

# Opticon H25



# System Controls SDK Framework

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H25 System Controls SDK Framework Documentation

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## Overview

The System Controls SDK Framework provides the control functions of SCC hand-held terminal device.

### Requirements

**Header:** syslib.h  
**DLL:** syslib.dll  
**Link Library:** syslib.lib

## Information

### SysGetModelName

This function retrieves the null-terminated string of model name.

```
BOOL SysGetModelName (LPCTSTR lpszModelName)
```

#### Parameter:

lpszModelName  
[out] Pointer to a null-terminated string that specifies the model name.

#### Return values:

TRUE indicates success  
FALSE indicates failure

### SysGetFirmwareVersion

This function retrieves the null-terminated string of firmware version.

```
BOOL SysGetFirmwareVersion (LPCTSTR lpszFWVersion)
```

#### Parameter:

lpszFWVersion  
[out] Pointer to a null-terminated string that specifies the firmware version.

#### Return values:

TRUE indicates success  
FALSE indicates failure

### SysGetSoftwareVersion

This function retrieves the null-terminated string of software version.

```
BOOL SysGetSoftwareVersion (LPCTSTR lpszSWVersion)
```

#### Parameter:

lpszSWVersion  
[out] Pointer to a null-terminated string that specifies the software version.

#### Return values:

TRUE indicates success  
FALSE indicates failure

### SysGetSerialNumber

This function retrieves the null-terminated string of serial number.

```
BOOL SysGetSerialNumber (LPCTSTR lpszSerialNumber)
```

#### Parameter:

lpszSerialNumber  
[out] Long pointer to a null-terminated string that specifies the serial number.

#### Return values:

TRUE indicates success  
FALSE indicates failure

### SysGetConfigNumber

This function retrieves the null-terminated string of configuration number.

```
BOOL SysGetConfigNumber (LPCTSTR lpszConfigNumber)
```

#### Parameter:

lpszConfigNumber  
[out] Long pointer to a null-terminated string that specifies the configuration number.

#### Return values:

TRUE indicates success  
FALSE indicates failure

### SysGetLibraryVersion

This function retrieves the version of System Controls SDK Framework library.

```
BOOL SysGetLibraryVersion (LPCTSTR lpLibraryVersion)
```

#### Parameter:

lpLibraryVersion  
[out] Long Pointer to a null-terminated string that specifies the version of System Controls SDK Framework library.

#### Return values:

TRUE indicates success  
FALSE indicates failure

### SysGetMemorySize

This function retrieves the size of system memories.

```
BOOL SysGetMemorySize (PDWORD lpROMSize, PDWORD lpRAMSize)
```

#### Parameter:

lpROMSize  
[out] Long pointer to the size dedicated to the store memory.  
  
lpRAMSize  
[out] Long pointer to size dedicated to system memory.

#### Return values:

TRUE indicates success  
FALSE indicates failure

## Keypad Controls

### SysGetKBDInputMode

This function retrieves the input mode of keypad.

```
BOOL SysGetKBDInputMode (PBYTE lpdwInputMode)
```

#### Parameter:

lpdwInputMode  
[out] Pointer to the variable that specifies the input mode of keypad.

The following table shows the possible values.

| Value              | Description                       |
|--------------------|-----------------------------------|
| NUMERICAL_KEY_MODE | Numerical character (1;2;3.....)  |
| ALPHA_KEY_MODE     | Alphabetical character (a;b;c...) |
| FUNC_KEY_MODE      | Function keys                     |

#### Return values:

TRUE indicates success  
FALSE indicates failure

## SysSetKBDInputMode

This function sets the input mode of keypad.

```
BOOL SysSetKBDInputMode (BYTE dwInputMode)
```

### Parameter:

dwInputMode  
[in] The variable specifies the input mode of keypad.

The following table shows the possible values.

| Value              | Description                       |
|--------------------|-----------------------------------|
| NUMERICAL_KEY_MODE | Numerical character (1;2;3.....)  |
| ALPHA_KEY_MODE     | Alphabetical character (a;b;c...) |
| FUNC_KEY_MODE      | Function keys                     |

### Return values:

TRUE indicates success  
FALSE indicates failure

## SysGetKeypadState

This function retrieves the state (Lock / Unlock) of key.

```
BOOL SysGetKeypadState (DWORD dwVKCode, PBOOL  
lpdwLockState)
```

### Parameter:

dwVKCode  
[in] Specifies the virtual-key code to indicate the key

lpdwLockState  
[out] Pointer to the Boolean value that specifies the state (Lock / Unlock) of key.

