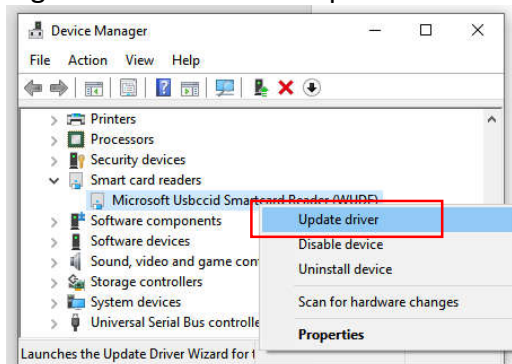

4. Select and open "Smart card readers"

if it is shown "Microsoft Usbccid ... (WUDF)", please continue with step 5)

if it is shown "CIR315 Dual & 1S" mean driver install completed

5.   Right click then select "Update driver"

6.   Select "Browse my computer for driver software…"
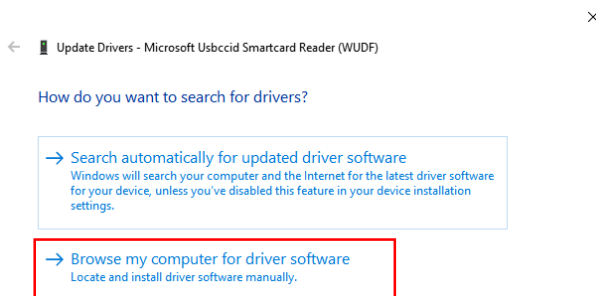
7.   選擇 "Let me pick from a list …"
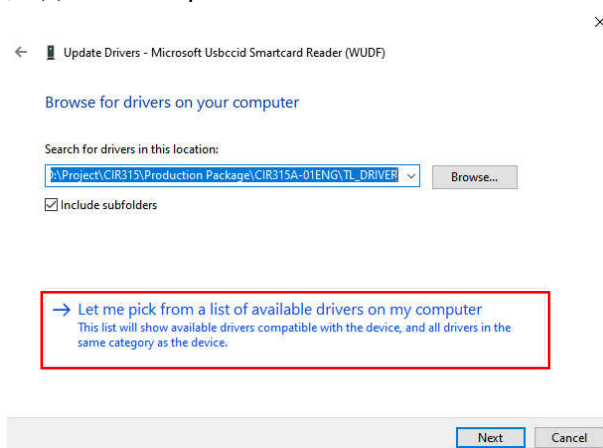
8.   Select "Have Disk…"
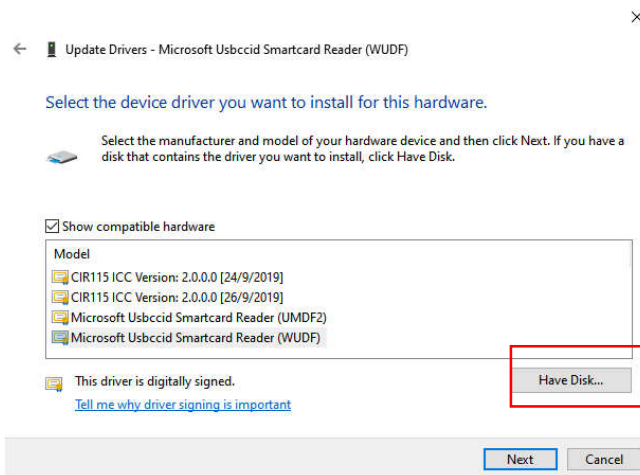
9.   Select "Browse…"
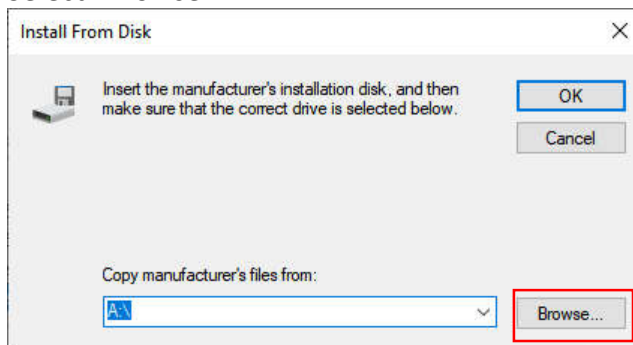
Select "CIR315.inf", then press "Open" and "OK"

