

## ***USER MANUAL***

**3D TouchPrint<sup>®</sup>** *Optical Fingerprint Recognition* **EMBEDDED** Module

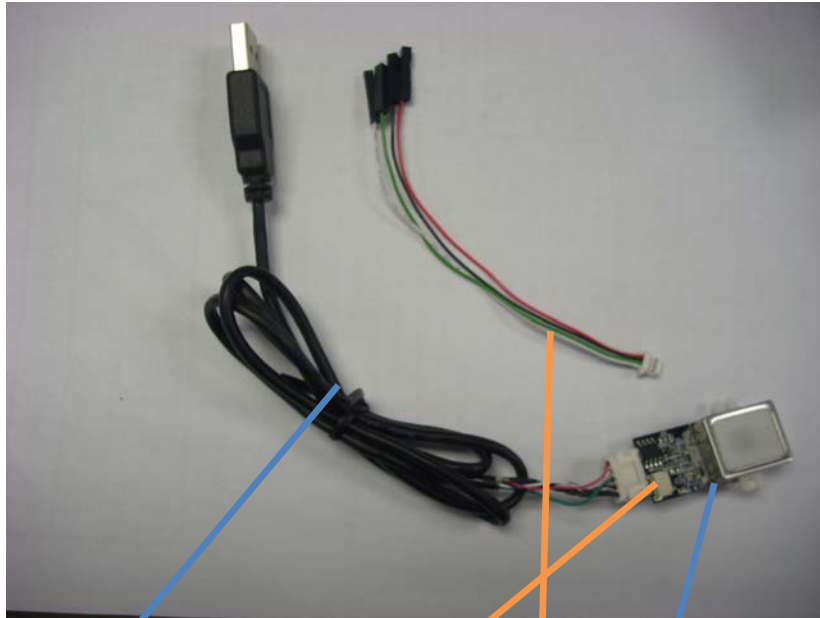
***GTM-5110C2\_SMACK***



**2012/10/26**

**V1.0**

## 1 Produce & accessory



**Usb cable**

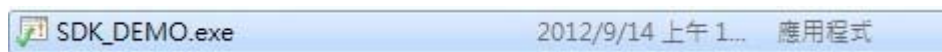
**GTM5110C2**

**UART Interface**

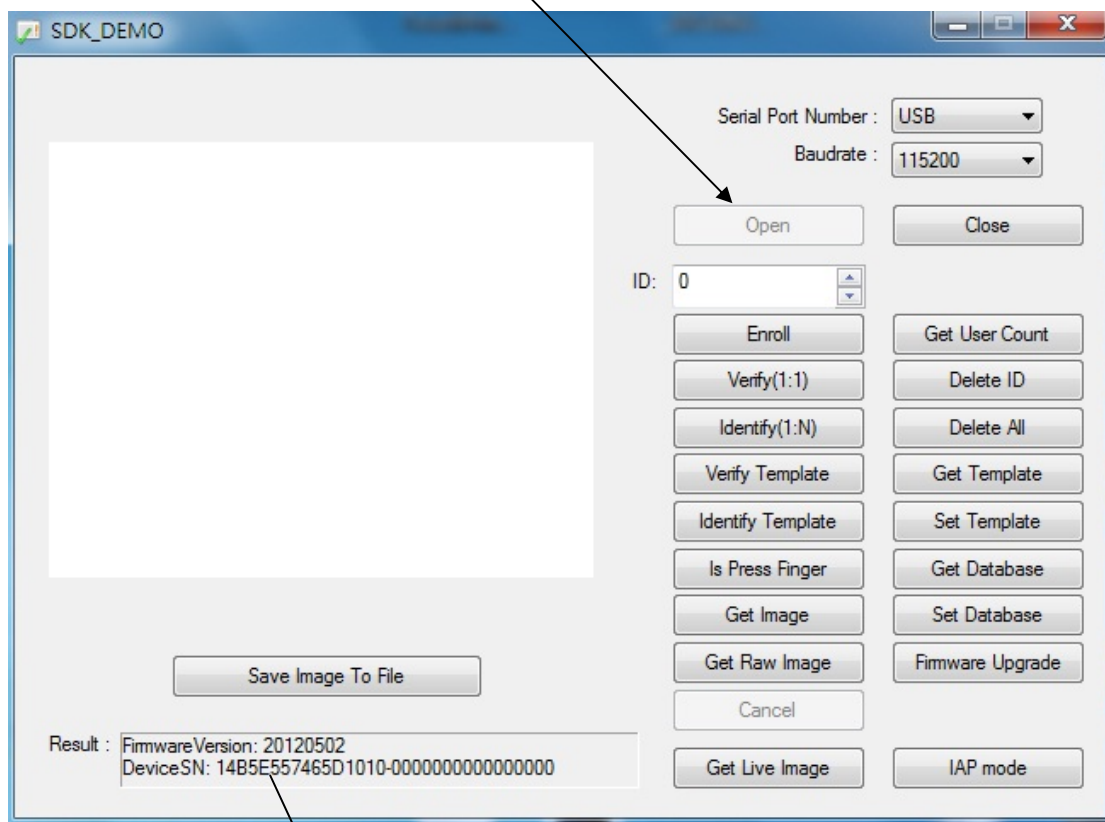
