

USER MANUAL

3D TouchPrint[®] Optical Fingerprint Recognition EMBEDDED Module GTM-5110C2_SMACK



2012/10/26

V1.0



1 Produce & accessory





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"

ZI SDK_DEMO			_ _ ×
	$\overline{\ }$	Serial Port Number :	USB 🔹
	Ň	Baudrate :	115200 ▼
		Open	Close
	ID:	0	
		Enroll	Get User Count
		Verify(1:1)	Delete ID
		Identify(1:N)	Delete All
		Verify Template	Get Template
		Identify Template	Set Template
		Is Press Finger	Get Database
		Get Image	Set Database
Save Image To File		Get Raw Image	Firmware Upgrade
		Cancel	
Result : FirmwareVersion: 20120502 DeviceSN: 14B5E557465D1010-000000000000000000000000000000000		Get Live Image	IAP mode

(2) Firmware Version: Last update date



3. Select the ID number

SDK_DEMO		and many	×
		Serial Port Number : Baudrate :	USB
		Open	Close
	ID:		
		Enroll	Get User Count
		Verify(1:1)	Delete ID
		Identify(1:N)	Delete All
		Verify Template	Get Template
		Identify Template	Set Template
		Is Press Finger	Get Database
		Get Image	Set Database
Save Image To File		Get Raw Image	Firmware Upgrade
		Cancel	
Result : FirmwareVersion: 20120502 DeviceSN: 14B5E557465D1010-000000000000000000000000000000000		Get Live Image	IAP mode



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.

		Serial Port Number : Baudrate :	USB
		Open	Close
	ID:	1	
		Enroll	Get User Count
		Verify(1:1)	Delete ID
~~ ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		Identify(1:N)	Delete All
		Verify Template	Get Template
020111111163312720		Identify Template	Set Template
		Is Press Finger	Get Database
		Get Image	Set Database
Save Image To File		Get Raw Image	Firmware Upgrade
		Cancel	
lesult : ID = 1: is already used!		Get Live Image	IAP mode

The ID number have occupy already will show up as message



_		Serial Port Number : Baudrate :	USB -
		Open	Close
	ID:	1	
		Enroll	Get User Count
		Verify(1:1)	Delete ID
		Identify(1:N)	Delete All
		Verify Template	Get Template
		Identify Template	Set Template
		Is Press Finger	Get Database
		Get Image	Set Database
Save Image To File		Get Raw Image	Firmware Upgrade
		Cancel	
Result : Input finger 2 !		Get Live Image	IAP mode

Second times



The fingerprint have been enrollment success as follow

SDK_DEMO				
	\sim	`	Serial Port Number :	USB 👻
		\backslash	Baudrate :	115200 -
	differing.		Open	Close
		ID:	2	
	111111111		Enroll	Get User Count
	NIIIIIIIII	[Verify(1:1)	Delete ID
	91191191 818	[Identify(1:N)	Delete All
	and the second second		Verify Template	Get Template
a all and the second	131.1.1.5	(Identify Template	Set Template
		[Is Press Finger	Get Database
		(Get Image	Set Database
Save Image T	o File	[Get Raw Image	Firmware Upgrade
			Cancel	
Result : Enroll OK (ID = 1)!		(Get Live Image	IAP mode

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.

SDK_DEMO			X
		Serial Port Number : Baudrate :	USB
		Open	Close
	ID:	1	
		Enroll	Get User Count
		Verify(1:1)	Delete ID
		Identify(1:N)	Delete All
		Verify Template	Get Template
011111111111111111111111111111111111111		Identify Template	Set Template
		Is Press Finger	Get Database
		Get Image	Set Database
Save Image To File		Get Raw Image	Firmware Upgrade
		Cancel	
Result : Timeout!		Get Live Image	IAP mode
	_		





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.

		Serial Port Number : Baudrate :	USB -
		Open	Close
	ID:	2	
		Enroll	Get User Count
		Verify(1:1)	Delete ID
		Identify(1:N)	Delete All
		Verify Template	Get Template
020111111111111111111111111111111111111		Identify Template	Set Template
		Is Press Finger	Get Database
		Get Image	Set Database
Save Image To File		Get Raw Image	Firmware Upgrade
		Cancel	
esult : ID = 1 : 1108 ms; Input finger !		Get Live Image	IAP mode

Identification correct (Timing is showing up)

 \checkmark



Guide

		Serial Port Number : Baudrate :	USB
		Open	Close
	ID:	1	
		Enroll	Get User Count
		Verify(1:1)	Delete ID
		Identify(1:N)	Delete All
		Verify Template	Get Template
		Identify Template	Set Template
		Is Press Finger	Get Database
		Get Image	Set Database
Save Image To File		Get Raw Image	Firmware Upgrade
		Cancel	ISO Upgrade
Result : FirmwareVersion: 20120502, IsoAreaMaxSize: 500 KB DeviceSN: 14B5E2B48A5D1010-00000000000000000		Get Live Image	

Command Alias	UI item to test it
Open, UsbInternalCheck, ChangeBaudrate	Open
Close	Close
GetEnrollCount	Get User Count
CheckEnrolled, EnrollStart, Enroll1, Enroll2, Enroll3, IsPressFinger	Enroll
	Is Press Finger



Command Alias	UI item to test it
DeleteID	Delete ID
DeleteAll	Delete All
Verify	Verify(1:1)
Identify	Identify(1:N)
VerifyTemplate	Verify Template
IdentifyTemplate	Identify Template
CaptureFinger, GetImage	Get Image
GetRawImage	Get Raw Image
GetTemplate, GetDatabaseStart, GetDatabaseEnd	Get Template
	Get Database
SetTemplate	Set Template
	Set Database
UpgradeFirmware	Firmware Upgrade
UpgradelSOCDImage	ISO Image Upgrade

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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