

Biomini Combo Dual User Guide



INDEX

Bion	nini Combo Dual User Guide	1
1.	Specification	3
2.	Install Suprema PC SDK	4
3.	Device driver installation	7
4.	Sample Application	9



1. Specification

Fingerprint Sensor	Optical			
Resolution	500 dpi, 256 gray			
Platen Size	18.0mmx25.4mm(0.71"x1.0")			
Sensing Area	17.0mmx25.0mm(0.67"x0.99")			
Image Size	320x480 pixels			
Interface	USB2.0 High Speed			
Operating System	MS Windows/ Linux(32/64bit)			
Operating Temp./Humidity	-10°C~50°C / 0~90%			
Weight	0.40 kg			
Certificates	CE, FCC, KCC, UL or CB, WHQL, USB-IF, WEEE			
Smart Card Reader	ISO7816 Class A/B/C (5V, 3.0V, 1.8V) T=0 , T=1 EMV2000 contact smart card with SAM slot(optional, max 2x SAM)			
	interface. USB2.0 CCID , PC/SC Univer			
Contactless Smart Card Reader	INTERFACE: USB2.0 CCID , PC/SC Unver ISO/IEC 14443 A&B, Mifare, FeliCa NFC Forum tag types (Jewel, Mifare Ultralight, FeliCa, FeliCa lite, Mifare Desifare) EMV2000 contactless smart card Frequency: 13.56 MHz +- 7KHz Distanace transaction: Up to 10cm Baud: 106/212/424/848 kbit/s Interface: USB2.0 CCID, PC/SC driver			



2. Install Suprema PC SDK

1. Run an Suprema PC SDK install program such as "Suprema_PC_SDK3.x[3.x.x.x]_Install.exe".



2. Select the provided license file, and brief information about the license will be shown. Selected license file will be copied to bin subfolder of installed directory.

😚 Suprema P	C SDK 3.4 (3.4.0.0) Setup	
6	Check License File Select the provided license file (UFLicense.dat).	
	😽 Suprema PC SDK 3.4 (3.4.0.0) S 🔀	
	Select the provided license file (UFLicense,dat),	
	확인	
Install Suprema PC	5DK 3.4	
	< <u>Back</u> Next >	Cancel

3. Agree with the licence.



🗑 Suprema PC 🕄	GDK 3.4 (3.4.0.0) Setup					
6	License Agreement Please review the license terms before installing Suprema PC SDK 3.4 (3.4.0.0).					
Press Page Down to	see the rest of the agreement.					
Suprema warrants to buyer, subject to the limitations set forth below, that each product shall operate in substantial accordance with the published specifications for such product for a period of one (1) year from the date of shipment of the products ("Warranty Period"). If buyer notifies Suprema in writing within the Warranty Period of any defects covered by this warranty, Suprema shall, at its option, repair or replace the defective product which is returned to Suprema within Warranty Period freight and insurance prenaid by huver. Such						
If you accept the ter agreement to install	ms of the agreement, click I Agree to continue. You must accept the Suprema PC SDK 3.4 (3.4.0.0).					
Install Suprema PC SDK 3,4						
	< Back I Agree Cancel					

4. Choose installing components.

😽 Suprema PC SDK 3.4 (3.4.0.0) Setup 📃 🗖 🔀						
Choose Components Choose which features of Suprema PC SDK 3.4 (3.4.0.0) you want to install.						
Check the components you install. Click Next to continu	want to install and uncheck the components you don't want to ue.					
Select the type of install:	Install 🗸 🗸					
Or, select the optional components you wish to install:	 ✓ Copy all files ✓ Create a program group 					
Space required: 0.0KB						
Install Suprema PC SDK 3.4 —	,					
	< <u>Back</u> Next > Cancel					



5. Choose install location. After pushing Install button Suprema PC SDK files will be installed to the selected install location.

😽 Suprema PC SDK 3.4 (3.4.0.0) Setup					
6	Choose Install Location Choose the folder in which to install Suprema PC SDK 3.4 (3.4.0.0).				
Setup will install folder, click Brov	Suprema PC SDK 3.4 (3.4.0.0) in the following folder. To install in a different ise and select another folder. Click Install to start the installation.				
Destination Fo	lder I Files WSuprema WUFE34				
Space required: Space available:	0.0KB 42.9GB				
Install Suprema PC	SDK 3,4 Cancel				

6. Installed SDK can be found in Start menu.

😚 Suprema PC SDK 3.	4 (3.4.0.0) Setup
	Completing the Suprema PC SDK 3.4 (3.4.0.0) Setup Wizard Suprema PC SDK 3.4 (3.4.0.0) has been installed on your computer. Click Finish to close this wizard.
	< <u>B</u> ack Einish Cancel



3. Device driver installation

• FingerPrint Scanner Driver

1. Connect BioMini Combo Dual to the PC.

2. Windows will launch new hardware search wizard. Click the 'cancel' button at this time.

3. Run the BioMini Combo Dual driver installation file, Sup_Fingerprint_Driver_v2.1.0.exe from install#drivers#SFR Driver(unified)and follow the installation flow.



