



# AsReader Finger-Type

## Objective-C SDK Reference Guide

ASR-023B

## Revision History

Version	Modified Contents	Revised By	Date
1.0	The initial version	Trinity Liu	2020/7/10
1.1	1, Adds sample codes for functions. 2, Deletes the function and delegate used to get the mac address.	Trinity Liu	2020/9/3

# Contents

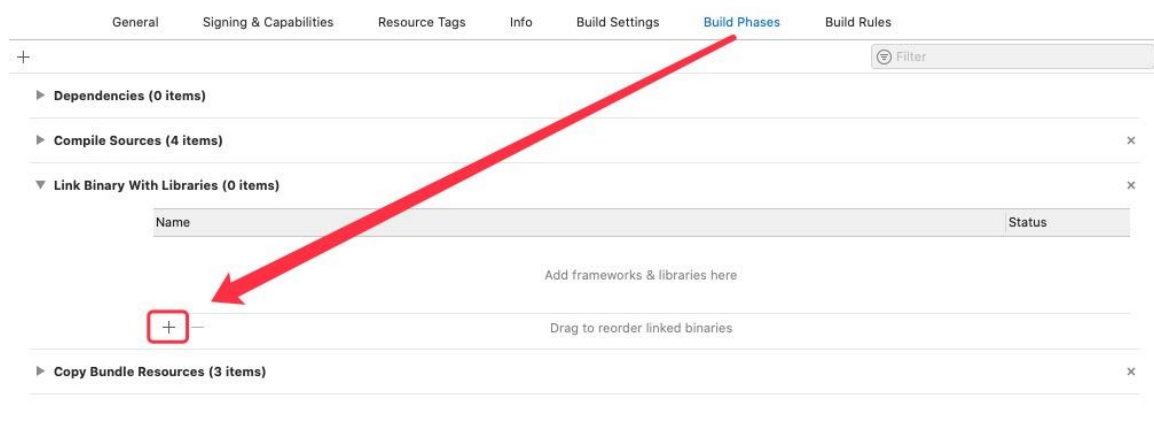
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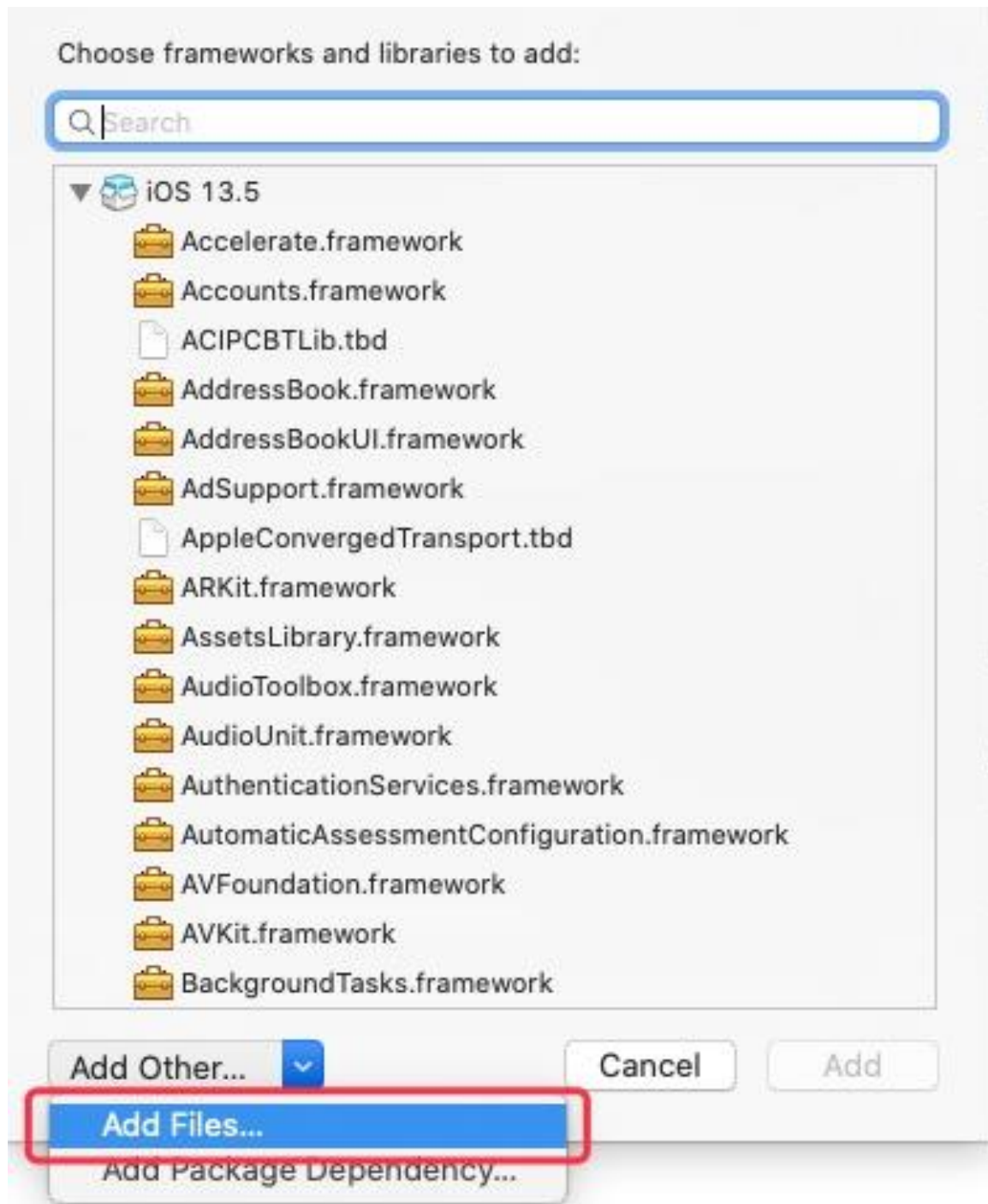
# 1 Preparation for SDK Usage