### Return values:

TRUE indicates success  
FALSE indicates failure

## SysSetKeypadState

This function sets the state (Lock / Unlock) of key.

```
BOOL SysSetKeypadState (DWORD dwVKCode, BOOL dwLockState)
```

### Parameter:

dwVKCode  
[in] Specifies the virtual-key code to indicate the key

dwLockState  
[in] The Boolean value specifies whether to lock or unlock the key. Set it to TRUE to lock the key or FALSE to unlock it.

### Return values:

TRUE indicates success  
FALSE indicates failure

## Function Key Controls

### SysGetFxKeyPrograms

This function retrieves the settings of function keys (F1 ~ F4).

```
BOOL SysGetFxKeyPrograms (
    DWORD dwVKCode,
    LPCTSTR lpFileName,
    LPCTSTR lpParameters
)
```

### Parameter:

dwVKCode  
[in] Specifies the virtual-key code to indicate the function key (F1 ~ F8).

lpFileName  
[in] Long pointer to a null-terminated string that specifies the absolute name of the file to open.

lpParameters  
[in] Long pointer to a null-terminated string that contains the application parameters.

### Return values:

TRUE indicates success  
FALSE indicates failure

### SysSetFxKeyPrograms

This function sets the setting of function keys (F1 ~ F4).

```
BOOL SysSetFxKeyPrograms (
    DWORD dwVKCode,
    LPCTSTR lpFileName,
    LPCTSTR lpParameters
)
```

### Parameter:

dwVKCode  
[in] Specifies the virtual-key code to indicate the function key (F1 ~ F8).

lpFileName  
[in] Long pointer to a null-terminated string that specifies the absolute name of the file to open.

lpParameters  
[in] Long pointer to a null-terminated string that contains the application parameters.

### Return values:

TRUE indicates success  
FALSE indicates failure

## Backlight Controls

### SysGetScreenBrightness

This function retrieves the level of LCD backlight brightness.

```
BOOL SysGetScreenBrightness (PBYTE lpdwLevel)
```

### Parameter:

lpdwLevel  
[out] Pointer to the variable that specifies the level of LCD backlight brightness.. The range of variable is from 0 to 100.

### Return values:

TRUE indicates success  
FALSE indicates failure

## SysSetBacklight

This function sets the brightness level of LCD backlight.

```
BOOL SysSetScreenBrightness (BYTE dwLevel)
```

### Parameter:

dwLevel  
[out] Specifies the level of LCD backlight brightness.  
The range of variable is from 0 to 100.

### Return values:

TRUE indicates success  
FALSE indicates failure

## SysGetBrightnessTimer

This function retrieves the value of timer that specifies the time to turn off the LCD backlight.

```
BOOL SysGetBrightnessTimer (PDWORD lpdwTimeCount);
```

### Parameter:

lpdwTimeCount  
[out] Pointer to the variable that specifies the time-out value of LCD backlight.

The following table shows the possible values.

| Value              | Description                                 |
|--------------------|---|
| BKL_TIMEOUT_NEVER  | Never turn off LCD backlight                |
| BKL_TIMEOUT_10_SEC | Turn off the LCD backlight after 10 seconds |
| BKL_TIMEOUT_20_SEC | Turn off the LCD backlight after 20 seconds |
| BKL_TIMEOUT_30_SEC | Turn off the LCD backlight after 30 seconds |
| BKL_TIMEOUT_40_SEC | Turn off the LCD backlight after 40 seconds |
| BKL_TIMEOUT_1_MIN  | Turn off the LCD backlight after 1 minute   |
| BKL_TIMEOUT_3_MIN  | Turn off the LCD backlight after 3 minutes  |
| BKL_TIMEOUT_5_MIN  | Turn off the LCD backlight after 5 minutes  |
| BKL_TIMEOUT_10_MIN | Turn off the LCD backlight after 10 minutes |

### Return values:

TRUE indicates success  
FALSE indicates failure

## SysSetBrightnessTimer

This function sets the timer to turn off the LCD backlight.

```
BOOL SysSetBrightnessTimer (DWORD dwTimeCount)
```

### Parameter:

dwTimeCount  
[in] Specifies the time-out value of LCD backlight.

The following table shows the possible values.

| Value              | Description                                 |
|--------------------|---|
| BKL_TIMEOUT_NEVER  | Never turn off LCD backlight                |
| BKL_TIMEOUT_10_SEC | Turn off the LCD backlight after 10 seconds |
| BKL_TIMEOUT_20_SEC | Turn off the LCD backlight after 20 seconds |
| BKL_TIMEOUT_30_SEC | Turn off the LCD backlight after 30 seconds |
| BKL_TIMEOUT_40_SEC | Turn off the LCD backlight after 40 seconds |
| BKL_TIMEOUT_1_MIN  | Turn off the LCD backlight after 1 minute   |
| BKL_TIMEOUT_3_MIN  | Turn off the LCD backlight after 3 minutes  |
| BKL_TIMEOUT_5_MIN  | Turn off the LCD backlight after 5 minutes  |
| BKL_TIMEOUT_10_MIN | Turn off the LCD backlight after 10 minutes |

### Return values:

TRUE indicates success  
FALSE indicates failure

## SysGetKeypadBacklight

This function retrieves the mode of keypad backlight.

```
BOOL SysGetKeypadBacklight (PBYTE lpdwMode)
```

### Parameter:

lpdwMode  
[out] Pointer to the variable that specifies the mode of keypad backlight.