4. Confirm the installation of driver from Device manager





• Smart Card Reader Driver

Since Biomini Combo Dual supports Microsoft CCID driver.

Biomini Combo Dual does not need vender driver For using Contact, ContactLess and first SIM Reader. But you need to use second SIM Readers too, you have to install Vender driver provided from Gemalto, Named "GemPcCCID_en_us_32.msi" or "GemPcCCID_en_us_64.msi"

Before Driver installation, you can see three Smard Card Readers



GemPcCCL..

After installation, you can see new Smart Cards list included "SIM Pro Smart Card Reader".

- Processors
- ▲ Smart card readers
 - ---- 🛗 Microsoft Usbccid Smartcard Reader (WUDF)
 - ---- 🛗 Microsoft Usbccid Smartcard Reader (WUDF)
 - SIM Pro Smart Card Reader
- Sound, video and game controllers

Check smart card service

Check the status that smart card service is "Running".

9		Services					 ×
<u>File Action View H</u>	lelp						
♦ ♦ 1 0 0 0 0	è 🛛 🖬 🕨 🗰 🖬 🕩						
Services (Local)	Services (Local)						
Sm	nart Card	Name	Description	Status	Startup Type	Log On As	^
Sto Re: De	op the service <u>start</u> the service escription:	Secondary Logon Secure Socket Tunneling Protocol Service Security Accounts Manager Security Center Sessor Monitorina Service	Enables star Provides su The startup The WSCSV Monitors va	Running Running	Manual Manual Automatic Automatic (D Manual (Trig	Local Syste Local Service Local Syste Local Service Local Service	
Ma by sto	anages access to smart cards read this computer. If this service is opped, this computer will be unable read smart cards. If this service is	Server Shell Hardware Detection Smart Card	Supports fil Provides no Manages ac	Running Running Running	Automatic Automatic Automatic (T	Local Syste Local Syste Local Service	
dis dej	sabled, any services that explicitly pend on it will fail to start.	Smart Card Device Enumeration Service Smart Card Removal Policy SMNP Trap Software Protection Spot Verifier SSDP Discovery Still Image Acquisition Events Storage Service Super Storage Service Super Sector	Creates soft Allows the s Receives tra Enables the Verifies pot Discovers n Launches a Enforces gr Maintains a	Running Running	Manual (Trig Manual Automatic (D Manual (Trig Manual Manual Manual (Trig Automatic	Local Syste Local Syste Local Service Network S Local Syste Local Syste Local Syste Local Syste Local Syste	
Ex	xtended / Standard /	System Event Notification Service	Monitors sy	Running	Automatic	Local Syste	~

Control Panel \rightarrow Administrative Tools \rightarrow Service



4. Sample Application

1. BioMini Combo Dual test method by using PC/SC sample application.

• Download and install the PC/SC sample application:

You can download the application by accessing to below link:

http://support.gemalto.com/index.php?id=download_tools

*	New_PC/SC sample application for PC-Link readers: PC/SC IDBridge_ New PC/SC sample application allows communication with a Smart Card using a PC-Link reader (IDBridge range) and using the Windows PC/SC layers. New improvement for multi-reader support, ATR analysis, PC/SC part 10 support, etc â€i	March 2013	1.0

• Run PC/SC Bridge

There are two names of PC/SC reader as follows.

Gemalto SIM Pro Smard Card Reader 0 -> Contact card reader Gemalto SIM Pro Smard Card Reader 1 -> First SIM Reader Generic EMV SmartCard Reader -> Second SIM Reader NXP PR533 0 -> Contactless card reader





. PC/SC programming

You can get sample source code of PC/SC by accessing to the below link. http://ludovicrousseau.blogspot.kr/2010/04/pcsc-sample-in-different-languages.html

* For technical assistances, please contact us: sales@supremainc.com



European Union CE mark and compliance statement

This product is CE marked according to the provisions of the R&TTE Directive(1999/5/EC). Hereby, **Suprema Inc**. declares that this product is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

This device is Class 1 radio equipment under the European Radio and Telecommunications Terminal Equipment (R&TTE) Directive (1999/5/EC).



For further information, please contact http:// www.suprema.co.kr

Suprema Inc.

16F Parkview Tower, Jeongja-dong, Bundang-gu, Seongnam, Gyeonggi, 463-863 Korea Tel: +82-31-7104922 Fax: +82-31-710-5699



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.

Note : This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of 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 tuning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.

- Increase the distance between the equipment and the receiver.

- Connect the equipment to outlet on a circuit different from that to which the receiver is connected.

- Consult the dealer or an experienced radio/TV technician for help.

Caution : Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.