## 1.1. Add SDK

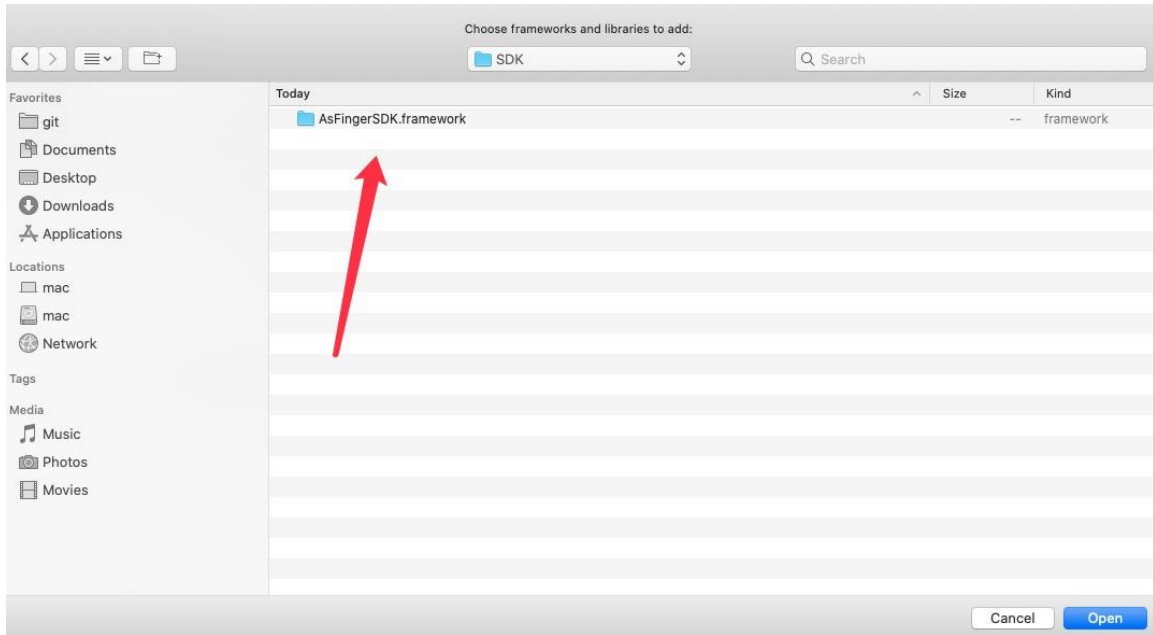
1. TARGET -> Build phases -> Link Binary with Libraries