The following table shows the possible values.

| Value                  | Description                            |
|------------------------|--|
| KEYPAD_BL_OFF          | Disable keypad backlight ( always off) |
| KEYPAD_BL_ENABLE_TIMER | Enable the timer for keypad backlight  |
| KEYPAD_BL_ALWAYS_ON    | Keypad backlight is always on          |

### Return values:

TRUE indicates success  
FALSE indicates failure

## SysSetKeypadBacklight

This function sets the mode of keypad backlight.

```
BOOL SysSetKeypadBacklight (BYTE dwMode)
```

### Parameter:

dwMode  
[in] Specifies the mode of keypad backlight.

The following table shows the possible values.

| Value                  | Description                            |
|------------------------|--|
| KEYPAD_BL_OFF          | Disable keypad backlight ( always off) |
| KEYPAD_BL_ENABLE_TIMER | Enable the timer for keypad backlight  |
| KEYPAD_BL_ALWAYS_ON    | Keypad backlight is always on          |

### Return values:

TRUE indicates success  
FALSE indicates failure

## Wireless LAN Controls

### SysGetWLANPower

This function retrieves the power of wireless LAN.

```
BOOL SysGetWLANPower (LPDWORD dwPowerStatus)
```

### Parameter:

lpdwPowerStatus  
[out] Pointer to the variable that specifies the power of WLAN.  
If this parameter is 1, the WLAN is enabled.  
If the parameter is 0, the WLAN is disabled.

### Return values:

TRUE indicates success  
FALSE indicates failure

### SysSetWLANPower

This function sets the power of wireless LAN.

```
BOOL SysSetWLANPower (DWORD dwPowerStatus)
```

### Parameter:

dwPowerStatus  
[in] the variable that specifies whether to enable or disable the WLAN  
If this parameter is 1, the WLAN is enabled.  
If the parameter is 0, the WLAN is disabled.

### Return values:

TRUE indicates success  
FALSE indicates failure

### SysGetWLANPHYAddress

This function retrieves the address of wireless LAN.

```
BOOL SysGetWLANPHYAddress (LPTSTR lpszPhyAddr)
```

### Parameter:

lpszPhyAddr  
[out] Pointer to a null-terminated string that specifies the address of wireless LAN.

### Return values:

TRUE indicates success  
FALSE indicates failure

## Bluetooth Controls

### SysGetBluetoothPower

This function retrieves the power of Bluetooth.

```
BOOL SysGetBluetoothPower (LPDWORD lpdwPowerStatus);
```

### Parameter:

lpdwPowerStatus  
[out] Pointer to the variable that specifies the power of Bluetooth.  
If this parameter is 1, the Bluetooth is enabled.  
If the parameter is 0, the Bluetooth is disabled.

### Return values:

TRUE indicates success  
FALSE indicates failure

### SysSetBluetoothPower

This function sets the power of Bluetooth.

```
BOOL SysSetBluetoothPower (DWORD dwPowerStatus)
```

### Parameter:

dwPowerStatus  
[in] the variable that specifies whether to enable or disable the Bluetooth.  
If this parameter is 1, the Bluetooth is enabled.  
If the parameter is 0, the Bluetooth is disabled.

### Return values:

TRUE indicates success  
FALSE indicates failure

## SysGetBluetoothPHYAddress

This function retrieves the address of Bluetooth.

```
BOOL SysGetBluetoothPHYAddress (LPTSTR lpszPhyAddr)
```

### Parameter:

lpszPhyAddr  
[out] Pointer to a null-terminated string that specifies the address of Bluetooth.

### Return values:

TRUE indicates success  
FALSE indicates failure

## GPRS Controls

### SysGetGPRSPower

This function retrieves the power of GPRS.

```
BOOL SysGetGPRSPower (LPDWORD lpdwPowerStatus);
```

### Parameter:

lpdwPowerStatus  
[out] Pointer to the variable that specifies the power of GPRS.  
If this parameter is 1, the GPRS is enabled.  
If the parameter is 0, the GPRS is disabled.

