CUSTOMIOSAPI

USER MANUAL FOR
iOS LIBRARY CustomiOSApi

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Rev. History	**Description :**	**Date**	**Revision**
	First Revision	23/07/2013	1.00
	Add new “Supported external accessory protocol” and “Get PPID” section	30/07/2014	1.01
	Added new communication port (BLE)	02/09/2021	1.02

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Document Overview

This document details about CUSTOM iOS API for printers. And also explains how to use this API for iOS application development for CUSTOM printers.

About CUSTOM iOS API

This API provides functions to access the CUSTOM printers via Bluetooth, BLE (Bluetooth low energy) and Wifi.
It includes below functions to access the printer

- *Get the printer class for printer*
- *Connect to printer*
- *Close connection*
- *Set timeout for read/write*
- *Write / Read bytes to/from printer*
- *Print text with various text attributes*
- *Print image with image scaling options*
- *Print Barcode and Barcode 2D*
- *Cut, eject / retract and present the ticket*

iOS Platform Compatibility

iOS 5.0 or latest

API reference guide

Attached separately (HTML files format)

Prerequisite

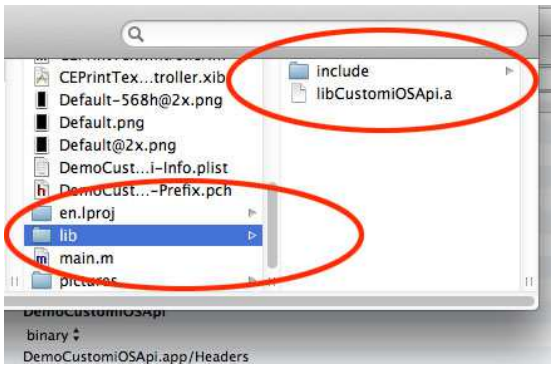
- *You must be familiar with iOS development environment*
- *API library file: libCustomiOSApi.a*
- *iOS device with Bluetooth and/or Wifi*

How to use API

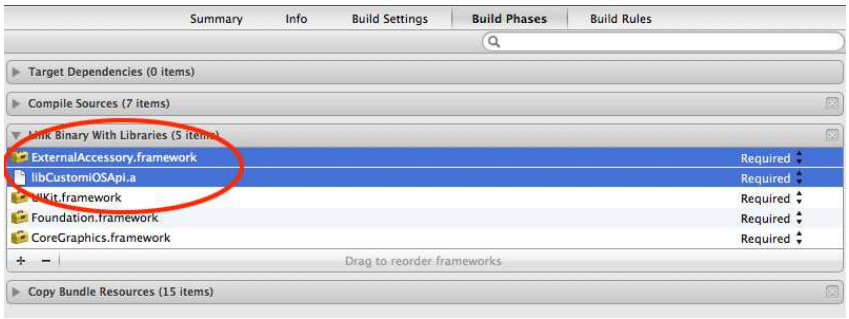
Developer needs to add the API in Xcode project and then developer can access the various API functions.

Add the API to Xcode project

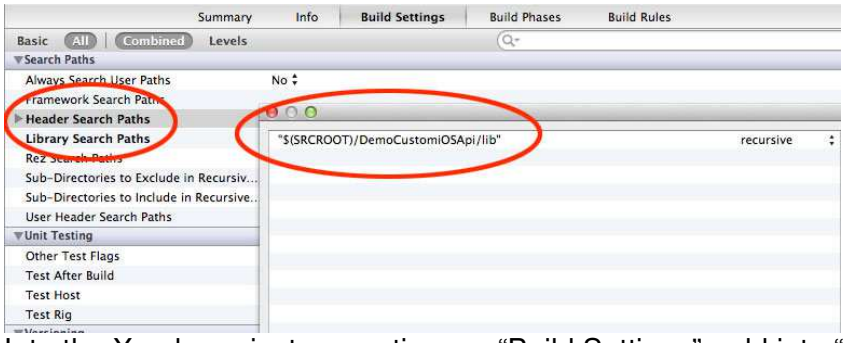
Copy into the project folder, the API folder “Lib” (it includes the library and the .h files)



Into the Xcode project properties, on “Build Phases”, add into “Link Binary with Libraries” the libraries iOS “ExternalAccessory.framework” and the “libCustomiOSApi.a”, located into the Lib folder.



Into the Xcode project properties, on “Build Settings”, add into “Header Search Path” the path of the Lib folder and set it to “recursive”.



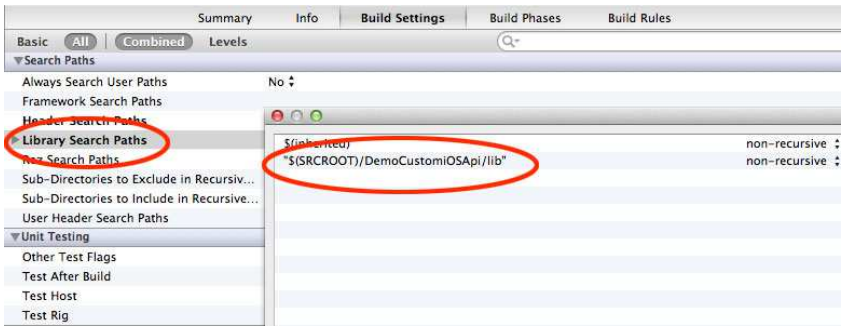
Into the Xcode project properties, on “Build Settings”, add into “Library Search Path” the path of the Lib folder.