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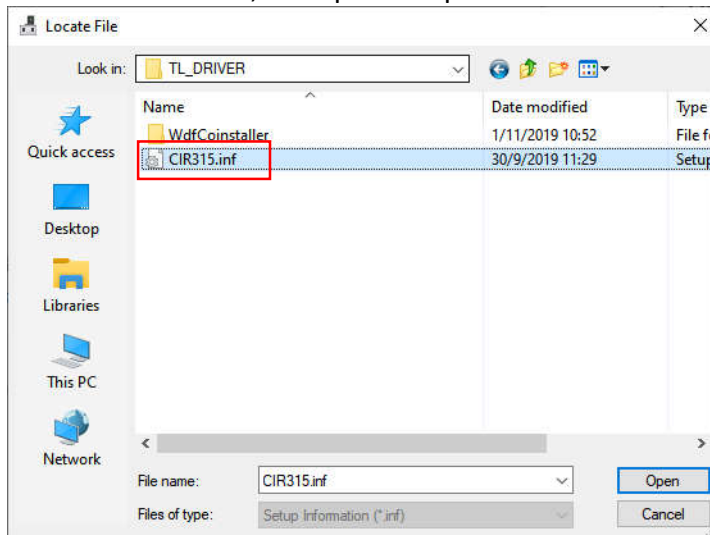
10. Select "CIR315 Dual & 1S" then "Next"
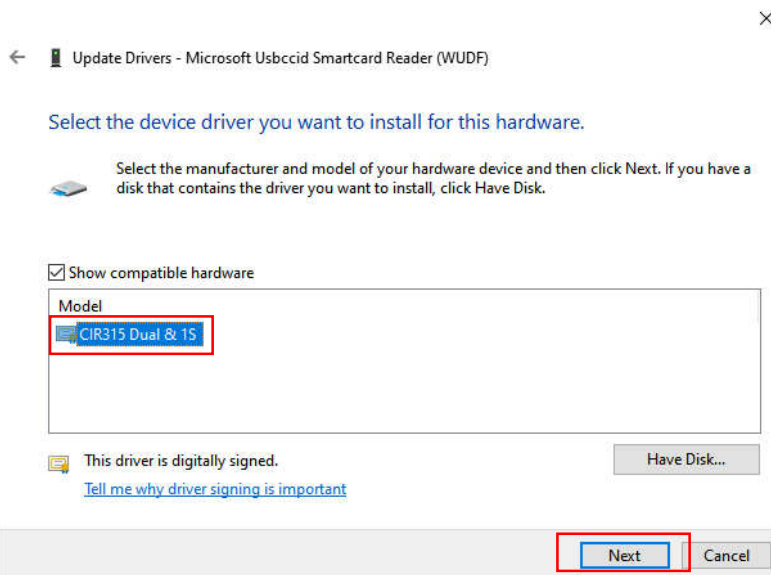
11. Waiting until below screen shown, Press "Close" to complete

12. Double click to ensure the device changed to "CIR315 Dual & 1S"
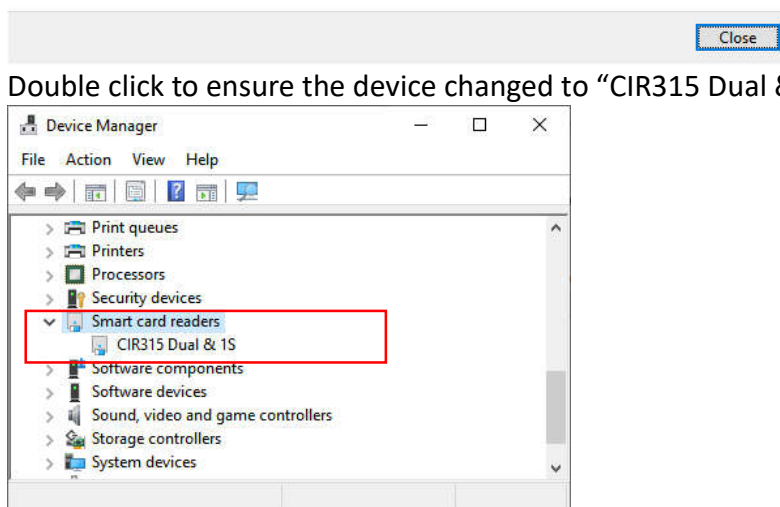
13. Done

Operation Example

Hardware requires:

- ❖ CIR315B
- ❖ PC with OS windows 7 or above
- ❖ ISO14443 Test Card

Software requires:

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

Steps:

1. Plug in the reader into the PC

2. Open "APDU.exe"
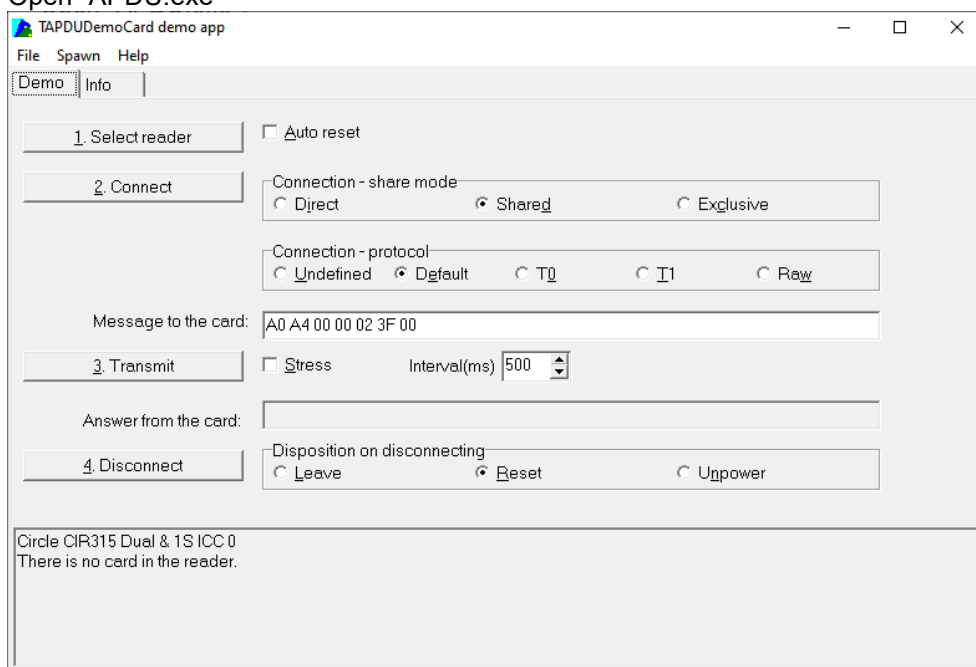
3. Click "1. Select reader", Chose "Circle CIR315 Dual & 1S PICC 0", then click "OK"