### Return values:

TRUE indicates success  
FALSE indicates failure

### SysSetGPRSPower

This function sets the power of GPRS.

```
BOOL SysSetGPRSPower (DWORD dwPowerStatus)
```

### Parameter:

dwPowerStatus  
[in] the variable that specifies whether to enable or disable the GPRS.  
If this parameter is 1, the GPRS is enabled.  
If the parameter is 0, the GPRS is disabled.

### Return values:

TRUE indicates success  
FALSE indicates failure

## GPS Controls

### SysGetGPSPower

This function retrieves the power state of GPS.

```
BOOL SysGetGPSPower (LPDWORD lpdwPowerStatus)
```

### Parameter:

lpdwPowerStatus  
[out] Pointer to the variable that specifies the power of GPS.  
If this parameter is 1, the GPS is enabled.  
If the parameter is 0, the GPS is disabled.

### Return values:

TRUE indicates success  
FALSE indicates failure

## SysSetGPSPower

This function sets the power state of GPS.

```
BOOL SysSetGPSPower (DWORD dwPowerStatus)
```

### Parameter:

dwPowerStatus  
[in] the variable that specifies whether to enable or disable the GPS.  
If this parameter is 1, the GPS is enabled.  
If the parameter is 0, the GPS is disabled.

### Return values:

TRUE indicates success  
FALSE indicates failure

## System Controls

### SysGetACPowerScheme

This function retrieves the settings of power schemes for AC power.

```
BOOL SysGetACPowerScheme (
    PDWORD lpUserIdleTime,
    PDWORD lpSystemIdleTime,
    PDWORD lpSuspendTime
)
```

### Parameter:

lpUserIdleTime  
[out] Pointer to the variable that specifies the timeout setting of user idle for AC power.

lpSystemIdleTime  
[out] Pointer to the variable that specifies the timeout setting of system idle for AC power.

lpSuspendTime  
[out] Pointer to the variable that specifies the timeout setting of suspend time for AC power.

### Return values:

TRUE indicates success  
FALSE indicates failure

### SysSetACPowerScheme

This function sets the settings of power schemes for AC power.

```
BOOL SysSetACPowerScheme (
    DWORD dwUserIdleTime,
    DWORD dwSystemIdleTime,
    DWORD dwSuspendTime
)
```

### Parameter:

dwUserIdleTime  
[in] Specifies the timeout setting of user idle for AC power.

dwSystemIdleTime  
[in] Specifies the timeout setting of system idle for AC power.

dwSuspendTime  
[in] Specifies the timeout setting of suspend time for AC power.

### Return values:

TRUE indicates success  
FALSE indicates failure



## SysGetBatteryPowerScheme

This function retrieves the settings of power schemes for main battery.

```

BOOL SysGetBatteryPowerScheme (
    PDWORD lpUserIdleTime,
    PDWORD lpSystemIdleTime,
    PDWORD lpSuspendTime
)
    
```

### Parameter:

lpUserIdleTime

[out] Pointer to the variable that specifies the timeout setting of user idle for main battery.

lpSystemIdleTime

[out] Pointer to the variable that specifies the timeout setting of system idle for main battery.

lpSuspendTime

[out] Pointer to the variable that specifies the timeout setting of suspend time for main battery.

### Return values:

TRUE indicates success  
FALSE indicates failure

## SysSetBatteryPowerScheme

This function sets the settings of power schemes for main battery.

```

BOOL SysSetBatteryPowerScheme (
    DWORD dwUserIdleTime,
    DWORD dwSystemIdleTime,
    DWORD dwSuspendTime
)
    
```

### Parameter:

dwUserIdleTime

[in] The variable specifies the timeout setting of user idle for main battery.

dwSystemIdleTime

[in] The variable specifies the timeout setting of system idle for main battery.

dwSuspendTime

[in] The variable specifies the timeout setting of suspend time for main battery.

### Return values:

TRUE indicates success  
FALSE indicates failure

## SysGetACLineState

This function retrieves status of AC power.

```

BOOL SysGetACLineState (PBOOL lpACState)
    
```

### Parameter:

lpACState

[out] Pointer to the variable that specifies the status of AC power.

If this parameter is TRUE, AC power is online.

If the parameter is FALSE, AC power is offline.

### Return values:

TRUE indicates success  
FALSE indicates failure

## SysGetMainBatteryState

This function retrieves status of main battery.

```

BOOL SysGetMainBatteryState (PBYTE lpPowerLevel, PBOOL
lpChargeState)
    
```

### Parameter:

lpPowerLevel

[out] Pointer to the variable that specifies the level of main battery.