2. Select “Add Other...”, “Add Files...”



### 3. Add AsFingerSDK.framework



### 4. Add Completely



## 1.2. Import the Header File

The Objective-C project needs to import the header file in the class where you want to use the SDK. Please refer to the following code:

```
#import <AsFingerSDK/AsFingerSDK.h>
```

## 2 AsFinger Class

### 2.1. Properties

Property Name	Property	Type	Descriptions
delegate	nonatomic, weak	AsFingerDelegate	AsFingerDelegate (Refer to <a href="#">2.3 Delegates</a> )
peripheral	nonatomic, strong, readonly	CBPeripheral	The object of the AsReader Finger-Type which is connected with iOS via Bluetooth
isConnected	nonatomic, assign, readonly	BOOL	The connection status of the AsReader Finger-Type
name	nonatomic, strong, readonly	NSString	The name of AsReader Finger-Type

### 2.2. Functions

#### 2.2.1. initWithCBPeripheral

Function name	-(instancetype)initWithCBPeripheral:(CBPeripheral *)cBPeripheral;			
Parameters	Name	In/Out	Type	Descriptions
	cBPeripheral	In	CBPeripheral	The object of the AsReader Finger-Type which is connected with iOS via Bluetooth
<b>Return value</b>	-	Out	AsFinger	The object of the AsFinger
<b>Function Descriptions:</b> Initializes the object of the AsFinger.				



### 2.2.2. connect

<b>Function name</b>	- (void)connect;			
<b>Parameters</b>	<b>Name</b>	<b>In/Out</b>	<b>Type</b>	<b>Descriptions</b>
	-	-	-	-
<b>Return value</b>	-	-	-	-
<b>Function Descriptions:</b> Connects the AsReader Finger-Type (Via Bluetooth). The function “whenAsFingerIsConnected” will be called back once this function is executed. (Refer to <a href="#">2.3.1 whenAsFingerIsConnected</a> ).				

### 2.2.3. disconnect

<b>Function name</b>	- (void)disconnect;			
<b>Parameters</b>	<b>Name</b>	<b>In/Out</b>	<b>Type</b>	<b>Descriptions</b>
	-	-	-	-
<b>Return value</b>	-	-	-	-
<b>Function Descriptions:</b> Disconnects the AsReader Finger-Type. The function “whenAsFingerIsConnected” will be called back once this function is executed. (Refer to <a href="#">2.3.1 whenAsFingerIsConnected</a> ).				

### 2.2.4. startScan

<b>Function name</b>	- (void)startScan;			
<b>Parameters</b>	<b>Name</b>	<b>In/Out</b>	<b>Type</b>	<b>Descriptions</b>
	-	-	-	-
<b>Return value</b>	-	-	-	-
<b>Function Descriptions:</b> Starts to scan barcodes. The function “receivedBarcodeData” will be called back once this function is executed. (Refer to <a href="#">2.3.2 receivedBarcodeData</a> ).				

### 2.2.5. stopScan

<b>Function name</b>	- (void)stopScan;			
<b>Parameters</b>	<b>Name</b>	<b>In/Out</b>	<b>Type</b>	<b>Descriptions</b>
	-	-	-	-
<b>Return value</b>	-	-	-	-

**Function Descriptions:**  
Stops scanning barcodes.

### 2.2.6. getBattery

<b>Function name</b>	- (void)getBattery;			
<b>Parameters</b>	<b>Name</b>	<b>In/Out</b>	<b>Type</b>	<b>Descriptions</b>
	-	-	-	-
<b>Return value</b>	-	-	-	-
<b>Function Descriptions:</b> Gets the current battery power value of the AsReader Finger-Type. The function “receivedBattery” will be called back once this function is executed. (Refer to <a href="#">2.3.3 receivedBattery</a> ).				