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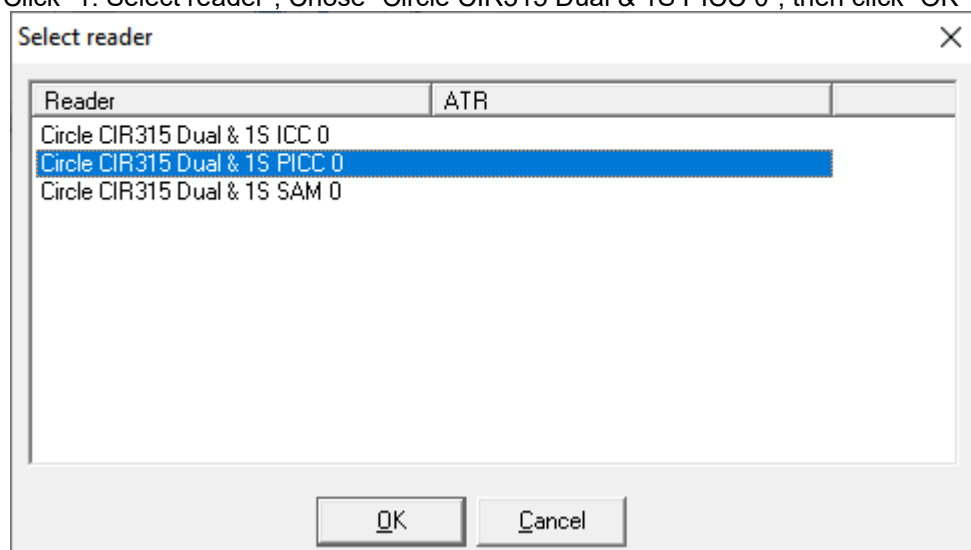
4. Tag ISO14443 Test card on CIR315A
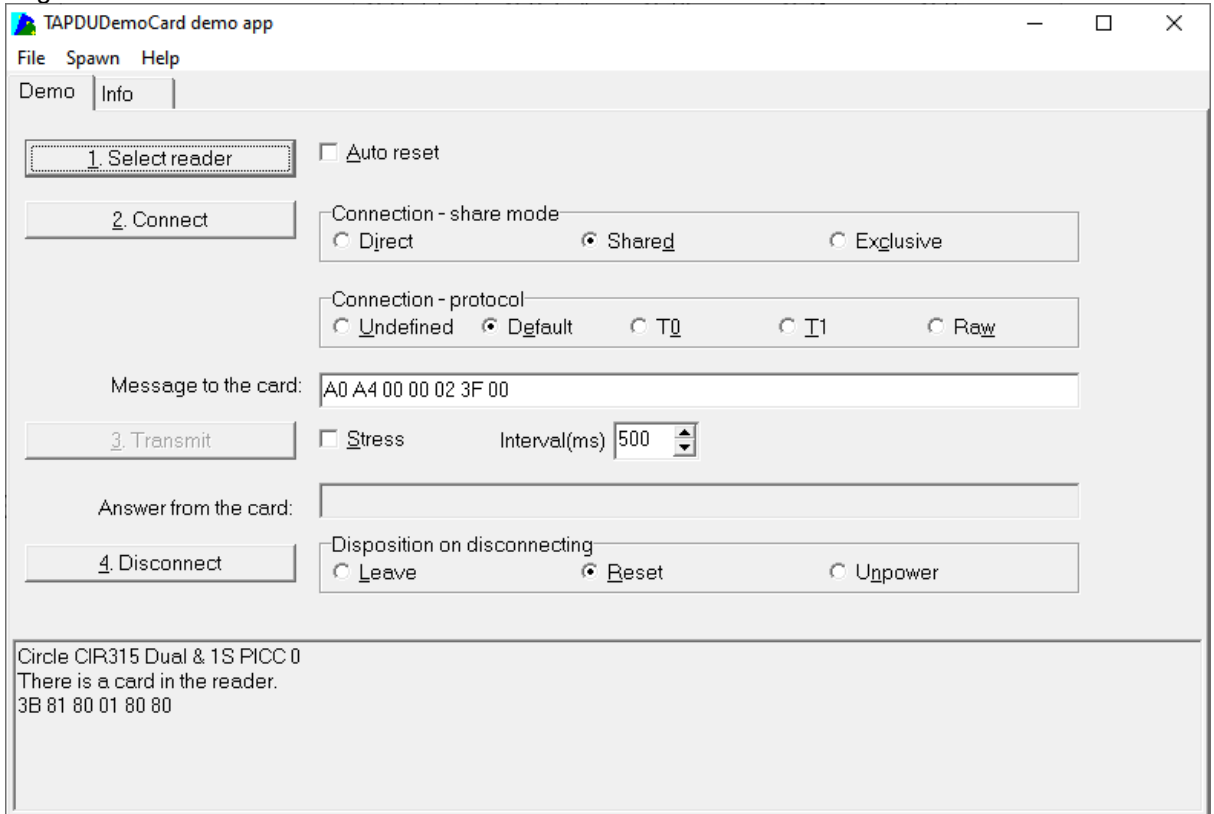
5. Select "T1", Message = "90 0a 00 00 01 00 00"

