

# **SL110 SDK Guidance**

## **For Android**

**Version 1.0**

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**StrongLink**

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## 1、Interface Introduction

IvrJack.jar supports interfaces for the platform of Android 2.1 or above. Major interfaces are as followings:

- a) IvrJackService — Communication Controlling Interface
- b) IvrJackAdapter — Event Interface
- c) IvrJackStatus — State

Attention: It is needed to add <uses-permission

android:name="android.permission.RECORD\_AUDIO"/> in the project. Refer to the event of IvrJackExample.

## 2、Interface Definitions

### 2.1、IvrJackService

#### 2.1.1 uid

Definition: public int uid = 0;

Explanation: The UID of the tag.

#### 2.1.2 open

Definition: public void open(Context context, IvrJackAdapter adapter);

Explanation: Start the server for the reader.

Parameter: a) @param context Activity instance.

b) @param adapter used for receiving event.

#### 2.1.3 close

Definition: public void close();

Explanation: Close the server for elf reader.

#### 2.1.4 readTag

Definition: public int readTag();

Explanation: Open tag detection

Return: 0 represents success, else failure

#### 2.1.5 getTagUID

Definition: public int getTagUID();

Explanation: Get the UID of tag

Return: 0 represents success, else failure

## 2.1.6 tagAuthenticate(select sector)

Definition: public int tagAuthenticate(byte sector, byte[] pwds);

Explanation: Verify the key of sector

Parameter: a) sector: sector number

b) pwds: 6-byte key of the sector (Default:use key A)

Return: 0 represents success, else failure

## 2.1.7 tagReadData

Definition: public int tagReadData(byte block, byte[] data);

Explanation: Read the tag data

Parameter: a) block: the block number(0-3)

b) data :16-byte block data

Return: 0 represents success, else failure

## 2.1.8 tagReadBlockData

Definition: public int tagReadBlockData(byte sector1, byte block1, byte sector2, byte block2, byte[] pwds, byte[] data);

Explanation: Read the data of two blocks

Parameter: a) sector1: the sector number(0-31)

b) block1: the block number of the sector 1(0-3)

c) sector2: the sector number(0-31)

d) block2: the block number of the sector 2(0-3)

e) pwds: 6-byte key of the sector (Default:use key A)

f) data: data of the sectors

Return: 0 represents success, else failure

## 2.1.9 tagWriteData

Definition: public int tagWriteData(byte block, byte[] data);

Explanation: Write the tag data

Parameter: a) block: the block number(0-3)

b) data :16-byte data to be written (Default:use key A)

Return: 0 represents success, else failure

## 2.1.10 returned value

a) 0: success

b) 1: communication failure

c) 2: unknown error

d) -1: power insufficiency

## 2.2 IvrJackAdapter

### 2.2.1 onConnect

Definition: void onConnect(String deviceSN);

Explanation: Device connects successfully.

Parameter: a) deviceSN: the serial-number of device

## 2.2.2 onDisconnect

Definition: void onDisconnect();

Explanation: Trigger occurs when device disconnects

## 2.2.3 onStatusChange

Definition: void onStatusChange(IvrJackStatus status);

Explanation: The device state changes.

Parameter: a) status: the device state

## 2.3 IvrJackStatus

- a) ijsDetecting: Detecting device.
- b) ijsRecognized: Having detected device.
- c) ijsUnRecognized: No device detected.
- d) ijsLogout: The device is plugged out.

## 3、Calling procedures

### 3.1 Interface calling

- a) Copy IvrJack.jar to the project directory
- b) Include IvrJack.jar in the project directory
- c) Import the following classes when calling the class of Activity:

```
import com.xminnov.IvrJackAdapter;  
import com.xminnov.IvrJackService;  
import com.xminnov.IvrJackStatus;
```

- d) Realize the method in the interface of IvrJackAdapter (implements IvrJackAdapter)
- e) Create the class of IvrJackService.
- f) Others refer to examples.

### 3.2 Tag operation

- a) Call the method of readTag
- b) Call the method of getTagUID
- c) Call the method of tagAuthenticate(optional)

- d) Call the method of tagReadData(optional)
- e) Call the method of tagWriteData(optional)