The following table shows the possible values.

| Value                        | Description |
|------------------------------|-------------|
| SYSTEM_BATTERY_HIGH          | High        |
| SYSTEM_BATTERY_LOW           | Low         |
| SYSTEM_BATTERY_CRITICAL      | Critical    |
| SYSTEM_BATTERY_STATE_UNKNOWN | Unknown     |

lpChargeState

[out] Pointer to the variable that specifies the charging state.

If this parameter is TRUE, battery is charging. If the parameter is FALSE, battery power is discharged.

### Return values:

TRUE indicates success  
FALSE indicates failure

## SysGetBackupBatteryState

This function retrieves status of backup battery.

```

BOOL SysGetBackupBatteryState (
    PBYTE lpPowerLevel,
    PBOOL lpChargeState
)
    
```

### Parameter:

lpPowerLevel

[out] Pointer to the variable that specifies the level of backup battery.

The following table shows the possible values.

| Value                        | Description |
|------------------------------|-------------|
| SYSTEM_BATTERY_HIGH          | High        |
| SYSTEM_BATTERY_LOW           | Low         |
| SYSTEM_BATTERY_CRITICAL      | Critical    |
| SYSTEM_BATTERY_STATE_UNKNOWN | Unknown     |

lpChargeState

[out] Pointer to the variable that specifies the charging state.

If this parameter is TRUE, battery is charging. If the parameter is FALSE, AC power is discharged.

### Return values:

TRUE indicates success  
FALSE indicates failure



## SysGetSIPState

This function receives the state of software-based input panel.

```
BOOL SysGetSIPState (PBOOL lpSIPState)
```

### Parameter:

lpSIPState  
[out] Pointer to the variable that specifies the state of software-based input panel.

If this parameter is TRUE, the software-based input panel is on, or visible.  
If the parameter is FALSE, The software-based input panel is off, or not visible.

### Return values:

TRUE indicates success  
FALSE indicates failure

## SysSetSIPState

This function sets the state of software-based input panel.

```
BOOL SysSetSIPState (BOOL dwSIPState)
```

### Parameter:

dwSIPState  
[in] Specifies the state of software-based input panel.  
If this parameter is TRUE, the software-based input panel is on, or visible.  
If the parameter is FALSE, The software-based input panel is off, or not visible.

### Return values:

TRUE indicates success  
FALSE indicates failure

## SysStylusCalibration

This function opens the stylus calibration.

```
BOOL SysStylusCalibration (void)
```

### Parameter:

None

### Return values:

TRUE indicates success  
FALSE indicates failure

## SysLaunchCPLProgram

This function opens the programs of control panel.

```
BOOL SysLaunchCPLProgram (BYTE dwCPLProgram)
```

### Parameter:

dwCPLProgram  
[in] The variable specifies the programs of control panel.

The following table shows the possible values.

| Value               | Description                     |
|---------------------|---------------------------------|
| CPL_PC              | PC Connection Properties        |
| CPL_Dialing         | Dialing Properties              |
| CPL_Keyboard        | Keyboard Properties             |
| CPL_Password        | Password Properties             |
| CPL_Owner           | Owner Properties                |
| CPL_Power           | Power Properties                |
| CPL_System          | System Properties               |
| CPL_Display         | Display Properties              |
| CPL_Mouse           | Mouse Properties                |
| CPL_Stylus          | Stylus Properties               |
| CPL_Volume_Sounds   | Volume & Sounds Properties      |
| CPL_InputPanel      | Input Panel Properties          |
| CPL_Remove_Programs | Remove Programs                 |
| CPL_Date_Time       | Date/Time Properties            |
| CPL_Certificates    | Certificates                    |
| CPL_Bluetooth       | Bluetooth Device Properties     |
| CPL_Net_Connections | Network and Dial-up Connections |

### Return values:

TRUE indicates success  
FALSE indicates failure

## SysWarmReset

This function supports a warm boot of the device.

```
BOOL SysWarmReset (void)
```

### Return values:

TRUE indicates success  
FALSE indicates failure

## Bar Code Scanner Controls

### BCGetPower

This function retrieves the state of barcode engine's power.

```
BOOL BCGetPower (PBOOL lpPowerState)
```

### Parameter:

lpPowerState  
[out] Pointer to the variable that specifies the state of barcode engine's power.  
If this parameter is TRUE, the engine is enabled.  
If the parameter is FALSE, the engine is disabled.

### Return values:

TRUE indicates success  
FALSE indicates failure

## BCSetPower

This function sets the power of barcode engine.

```
BOOL BCSetPower (BOOL dwState)
```

### Parameter:

dwState  
[in] Specifies the state of barcode engine's power. If this parameter is TRUE, the engine is enabled. If the parameter is FALSE, the engine is disabled.

### Return values:

TRUE indicates success  
FALSE indicates failure

## BCStartScan

This function starts the scan process of barcode engine.

```
BOOL BCStartScan (void)
```

### Parameter:

None.