6. Press "2. Connect"

7. Press "3. Transmit"

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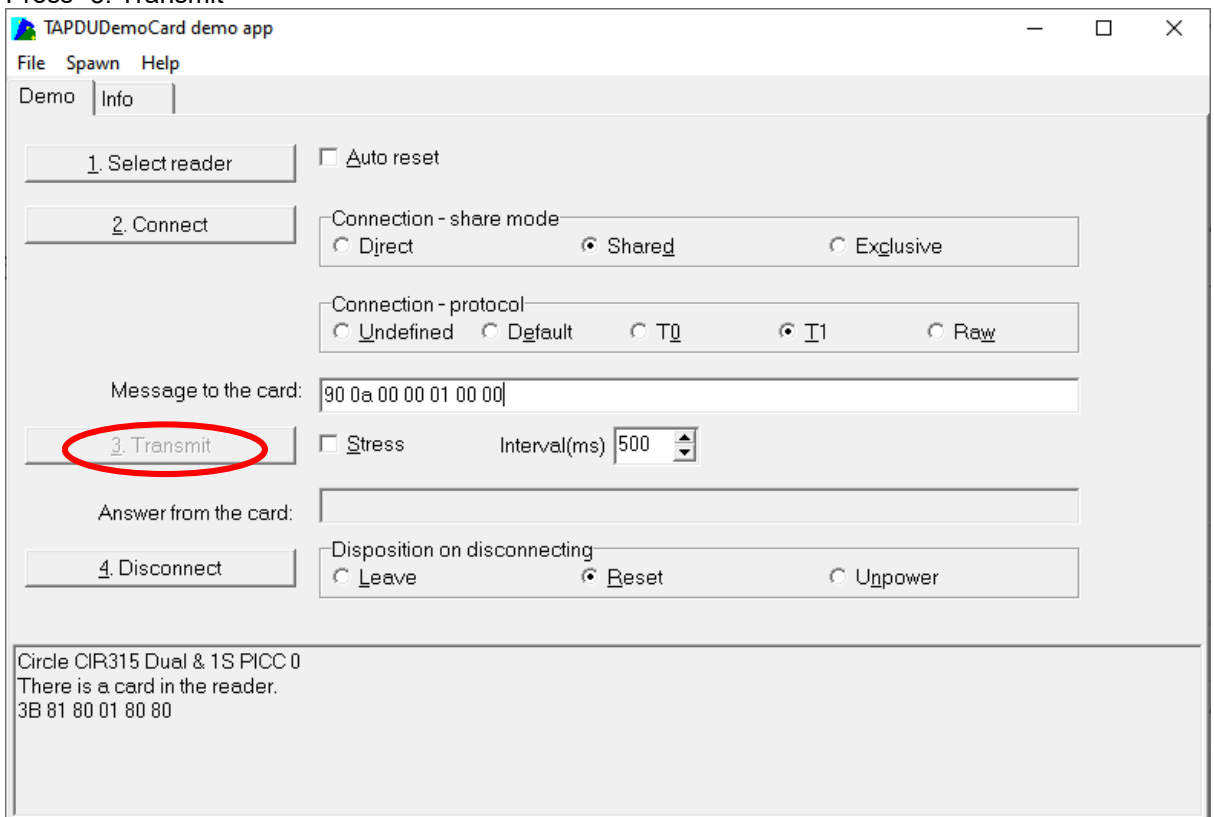