**UART Cable**

## PC Demo

The demonstration program is a simple but helpful example that will help you to get acquainted with the features of the fingerprint device. Start the program by double-clicking on the **SDK\_Demo.exe** in the program directory of the SDK without install usb driver . The screen will show up as follow:

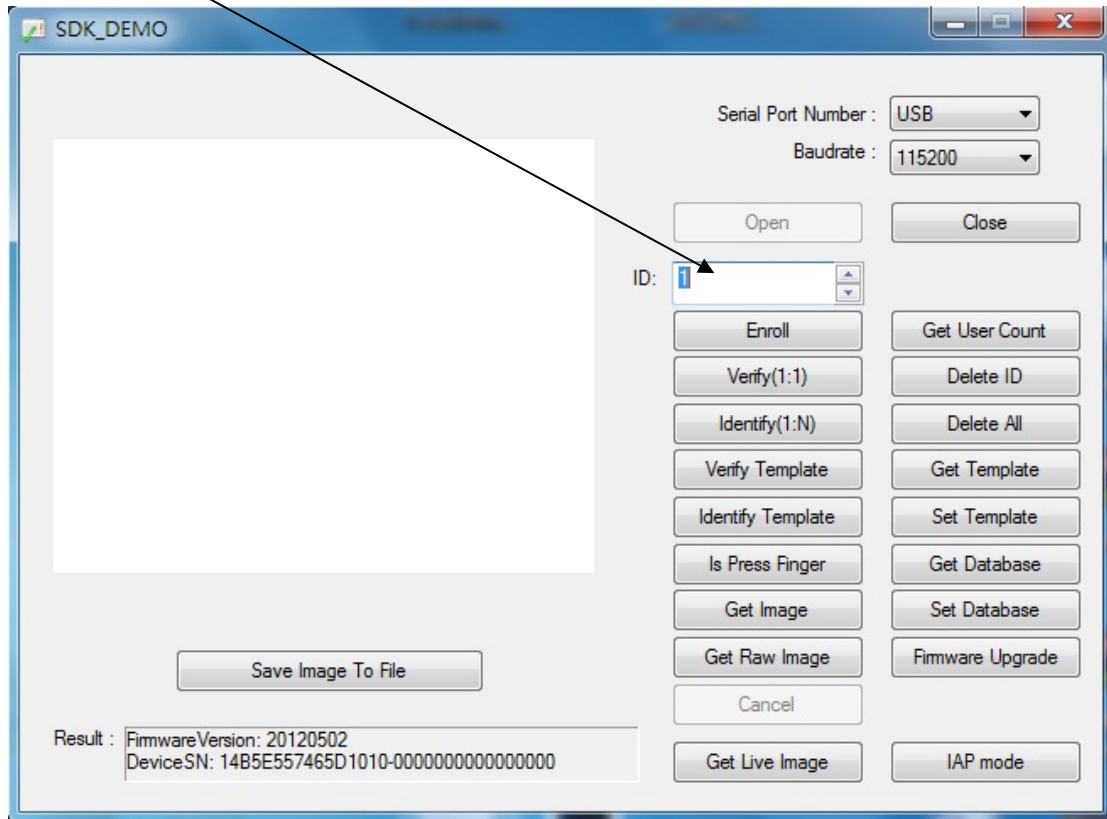


2.Start the program by double-clicking “Open”



