# 134K-RW-USB-D1+

## 134.2Khz ISO11784/11785 RFID reader/writer with USB interface

+

## T5567 RFID Reader/Writer

## Writer Program User Guide

### **USB driver installation**

#### **Remarks** :

Don't connect the USB reader with the PC when running below auto USB driver setup

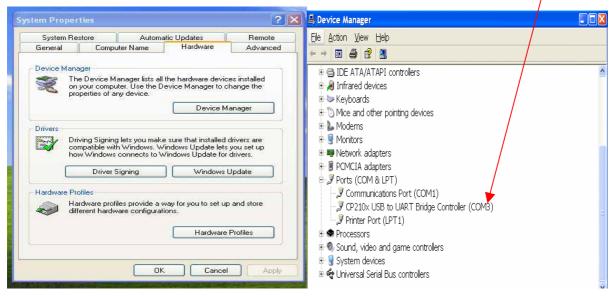
[1] insert the USB driver disk to CD-ROM : run the auto setup program from the following path : cd-rom drive :\USB To Virtual Com driver\CP210x\_VCP\_Win2K\_XP\_S2K3.exe windows OS support : 2000 , XP , Vista & 2003 server

Silicon Laboratories Silicon Laboratories CP210x US	B to UART Bridge
stallation Location:	Driver Version 4.40
C:\Program Files\Silabs\MCU\CP210;	4
Change Install Location	Install Cancel

[2] After driver installation  $\rightarrow$  connect the USB reader to the PC's USB port with a USB cable .

Then the PC will find the reader and install the "USB to UART Bridge" driver automatically. [3] After installation successfully , you will find "CP210xUSB to UART Bridge Controller (Com3)" as follow message from the control panel/system/hardware/device manager/port(COM & LPT) .

(may be see other COM port #, not the COM3 which is depend on your PC's hardware configuration)



## ISO11784 EM4305 Demo Program - user guide

#### Setup connection

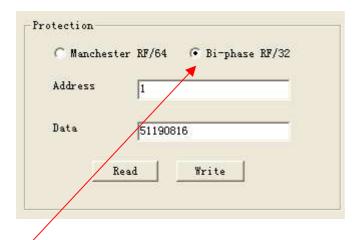
- [1] Make sure the USB driver installation successfully
- [2] copy full directory from the CD path :\ISO11784\demo program to your local PC
- [3] run the demo program from the path :\ISO11784\demo program\EM4305 Demo.exe
- [4] select a suitable "Com Port" No.
- If fails , Pls check or re-install the "USB to Serial" driver again.

4305 DEMO		
Communication Port	Protection C Manchester RF/64 C Bi-phase RF/32 Address 1	Configuration Word Encoder + Data Rate C Manchester RF/64 (? <u>Bi-phase RF/32</u> )
Lead EM ID Customer Code:	Data 51190816	
Read EM4001 Write EM4001	Login PassWord Password Login New PassWord Write	─Configuration Switches └── Read Login
Animal 🔽 Data 🗂 National 0211D36EF6	Read/Write EEFROM	Figeon mode
Country 0090 CRC B874 Trailer	Word 4   Word 5   Word 6   Word 7   Word 8   Word 9   Word A   Word B   Word C   Word D   Word E	Others Disable Card
Read Write	Read Protection Bits Set Protection Bits	Field ON Field OFF

## How to read/write ISO11784/11785 data format

- [1] put the EM4205/EM4305 ear tag on the reader
- [2] enter ISO11784/11785 data , then click on "write"
- [3] Click on "Read" to read data

#### How to read and write internal memory data



- [1] click on "Bi-phase RF/32"
- [2] put the EM4205/EM4305 tag on the reader
- [3] Refer to below memory map , input the memory address and data
- [4] click on "Write " to write the data to the specify memory address
- [5] click on "Read" to read the data from the specify memory address