8. Result will be shown on the "Answer from the card:"
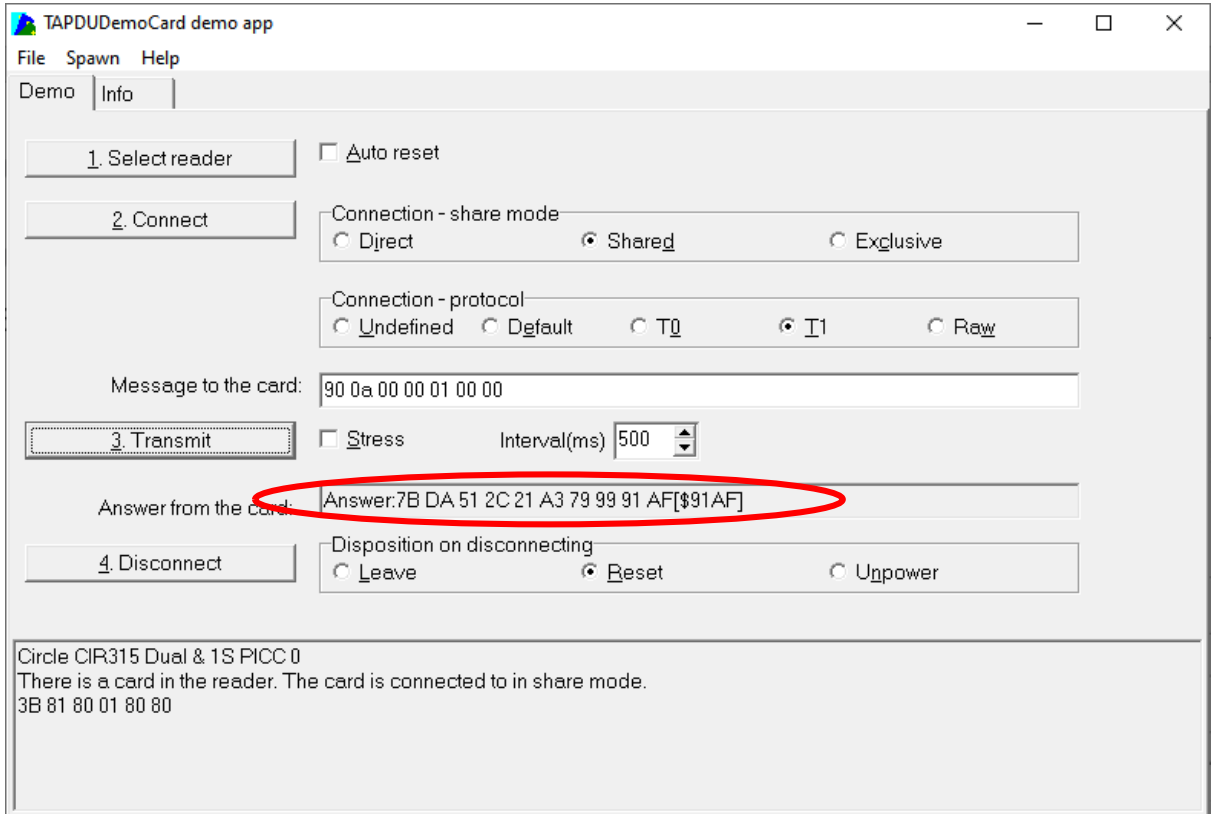
Parameter Sheet
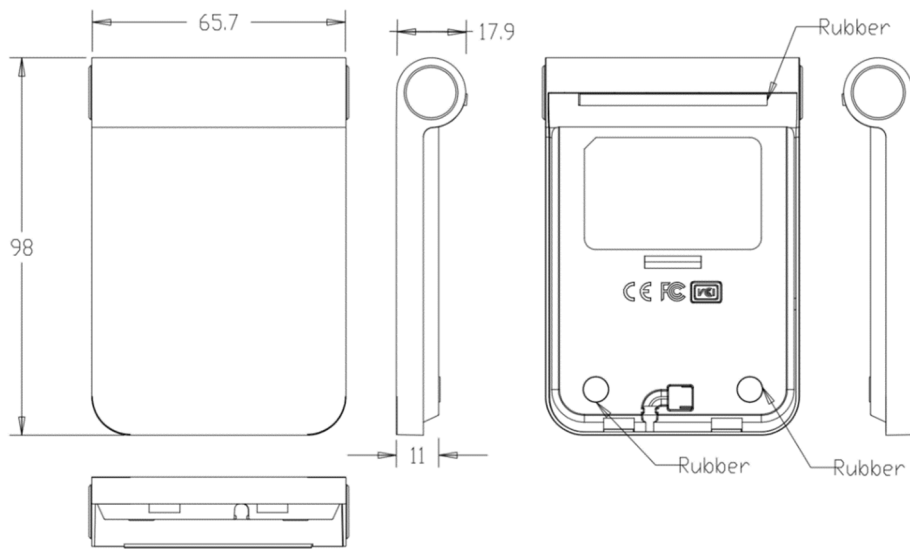
Physical Characteristics