### 2.2.7. getFirmwareVersion

<b>Function name</b>	- (void)getFirmwareVersion;			
<b>Parameters</b>	<b>Name</b>	<b>In/Out</b>	<b>Type</b>	<b>Descriptions</b>
	-	-	-	-
<b>Return value</b>	-	-	-	-
<b>Function Descriptions:</b> Gets the firmware version of the AsReader Finger-Type. The function “receivedFirmwareVersion” will be called back once this function is executed. (Refer to <a href="#">2.3.4 receivedFirmwareVersion</a> ).				

### 2.2.8. sendData

<b>Function name</b>	- (void)sendData:(NSData *)data;			
<b>Parameters</b>	<b>Name</b>	<b>In/Out</b>	<b>Type</b>	<b>Descriptions</b>
	data	IN	NSData	The custom data
<b>Return value</b>	-	-	-	-
<b>Function Descriptions:</b> Sends the custom data. The function “receivedData” will be called back once this function is executed. (Refer to <a href="#">2.3.5 receivedData</a> ).				

### 2.2.9. getSDKVersion

<b>Function name</b>	+ (NSString *)getSDKVersion;			
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Parameters	Name	In/Out	Type	Descriptions
	-	-	-	-
<b>Return value</b>	-	Out	NSString	SDK version
<b>Function Descriptions:</b> Gets the SDK version of the AsReader Finger-Type.				

## 2.3. Delegates

### 2.3.1 whenAsFingerIsConnected

Function name	- (void)whenAsFingerIsConnected:(BOOL)isConnected;			
Parameters	Name	In/Out	Type	Descriptions
	isConnected	In	BOOL	The connection status of AsFinger YES: Connected NO: Disconnected
<b>Return value</b>	-	-	-	-
<b>Function Descriptions:</b> Receives the connection status of AsFinger. This function will be called back once function “connect” or “disconnect” is executed. (Refer to <a href="#">2.2.2 connect</a> and <a href="#">2.2.3 disconnect</a> ).				

### 2.3.2 receivedBarcodeData

Function name	- (void)receivedBarcodeData:(NSData *)barcodeData;			
Parameters	Name	In/Out	Type	Descriptions
	barcodeData	In	NSData	Data scanned by the AsFinger.
<b>Return value</b>	-	-	-	-
<b>Function Descriptions:</b> Receives data scanned by the AsFinger. This function will be called back once function “startScan” is executed. (Refer to <a href="#">2.2.4 startScan</a> ).				

### 2.3.3 receivedBattery

Function name	- (void)receivedBattery:(int)battery;			
Parameters	Name	In/Out	Type	Descriptions
	battery	In	int	The remaining charge of the AsReader Finger-Type

<b>Return value</b>	-	-	-	-
<b>Function Descriptions:</b> Receives the remaining charge of the AsReader Finger-Type. This function will be called back once function “getBattery” is executed. (Refer to <a href="#">2.2.6 getBattery</a> ).				

### 2.3.4 receivedFirmwareVersion

<b>Function name</b>	- (void)receivedFirmwareVersion:(NSString *)firmwareVersion;			
<b>Parameters</b>	<b>Name</b>	<b>In/Out</b>	<b>Type</b>	<b>Descriptions</b>
	firmwareVersion	In	NSString	The firmware version of the AsReader Finger-Type
<b>Return value</b>	-	-	-	-
<b>Function Descriptions:</b> Receives the firmware version of the AsReader Finger-Type. This function will be called back once function “getFirmwareVersion” is executed. (Refer to <a href="#">2.2.7 getFirmwareVersion</a> ).				

### 2.3.5 receivedData

<b>Function name</b>	- (void)receivedData:(NSData *)data;			
<b>Parameters</b>	<b>Name</b>	<b>In/Out</b>	<b>Type</b>	<b>Descriptions</b>
	data	In	NSData	Data received by the SDK
<b>Return value</b>	-	-	-	-
<b>Function Descriptions:</b> Receives the data received by the SDK. This function will be called back once the AsFinger scans any barcode data or function “sendData” is executed. (Refer to <a href="#">2.2.8 sendData</a> ).				