### Return values:

TRUE indicates success  
FALSE indicates failure

## BCStopScan

This function stops the scan process of barcode engine.

```
BOOL BCStopScan (void)
```

### Parameter:

None.

### Return values:

TRUE indicates success  
FALSE indicates failure

## BCGetLastNotifyEvent

The WM\_BC\_NOTIFY is posted to the window to notify the state of scanning process when process is running. This function retrieves the state of scanning process.

```
BOOL ZBCRGetLastNotifyEvent (PDWORD lpNotifyEvent)
```

### Parameter:

lpNotifyEvent  
[out] Pointer to the variable that specifies the state of scan process.

The following table shows the possible values.

| Value                     | Description             |
|---------------------------|-------------------------|
| BC_NOTIFY_START_SCAN      | Start to scan a barcode |
| BC_NOTIFY_STOP_SCAN       | Stop scan               |
| BC_NOTIFY_RECEIVE_BARCODE | Receive barcode         |
| BC_NOTIFY_SCAN_FAILED     | Scan is failed          |

### Return values:

TRUE indicates success  
FALSE indicates failure

## BCGetLastBarcode

This function retrieves the string of decoded bar code.

```
BOOL BCGetLastBarcode (LPTSTR lpszBarcode)
```

### Parameter:

lpszBarcode  
[out] Pointer to a null-terminated string that specifies the bar code.

### Return values:

TRUE indicates success  
FALSE indicates failure

## BCGetOutputMode

This function retrieves the setting of bar code output mode.

```
BOOL BCGetOutputMode (PBYTE lpOutputMode)
```

### Parameter:

lpOutputMode  
[out] Pointer to the variable that specifies the setting of bar code output mode.

The following table shows the possible values.

| Value               | Description                                       |
|---------------------|---|
| BC_CLIPBOARD_OUTPUT | Copy the bar code to clipboard and past to window |
| BC_KEYEVENT_OUTPUT  | Simulate the keyboard event for each character    |
| BC_DISABLE_OUTPUT   | Only save the bar code to memory                  |

### Return values:

TRUE indicates success  
FALSE indicates failure

## BCSetOutputMode

This function sets the setting of bar code output mode.

```
BOOL BCSetOutputMode (BYTE dwMode)
```

### Parameter:

dwMode  
[in] the variable that specifies the setting of bar code output mode.

The following table shows the possible values.

| Value               | Description                                       |
|---------------------|---|
| BC_CLIPBOARD_OUTPUT | Copy the bar code to clipboard and past to window |
| BC_KEYEVENT_OUTPUT  | Simulate the keyboard event for each character    |
| BC_DISABLE_OUTPUT   | Only save the bar code to memory                  |

### Return values:

TRUE indicates success  
FALSE indicates failure

## BCGetTerminalChar

This function retrieves the terminal character of decoded bar code.

```
BOOL BCGetTerminalChar (PBYTE lpTermChar)
```

### Parameter:

lpTermChar  
[out] Pointer to the variable that specifies the terminal character of bar code.

The following table shows the possible values.

| Value                  | Description |
|------------------------|-------------|
| BC_TERMINAL_CHAR_ENTER | Enter Key   |
| BC_TERMINAL_CHAR_SPACE | Space Key   |
| BC_TERMINAL_CHAR_TAB   | TAB Key     |
| BC_TERMINAL_CHAR_NONE  | NONE        |

### Return values:

TRUE indicates success  
FALSE indicates failure

## BCSetTerminalChar

This function sets the terminal character of decoded bar code.

```
BOOL BCSetTerminalChar (BYTE dwTermChar)
```

### Parameter:

dwTermChar  
[in] the variable that specifies the terminal character of decoded bar code.

The following table shows the possible values.

| Value                  | Description |
|------------------------|-------------|
| BC_TERMINAL_CHAR_ENTER | Enter Key   |
| BC_TERMINAL_CHAR_SPACE | Space Key   |
| BC_TERMINAL_CHAR_TAB   | TAB Key     |
| BC_TERMINAL_CHAR_NONE  | NONE        |

### Return values:

TRUE indicates success  
FALSE indicates failure

## BCGetPrefix

This function retrieves the prefix string of bar code.

```
BOOL BCGetPrefix(LPTSTR lpszPrefix)
```

### Parameter:

lpszPrefix  
[out] Pointer to a null-terminated string that specifies the prefix string of bar code.

### Return values:

TRUE indicates success  
FALSE indicates failure

## BCSetPrefix

This function sets the prefix string of bar code.

```
BOOL BCSetPrefix(LPTSTR lpszPrefix)
```

### Parameter:

lpszPrefix  
[in] Pointer to a null-terminated string that specifies the prefix string of bar code.