(2) **Firmware Version:** Last update date

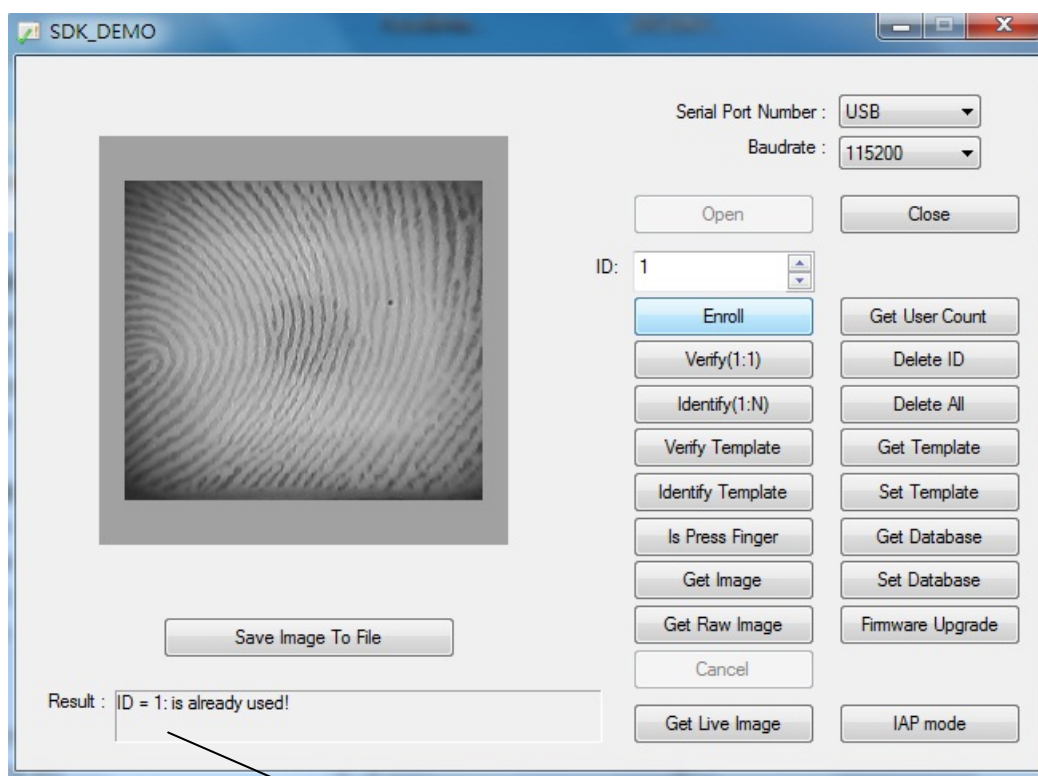
### 3. Select the ID number



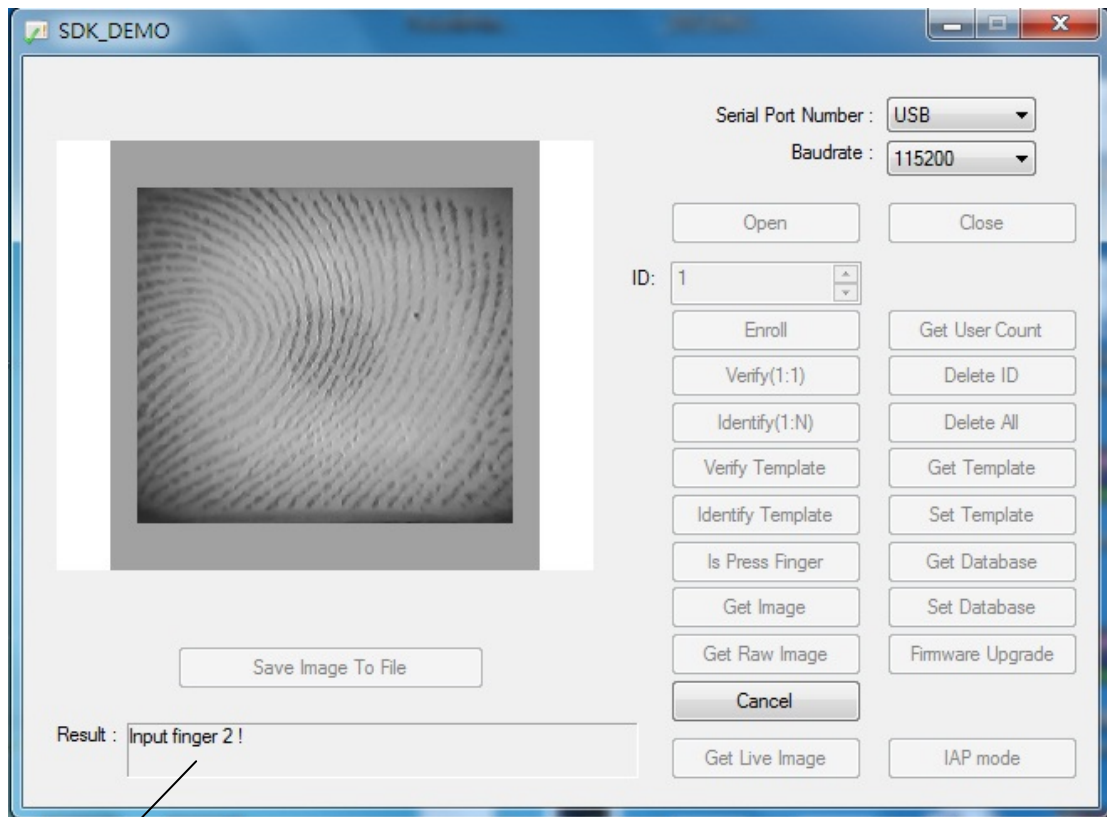
## 4.Enroll :