## 3 AsFingerManager Class

### 3.1. Properties

Property Name	Property	Type	Descriptions
delegate	nonatomic, weak	AsFingerManagerDelegate	The delegate of the AsFingerManager(Refer to <a href="#">3.3 Delegates</a> ).
centralManager	nonatomic, strong, readonly	CBCentralManager	The object of CBCentralManager.
isSearching	readonly	BOOL	Current Bluetooth search status. YES: In search NO: Not in search
deviceBLEStatus	readonly	AsFingerDeviceBLEStatus	The Bluetooth status of the iOS device. Enum type. (Refer to <a href="#">3.4.1 AsFingerDeviceBLEStatus</a> )

### 3.2. Functions

#### 3.2.1. sharedAsFingerManager

Function name	+ (AsFingerManager *)sharedAsFingerManager;			
Parameters	Name	In/Out	Type	Descriptions
	-	-	-	-
Return value	-	Out	AsFingerManager	Object of AsFingerManager
<b>Function Descriptions:</b> Create and initialize an object of AsFingerManager (Singleton mode).				

### 3.2.2. startSearching

<b>Function name</b>	- (BOOL)startSearching;			
<b>Parameters</b>	<b>Name</b>	<b>In/Out</b>	<b>Type</b>	<b>Descriptions</b>
	-	-	-	-
<b>Return value</b>	-	Out	BOOL	Function execution result YES: The function was executed successfully. NO: The function failed to execute.
<b>Function Descriptions:</b> Starts to search for AsReader Finger-Type. The delegate function “whenReceivedAsFingerList” will be called back once this function is executed. (Refer to <a href="#">3.3.1 whenReceivedAsFingerList</a> ).				

### 3.2.3. stopSearching

<b>Function name</b>	- (void)stopSearching;			
<b>Parameters</b>	<b>Name</b>	<b>In/Out</b>	<b>Type</b>	<b>Descriptions</b>
	-	-	-	-
<b>Return value</b>	-	-	-	-
<b>Function Descriptions:</b> Stops searching for AsReader Finger-Type.				

### 3.2.4. connectAsFinger

<b>Function name</b>	- (void)connectAsFinger:(AsFinger *)asFinger;			
<b>Parameters</b>	<b>Name</b>	<b>In/Out</b>	<b>Type</b>	<b>Descriptions</b>
	asFinger	In	AsFinger	The object of AsFinger
<b>Return value</b>	-	-	-	-
<b>Function Descriptions:</b> Connects to the specified AsReader Finger-Type.				

### 3.2.5. disconnectAsFinger

<b>Function name</b>	- (void)disconnectAsFinger:(AsFinger *)asFinger;			
<b>Parameters</b>	<b>Name</b>	<b>In/Out</b>	<b>Type</b>	<b>Descriptions</b>
	asFinger	In	AsFinger	The object of AsFinger
<b>Return value</b>	-	-	-	-
<b>Function Descriptions:</b> Disconnect from the specified AsReader Finger-Type.				

### 3.2.6. getCurrentConnectedAsFinger

<b>Function name</b>	- (AsFinger *)getCurrentConnectedAsFinger;			
<b>Parameters</b>	<b>Name</b>	<b>In/Out</b>	<b>Type</b>	<b>Descriptions</b>
	-	-	-	-
<b>Return value</b>	-	Out	AsFinger	The object of AsFinger
<b>Function Descriptions:</b> Gets the object of the AsReader Finger-Type that is currently connected.				

## 3.3. Delegates

### 3.3.1. whenReceivedAsFingerList

<b>Function name</b>	- (void)whenReceivedAsFingerList:(NSArray *)asFingerList;			
<b>Parameters</b>	<b>Name</b>	<b>In/Out</b>	<b>Type</b>	<b>Descriptions</b>
	asFingerList	In	NSArray	List of AsReader Finger-Types searched for. Array elements are AsFinger objects.
<b>Return value</b>	-	-	-	-
<b>Function Descriptions:</b> Receives an array whose elements are AsFinger objects (The function will call back multiple times). The delegate function will be called back once function “startSearching” is executed. (Refer to <a href="#">3.2.2 startSearching</a> ).				

## 3.4. Enum

### 3.4.1. AsFingerDeviceBLEStatus

Definition	Description
AsFingerDeviceBLEStatus_PowerOff	The Bluetooth of iOS device is off.
AsFingerDeviceBLEStatus_PowerOn	The Bluetooth of iOS device is on.
AsFingerDeviceBLEStatus_Unsupported	iOS device does not support Bluetooth.