#### Below is the memory Map

Addr. (dec)	Description	Туре	Bo,.		,b <sub>31</sub>
0	Chip Type, Res Cap Customer code/ User free	RW	cto	2	Ct <sub>31</sub>
1	UID number	RA	uido	5	uidat
2	Password	WO	ps <sub>0</sub>	÷	ps <sub>31</sub>
3	User free	RW	US <sub>0</sub>	-	us <sub>3</sub> .
4	Configuration word	RW	CO0	÷	CO3
5	User free	RW	US <sub>0</sub>	5	us <sub>3</sub>
6	User free	RW	US <sub>0</sub>	2	US <sub>3</sub>
7	User free	RW	US <sub>0</sub>	52	US3
8	User free	RW	US <sub>0</sub>	2	us <sub>3</sub>
9	User free	RW	US <sub>0</sub>	52	US <sub>3</sub>
10	User free	RW	US <sub>0</sub>	2	US <sub>3</sub>
11	User free	RW	US <sub>0</sub>	53	US <sub>3</sub>
12	User free	RW	US <sub>0</sub>	23	US3
13	User free	RW	US <sub>0</sub>	5	US3
14	Protection word 1	RP	pro	2	pr <sub>3</sub>
15	Protection word 2	RP	pro	-	pr <sub>3</sub>

#### Word types:

RA: access using Read Word command only

RW: access using Read Word and Write Word command

- WO: access using Write Word command only
- RP: access using Read Word and Protect command

## How to login by password

Default password is 00000000.

Input "New Password" then click on "Write" to change the password

-Login PassWord		
Password	00000000	Login
New PassWord		Write

## How to set the protection bits

Tick to select which word is needed for protection

click on "Set protection Bits" to save

click on "Read protection Bits" to read the protection bit status

Read/Write EEPROM	
🔽 Word 0 🔽 Word 1	🗖 Word 2 📄 Word 3
🗌 Word 4 📄 Word 5	🖵 Word 6 🔚 Word 7
🕅 Word 8 🕅 Word 9	🔲 Word A 📄 Word B
🕅 Word C 🕅 Word D	─ Word E
Read Protection Bits	Set Protection Bits

## How to set configuration word

Refer to EM4205 / EM4305 datasheet in detail operation

Configuration Word
Encoder + Data Rate
○ Manchester RF/64
LWR
LWR
Configuration Switches Read Login Disable Write Login Reader Talk First Pigeon mode
Write

[1] copy full directory from the CD path :\T5567\demo program to your local PC

remake : The demo program can not be run from CD directly

[2] run the program from the path :\T5567\demo program\rfid.exe

BLOCK 1 :   00000001     BLOCK 2 :   00000002     BLOCK 3 :   00000003     BLOCK 4 :   00000004     BLOCK 5 :   00000005     BLOCK 6 :   00000006     BLOCK 7 :   00000007	> 155x7 Write (Chir ort Card About EX		
MODE	BLOCK 2 : BLOCK 3 : BLOCK 4 : BLOCK 5 : BLOCK 6 :	00000002 00000003 00000004 00000005 00000006	Standard Write Protected Write Wake Up Direct Access PWD Direct Access Page Regular Read Reset Command
	MODE		

Port : select correct virtual com port No.

Card : No Function for this model

: this icon No Function

BLOCK : Block 1 TO Block 7 (7 x 32 bit data memory) - Refer to T55x7 datasheet in detail

T55x7 Function : Pls refer to T55x7 datasheet for the application in detail

MODE : OPCODE : 4 mode selection – 00, 10, 01 & 11 LOCK : 0 – unlock / 1 - lock Block : select Block 1 to 7 Password : entry password Pls refer to T55x7 datasheet for the application in detail

#### 125K EM4100 ID programmer user guide

- [1] run the program from the path :\T5567\ID programmer\ID programmer.exe
- [2] select the correct "com port" and click on "connect"

COM: 3	Conn tion Disconnect
ID:	Read
CustomerIE	Start ID: 1145
From File	Stop Stop
NOTE: Write M	essage.

#### How to duplicate a EM4100 or compatible card

- [1] select "Read and Write" and place the original EM4100 card on the reader
- [2] click on "Read" and card's ID will be shown here
- [3] take away the original EM#100 card and put a "T5567" card on the reader
- [4] click on "Write" and "Write success" message will show if write success

Read And Write ID: 12345678		Read	Disconnect Write	
1153 Continuous writ CustomerIE		art ID:	0090101	
🔽 From File 🤇	mmer\303\ID tes	ting.×ls 🗃	Start	Stop
E.	ss(1⊂00000	3EA)		
	SS(IA00000			