The definition of **Enroll** is to enroll a New Fingerprint as Current User. At least three fingerprints are required for enrollment. Please refer to the fingerprint snapping procedure. Put your finger on the reader at least three times, and check the enrolled quality. The enrollment will be finished when the enrolled quality comes out.

The fingerprint reader will take the common features of these fingerprints. After a few seconds of processing, the reader will inform you the enrolled result.



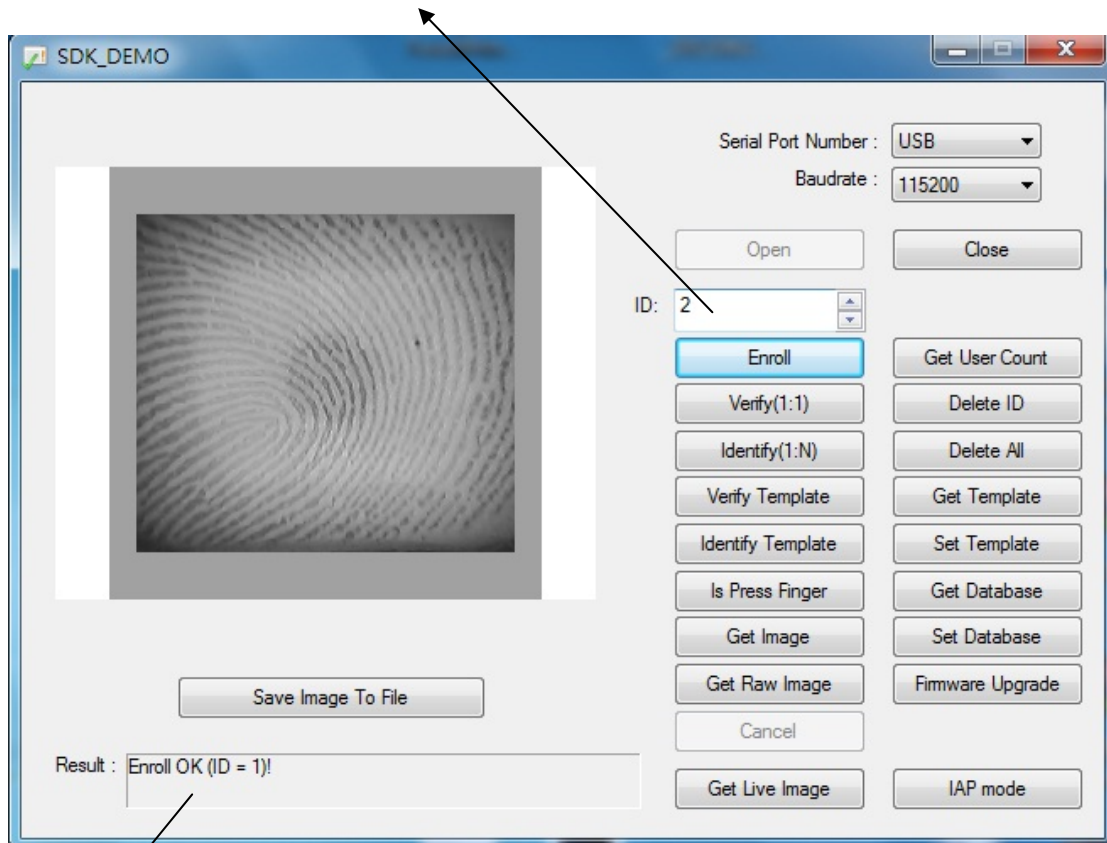
**The ID number have occupy already will show up as message**