### Return values:

TRUE indicates success  
FALSE indicates failure

## BCGet Suffix

This function retrieves the suffix string of bar code.

```
BOOL BCGet Suffix (LPTSTR lpszSuffix)
```

### Parameter:

lpszSuffix  
[out] Pointer to a null-terminated string that specifies the suffix string of bar code.

### Return values:

TRUE indicates success  
FALSE indicates failure

## BCSetSuffix

This function sets the suffix string of bar code.

```
BOOL BCSetsuffix (LPTSTR lpszSuffix)
```

### Parameter:

lpszSuffix  
[in] Pointer to a null-terminated string that specifies the suffix string of bar code.

### Return values:

TRUE indicates success  
FALSE indicates failure

## BCGetReadMode

This function retrieves the setting of bar code reading mode.

```
BOOL BCGetReadMode (LPDWORD lpReadMode)
```

### Parameter:

lpReadMode

[out] Pointer to the variable that specifies the setting of bar code reading mode.

The following table shows the possible values.

| Value   | Description  |
|---|--|
| BC_SINGLE_READ                                      | When a bar code has been decoded, the scan engine will stop reading and output the decoded data. The scan engine must be triggered again to read another bar code. |
| BC_MULTIPLE_READ                                    | When a bar code has been decoded, the decoded data will be output and the scan engine will keep on reading.  |
| BC_READ_3LABELS_IF_POSSIBLE<br>(Only for 2D Engine) | Read only 3 labels in an image   |
| BC_READ_3LABELS_ONLY<br>(Only for 2D Engine)        | Read 3 labels in an image if possible  |

### Return values:

TRUE indicates success  
FALSE indicates failure

## BCSetReadMode

This function sets the setting of bar code reading mode.

```
BOOL BCSetReadMode (DWORD dwReadMode)
```

### Parameter:

dwReadMode

[in] the variable that specifies the setting of bar code reading mode.

The following table shows the possible values.

| Value   | Description  |
|---|--|
| BC_SINGLE_READ                                      | When a bar code has been decoded, the scan engine will stop reading and output the decoded data. The scan engine must be triggered again to read another bar code. |
| BC_MULTIPLE_READ                                    | When a bar code has been decoded, the decoded data will be output and the scan engine will keep on reading.  |
| BC_READ_3LABELS_IF_POSSIBLE<br>(Only for 2D Engine) | Read only 3 labels in an image   |
| BC_READ_3LABELS_ONLY<br>(Only for 2D Engine)        | Read 3 labels in an image if possible  |

### Return values:

TRUE indicates success  
FALSE indicates failure

## BCGetBuzzerState

This function retrieves the state of the buzzer.

```
BOOL BCGetBuzzerState (PBOOL lpEnableState)
```

### Parameter:

lpEnableState

[out] Pointer to the variable that specifies the state of the buzzer.  
If this parameter is TRUE, the buzzer is enabled.  
If the parameter is FALSE, the buzzer is disabled.

### Return values:

TRUE indicates success  
FALSE indicates failure

## BCSetBuzzerState

This function sets the state of the buzzer.

```
BOOL BCSetBuzzerState (BOOL dwEnableState)
```

### Parameter:

dwEnableState

[in] the variable that specifies the state of the buzzer.  
If this parameter is TRUE, enable the buzzer.  
If the parameter is FALSE, disable the buzzer.

### Return values:

TRUE indicates success  
FALSE indicates failure

## BCGetVibratorState

This function retrieves the setting of vibrator for bar code decoding process.

```
BOOL BCGetVibratorState (PBYTE lpState)
```

### Parameter:

dwState

[out] Pointer to the variable that specifies the setting of vibrator for bar code decoding process.

The following table shows the possible values.

| Value                  | Description                                 |
|------------------------|---|
| BC_DISABLE_VIBRATOR    | Disable vibrator                            |
| BC_SHORT_VIBRATION     | Short vibration after decode a bar code     |
| BC_TWO_SHORT_VIBRATION | Two times vibration after decode a bar code |
| BC_LONG_VIBRATION      | Long vibration after decode a bar code      |

### Return values:

TRUE indicates success  
FALSE indicates failure

## BCSetVibratorState

This function retrieves the setting of vibrator for bar code decoding process.

BOOL BCSetVibratorState (BYTE dwState)

### Parameter:

dwState

[out] Pointer to the variable that specifies the setting of vibrator for bar code decoding process.