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Into the .plist file of the project, add new Row with the value “Supported external accessory protocoll” and add the Strings:

- “com.custom.dongle” and “com.custom.donglealt” for **CUSTOM BT1 device**
- “com.custom.my3” and “com.custom.my3alt” for **MY3A device**
- “com.custom.printer” and “com.custom.printeralt” for **all the other CUSTOM Apple Compatible devices**



Otherwise, open the .plist file in source code and add these line into the xml file:

```
            <key>Translucent</key>
            <false/>
        </dict>
    </dict>
    <key>UISupportedExternalAccessoryProtocols</key>
    <array>
        <string>com.custom.dongle</string>
        <string>com.custom.donglealt</string>
        <string>com.custom.my3</string>
        <string>com.custom.my3alt</string>
    </array>
    <key>UISupportedInterfaceOrientations</key>
    <array>
        <string>UIInterfaceOrientationPortrait</string>
```

Now you will see the library into your Xcode project



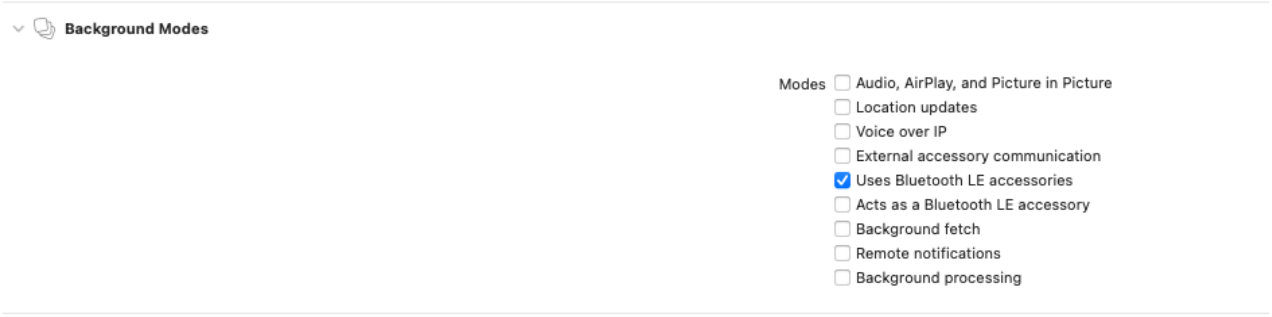
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For BLE (Bluetooth low energy) is important to add “CoreBluetooth.framework” too



and enable the “Uses Bluetooth LE accessories” into the “Background Modes”



iOS API is correctly added in project library. Now you can use this API.

Sample Code

Connect to Printer (Bluetooth)

```
//Open it (open the 1st BT device found)
NSError *error = nil;
CustomiOSApi* mFunctions = [[CustomiOSApi alloc] init];
NSArray* array = [mFunctions EnumBTDevices:&error];
CustomPrinter* prn=[mFunctions GetPrinterDriverBT:[array objectAtIndex:0]  :&error];
```

Connect to Printer (Bluetooth low energy)

```
//Open it (open the 1st BT device found)
NSError *error = nil;
CustomiOSApi* mFunctions = [[CustomiOSApi alloc] init];
NSArray* array = [mFunctions EnumBLEDevices:&error];
CustomPrinter* prn=[mFunctions GetPrinterDriverBLE:[array objectAtIndex:0]  :&error];
```

Connect to Printer (wifi)

```
//Open it (open the 1st Wifi device found)
NSError *error = nil;
CustomiOSApi* mFunctions = [[CustomiOSApi alloc] init];
NSArray* array = [mFunctions EnumWifiDevices:1000 :&error];
CustomPrinter* prn=[mFunctions GetPrinterDriverWIFI:[array objectAtIndex:0] :&error];
```

Print text

```
PrinterFont* font = [[PrinterFont alloc] init];       //create font object and required
[font SetEmphasized:true];                            //Set required attributes
[font SetJustification:FONT_JUSTIFICATION_CENTER :&error];
[prn PrintText:@"Hello World !!!" :104 :510 :font :&error];
//104 is left margin in pixel and 510 is text width in pixel
```

Print image

```
[prn PrintImage:[UIImage imageNamed:@"test.png"] :100 :IMAGE_SCALE_TO_WIDTH :376
:&error];
//100 is left margin in pixel and 376 is image width in pixel to print
//Above method will scale the image to 376 pixel width and then prints the image with left
margin of 100 //pixel
```

Get PPID for iOS APP that uses CUSTOM Bluetooth Devices

NOTE: This procedure is necessary only for Bluetooth devices, **NOT** for BLE (Bluetooth low energy) devices.

Go to the address

http://www.custom.biz/ios/

and fill the form with all the information about your company and your App, and CUSTOM will send to you back the PPID (MFI Product Plan ID).
Submit your App to the Apple iTunes App Store with the MFI PPID number in the Review Notes (Optional) section of the App Review Information.



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