**Second times**

The fingerprint have been enrollment success as follow

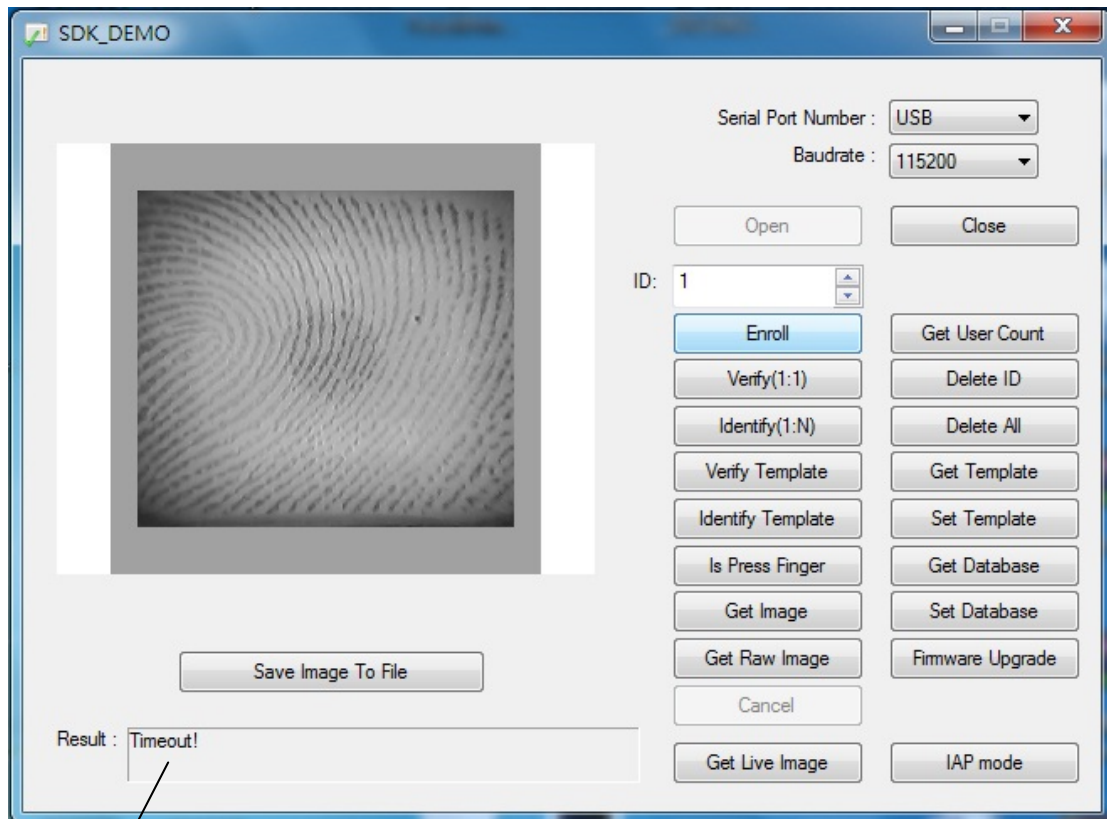
ID number will show up automatic after enrolled



The result of enroll will show up as follow

## 5. Time Out

If the enrollment is fail , the “Time Out” message will show up as follow.  
Please enroll again.



Show up



## 6 .Verify

The definition of **Verify** is to verify a live-scanned fingerprint from the current user. It does only one-to-one matching. The matching compares a live-scanned fingerprint image against the previously enrolled fingerprints, checking if they came from the same finger.