The following table shows the possible values.

| Value                  | Description                                 |
|------------------------|---|
| BC_DIABLE_VIBRATOR     | Disable vibrator                            |
| BC_SHORT_VIBRATION     | Short vibration after decode a bar code     |
| BC_TWO_SHORT_VIBRATION | Two times vibration after decode a bar code |
| BC_LONG_VIBRATION      | Long vibration after decode a bar code      |

### Return values:

TRUE indicates success

FALSE indicates failure

## Functions & Supported Devices

| Functions                 | PHL7000   | PHL8000   | H25       |
|---------------------------|-----------|-----------|-----------|
| SysGetModelName           | Supported | Supported | Supported |
| SysGetFirmwareVersion     | Supported | Supported | Supported |
| SysGetSoftwareVersion     | Supported | Supported | Supported |
| SysGetConfigNumber        | Supported | Supported | Supported |
| SysGetSerialNumber        | Supported | Supported | Supported |
| SysGetLibraryVersion      | Supported | Supported | Supported |
| SysGetMemorySize          | Supported | Supported | Supported |
| SysGetKBDInputMode        | Supported | Supported | Supported |
| SysSetKBDInputMode        | Supported | Supported | Supported |
| SysGetKeypadState         |           |           | Supported |
| SysSetKeypadState         |           |           | Supported |
| SysGetFxKeyPrograms       | Supported | Supported | Supported |
| SysSetFxKeyPrograms       | Supported | Supported | Supported |
| SysGetScreenBrightness    | Supported | Supported | Supported |
| SysSetScreenBrightness    | Supported | Supported | Supported |
| SysGetBrightnessTimer     | Supported | Supported | Supported |
| SysSetBrightnessTimer     | Supported | Supported | Supported |
| SysGetKeypadBacklight     | Supported | Supported | Supported |
| SysSetKeypadBacklight     | Supported | Supported | Supported |
| SysSetWLANPower           | Supported | Supported | Supported |
| SysGetWLANPower           | Supported | Supported | Supported |
| SysGetWLANPHYAddress      | Supported | Supported | Supported |
| SysSetBluetoothPower      | Supported | Supported | Supported |
| SysGetBluetoothPower      | Supported | Supported | Supported |
| SysGetBluetoothPHYAddress | Supported | Supported | Supported |
| SysGetACPowerScheme       | Supported | Supported | Supported |
| SysSetACPowerScheme       | Supported | Supported | Supported |
| SysGetBatteryPowerScheme  | Supported | Supported | Supported |
| SysSetBatteryPowerScheme  | Supported | Supported | Supported |

| Functions                | PHL7000   | PHL8000   | H25       |
|--------------------------|-----------|-----------|-----------|
| SysGetACLineState        | Supported | Supported | Supported |
| SysGetMainBatteryState   | Supported | Supported | Supported |
| SysGetBackupBatteryState | Supported | Supported | Supported |
| SysGetSIPState           | Supported | Supported | Supported |
| SysSetSIPState           | Supported | Supported | Supported |
| SysLaunchCPLProgram      | Supported | Supported | Supported |
| SysWarmReset             |           |           | Supported |
| BCGetPower               | Supported | Supported | Supported |
| BCSetPower               | Supported | Supported | Supported |
| BCStartScan              | Supported | Supported | Supported |
| BCStopScan               | Supported | Supported | Supported |
| BCGetLastNotifyEvent     | Supported | Supported | Supported |
| BCGetLastBarcode         | Supported | Supported | Supported |
| BCGetOutputMode          | Supported | Supported | Supported |
| BCSetOutputMode          | Supported | Supported | Supported |
| BCGetTerminalChar        | Supported | Supported | Supported |
| BCSetTerminalChar        | Supported | Supported | Supported |
| BCGetPrefix              | Supported | Supported | Supported |
| BCSetPrefix              | Supported | Supported | Supported |
| BCGetSuffix              | Supported | Supported | Supported |
| BCSetSuffix              | Supported | Supported | Supported |
| BCGetReadMode            |           |           | Supported |
| BCSetReadMode            |           |           | Supported |
| BCGetBuzzerState         |           |           | Supported |
| BCSetBuzzerState         |           |           | Supported |
| BCGetVibratorState       |           |           | Supported |
| BCSetVibratorState       |           |           | Supported |

## Load DLL & Call the Function

The programmer can use LoadLibrary to map syslib.dll module and return a handle that can be used in GetProcAddress to get the address of a DLL function.

**Example:**

```
BOOL GetWIFIPower (DWORD *lpPower)
{
    HMODULE hSDK = LoadLibrary(_T("sysctl.dll"));
    BOOL status=FALSE;
    typedef BOOL (*API_Export)(DWORD * lpPower);
    if(hSDK)
    {
        API_Export Export = (API_Export)GetProcAddress(hSDK, _T("SysGetWLANPower"));
        if(Export){ status=Export(lpPower); }
        FreeLibrary(hSDK);
    }
    return status;
}
```