Dimensions...66 mm x 98 mm x 11 mm

Casing ....White and Grey ABS

Universal Serial Bus Interface

Specification ....USB 2.0

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 ....<250mA

Cable Length 1m

Contactless Interface

Standard..ISO14443, ISO18092, FeliCa®, ISO15693

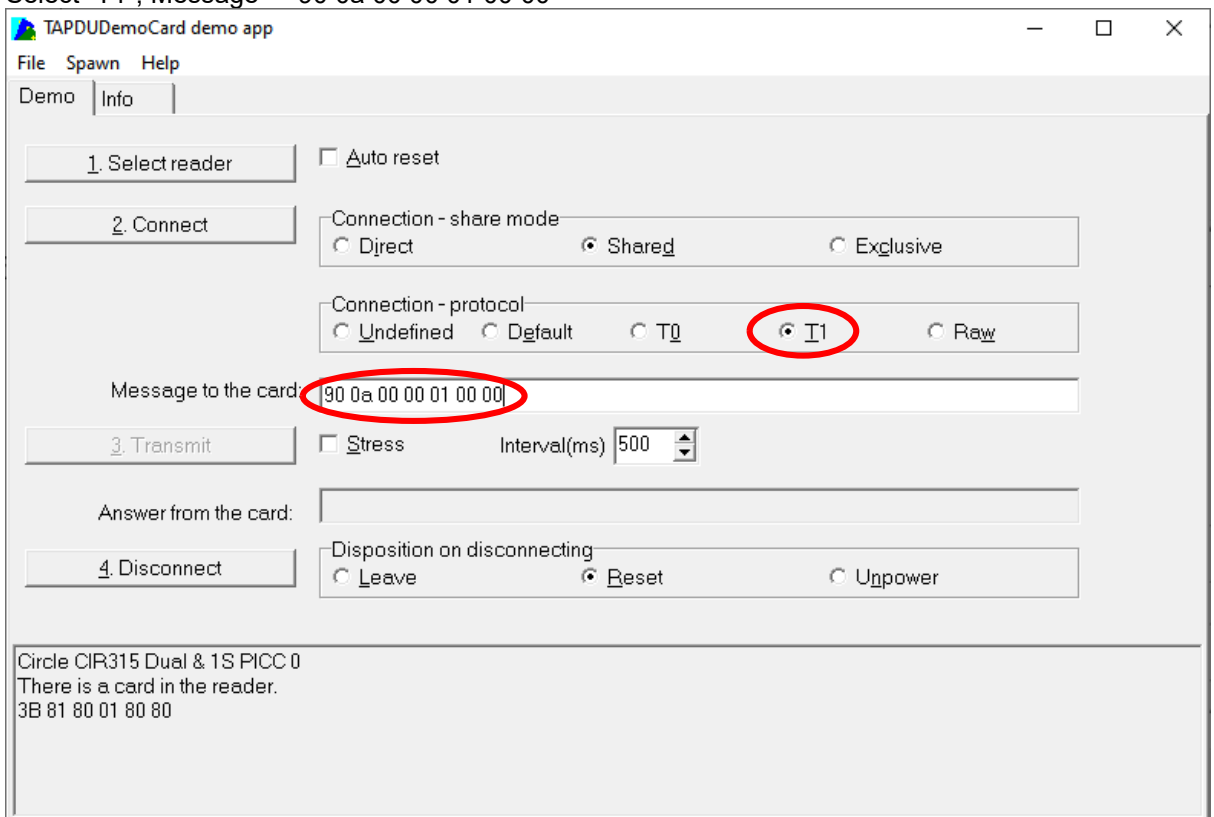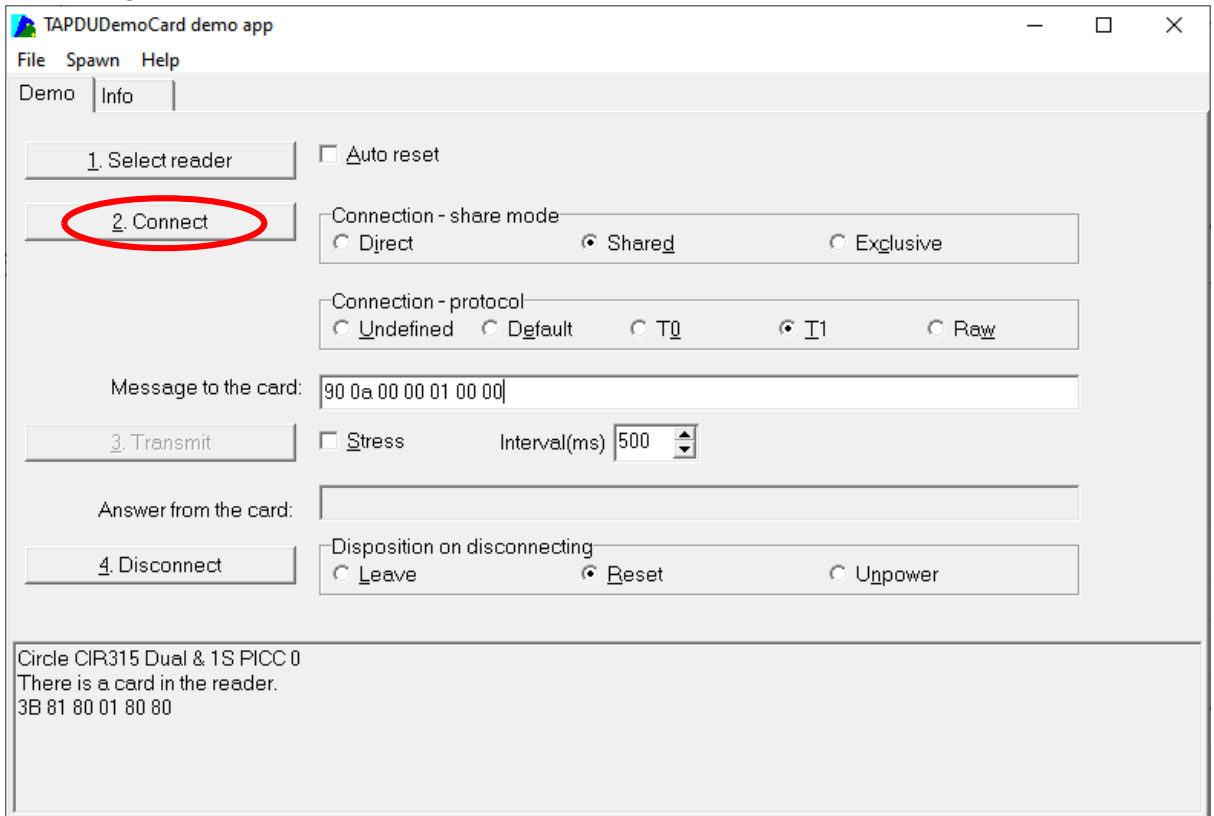Protocol ....T=CL for ISO14443-4–compliant cards, T=CL Emulation for MIFARE Classic, ISO 18092, FeliCa and NFC tags

Carrier Frequency 13.56MHz

Operating Baud Rate 106kbps, 212kbps, 424kbps

Contact Smart Card Interface

Standard..ISO 7816 1/2/3/4

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

Supply Current ....Max. 50mA

Smart Card Voltage...5V/3V/1.8V

Operating Baud Rate ....9600 – 826kbps

Short Circuit Protection ....Fulfill JESD22-A114

Clock Frequency ....4.8 MHz

Card Connector Type...Contact

Card Insertion Cycles.......................................min. 200,000

SAM Smart Card Interface

Standard..ISO 7816 3/4

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, 2 Blue (Operation Status), 1 Green (Power)

Operating Conditions

Temperature..0 – 60 ℃

Humidity ....<90%

Compliances/Certifications

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

Regulatory/ Environmental.................................CE, FCC, VCCI

Operational Environment

Compatible Operating System ....Windows 7, 8, 10

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

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