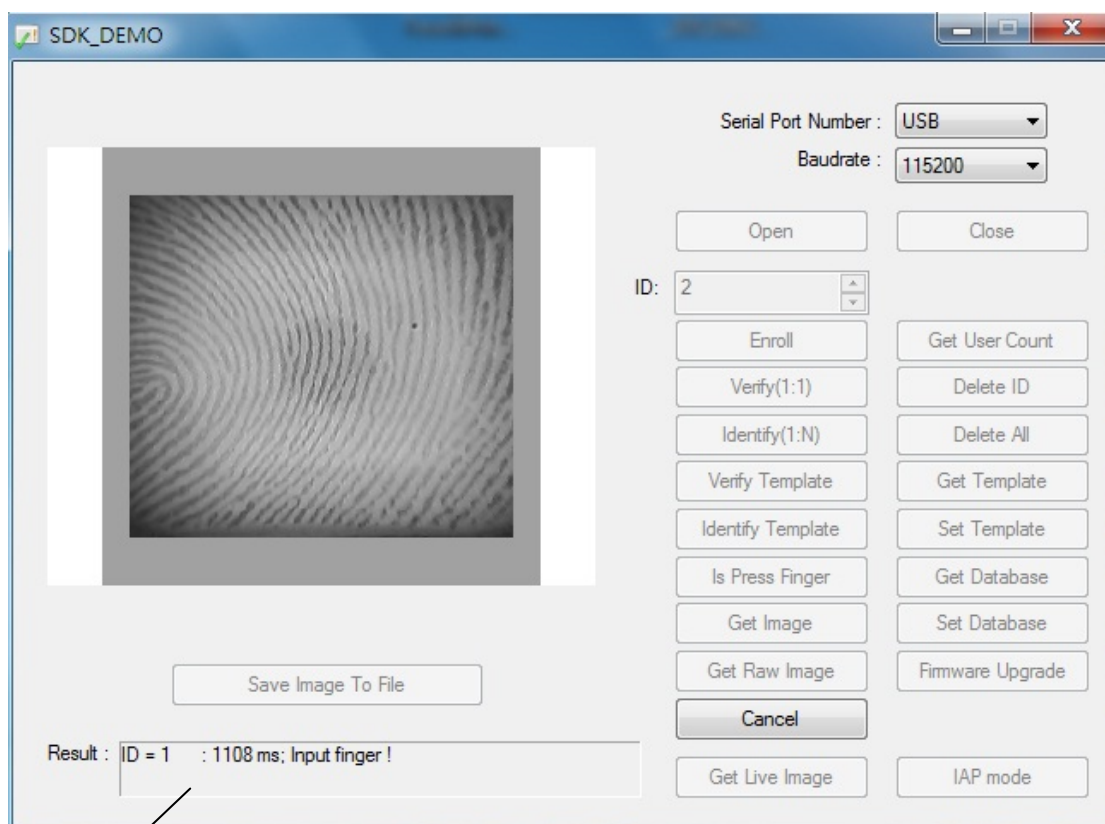
You can click the **Verify** by mouse to enter the matching fingerprint mode. Before clicking the **Verify** button, you must first select **ID**

After verification, the result will be displayed on the screen to show if the verification is matched or failed. See **Identify** for details.

## 7. Identify

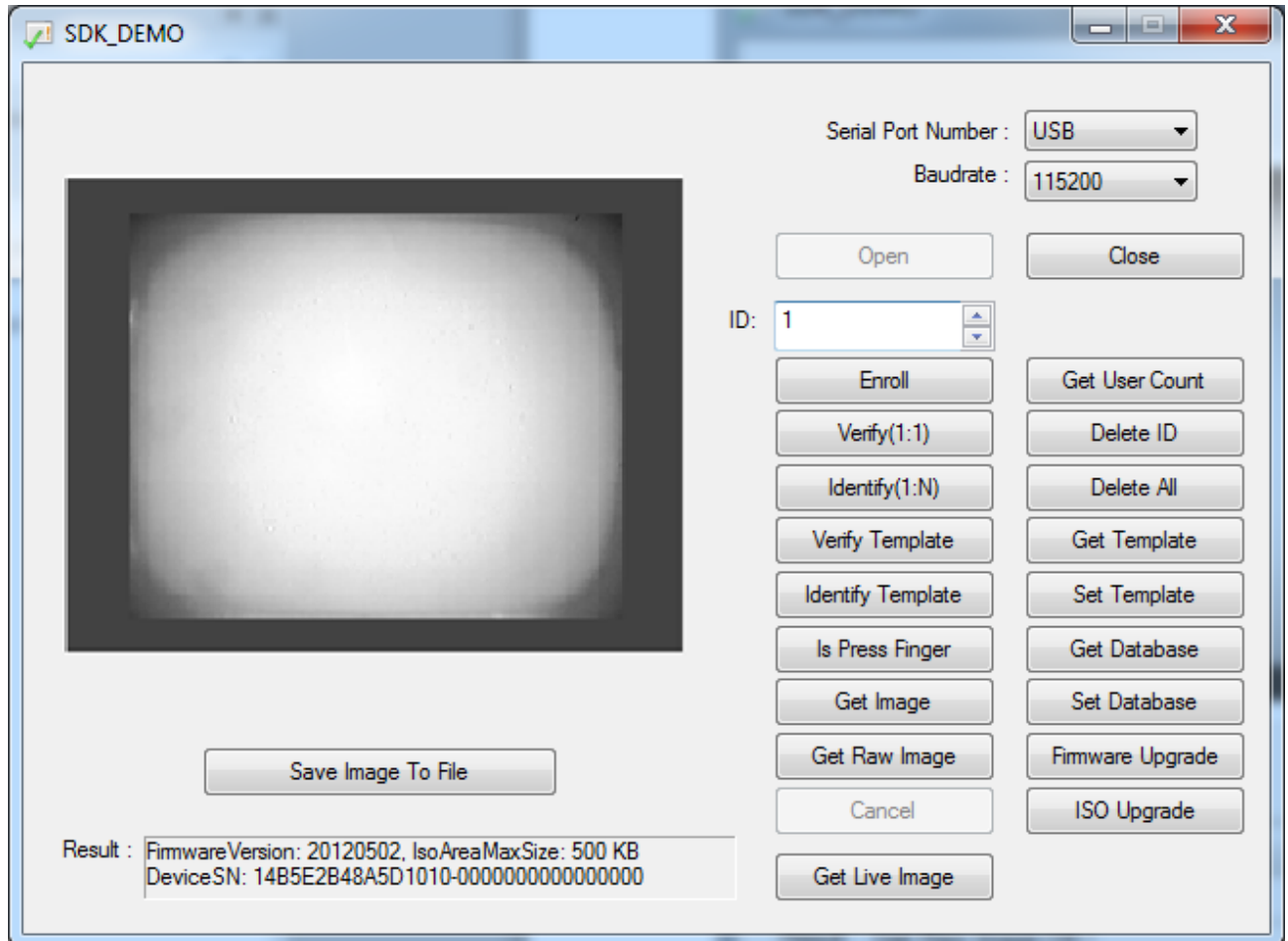
The definition of **Identify** is to identify a live-scanned fingerprint from the database. It does one-to-many matching. The matching compares a live-scanned fingerprint image against the previously enrolled database. Please put your finger on the reader, and the fingerprint reader will check it out automatically according to the security level settings.

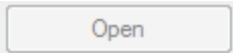
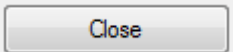
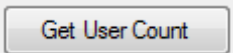
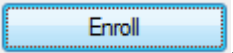
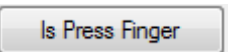
You can click the **Identify** by mouse to enter the matching fingerprint mode. After identification, the score will be displayed on the screen to show if the identification is matched or failed. If the identification succeeds, the user information will also be shown on the screen.

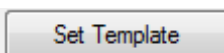


**Identification correct (Timing is showing up)**

## Guide



Command Alias	UI item to test it
<i>Open, UsbInternalCheck, ChangeBaudrate</i>	
<i>Close</i>	
<i>GetEnrollCount</i>	
<i>CheckEnrolled, EnrollStart, Enroll1, Enroll2, Enroll3, IsPressFinger</i>	 , 

Command Alias	UI item to test it
<i>DeleteID</i>	
<i>DeleteAll</i>	
<i>Verify</i>	
<i>Identify</i>	
<i>VerifyTemplate</i>	
<i>IdentifyTemplate</i>	
<i>CaptureFinger, GetImage</i>	
<i>GetRawImage</i>	
<i>GetTemplate, GetDatabaseStart, GetDatabaseEnd</i>	 
<i>SetTemplate</i>	 
<i>UpgradeFirmware</i>	
<i>UpgradeISOCDImage</i>	

Demo program is supported with its source code.  
The project is Microsoft Visual C++ 6.0 project.  
We selected VC6.0 to minimize the size of the executable.



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