

SDK API User's Guide (Bluetooth)

Version 1.2.0

Display Audio

Solution Team



Release information

The following changes have been made to this document.

Change History

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Chap 1. Library information

1.1 Overview

- Library name : libnxbt.so
- Interface class name : INX_BT
- Interface header : INX_BT.h
- Dependency libraries : libappbt.so (Broadcom BT wrapper), libnxalsa (BT audio platform), libxml2.so (v2.9.7)
- Operational prerequisites : BSA server daemon (Broadcom BSA server, BT stack)

1.2 INX_BT class instance

The NXBT class provides functions to easily handle the broadcom BT stack

Header	#include <INX_BT.h>
Access class instance	extern INX_BT* getInstance(void)

1.3 List of all members for INX_BT

```

INX_BT(void) {}
virtual ~INX_BT(void) {}

/* NXBT manager APIs */
virtual int32_t initDevManager(void) = 0;
virtual void setRecoveryCommand(const char *command) = 0;
virtual int32_t enableAutoConnection(bool enable) = 0;
virtual bool isAutoConnection(void) = 0;
virtual void autoConnection(bool enable) = 0;
virtual int32_t requestLastAVKConnectedDevIndex(void) = 0;
virtual int32_t requestLastHSConnectedDevIndex(void) = 0;
virtual int32_t acceptPairing(void) = 0;
virtual int32_t rejectPairing(void) = 0;
virtual int32_t unpairDevice(int32_t device_index) = 0;
virtual int32_t enableAutoPairing(bool enable) = 0;
virtual bool isAutoPairing(void) = 0;
virtual int32_t enableDiscoverable(bool enable) = 0;
virtual bool isDiscoverable(void) = 0;

```

```

virtual int32_t renameLocalDevice(const char *name) = 0;
virtual char* getLocalDevName(void) = 0;
virtual unsigned char* getLocalAddress(void) = 0;
virtual int32_t getPairedDevCount(void) = 0;
virtual int32_t getPairedDevInfoByIndex(int32_t device_index, char *name, unsigned char
*bd_addr) = 0;
virtual int32_t getPairedDevAddrByIndex(int32_t device_index, unsigned char *bd_addr) =
0;
virtual int32_t getPairedDevNameByIndex(int32_t device_index, char *name) = 0;
virtual int32_t getPairedDevIndexByAddr(unsigned char *bd_addr) = 0;
virtual char* getPairedDevNameByAddr(unsigned char *bd_addr) = 0;
virtual void setALSADevName(const char *playback, const char *capture, const char
*playback_bt, const char *capture_bt, bool use_pcm_sync) = 0;

/* NXBT AVK service APIs */
virtual int32_t openAudioAVK(void) = 0;
virtual void closeAudioAVK(void) = 0;
virtual bool isAudioStatusAVK(void) = 0;
virtual bool isConnectedAVK(void) = 0;
virtual int32_t connectToAVK(int32_t device_index) = 0;
virtual int32_t disconnectFromAVK(unsigned char *bd_addr) = 0;
virtual int32_t getConnectionNumberAVK(void) = 0;
virtual int32_t getConnectionDevAddrAVK(int32_t connected_index, unsigned char *bd_addr)
= 0;
virtual int32_t requestGetElementAttr(unsigned char *bd_addr) = 0;
virtual int32_t playStartAVK(unsigned char *bd_addr) = 0;
virtual int32_t playStopAVK(unsigned char *bd_addr) = 0;
virtual int32_t playPauseAVK(unsigned char *bd_addr) = 0;
virtual int32_t playNextAVK(unsigned char *bd_addr) = 0;
virtual int32_t playPrevAVK(unsigned char *bd_addr) = 0;

/* NXBT HS service APIs */
virtual bool isConnectedHS(void) = 0;
virtual int32_t requestIndicator(void) = 0;
virtual void requestCurrentCalls(void) = 0;
virtual int32_t getConnectionDevAddrHS(unsigned char *bd_addr) = 0;
virtual int32_t connectToHS(int32_t device_index) = 0;
virtual int32_t disconnectFromHS(void) = 0;
virtual int32_t pickUpCall(void) = 0;
virtual int32_t hangUpCall(void) = 0;
virtual int32_t openAudioHS(void) = 0;
virtual int32_t closeAudioHS(void) = 0;
virtual bool isOpenedAudioHS(void) = 0;
virtual void muteMicrophoneHS(bool mute) = 0;

```

```

virtual bool isMutedMicrophoneHS(void) = 0;
virtual int32_t dialPhoneNumber(const char *number) = 0;
virtual int32_t reDialPhoneNumber(void) = 0;
virtual int32_t setATCommandDTMF(char key) = 0;
virtual int32_t requestCallOperName(void) = 0;
virtual int32_t getCurrentBattChargingStatus(void) = 0;
virtual int32_t startVoiceRecognition(void) = 0;
virtual int32_t stopVoiceRecognition(void) = 0;

/* NXBT PBC service APIs */
virtual bool isConnectedPBC(void) = 0;
virtual int32_t connectToPBC(int32_t device_index) = 0;
virtual int32_t disconnectFromPBC(void) = 0;
virtual int32_t abortPBC(void) = 0;
virtual int32_t getContactFromPBC(void) = 0;
virtual int32_t getCallHistoryFromPBC(void) = 0;

/* NXBT MCE service APIs */
virtual bool isConnectedMCE(void) = 0;
virtual int32_t connectToMCE(int32_t device_index) = 0;
virtual int32_t disconnectFromMCE(void) = 0;
virtual int32_t abortMCE(void) = 0;
virtual int32_t startNotifyServerFromMCE(void) = 0;
virtual int32_t stopNotifyServerFromMCE(void) = 0;
virtual int32_t getParserBmsg(char *fullName, char *phoneNumber, char *msgBody) = 0;

/* NXBT UI callback functions */
virtual void registerMGTDDisconnectedCbManager(void *pObj, void (*cbFunc)(void *)) = 0;
virtual void registerPairingFailedCbManager(void *pObj, void (*cbFunc)(void *, int32_t)) = 0;
virtual void registerPairedDevicesCbManager(void *pObj, void (*cbFunc)(void *)) = 0;
virtual void registerUnpairedDevicesCbManager(void *pObj, void (*cbFunc)(void *)) = 0;
virtual void registerPairingRequestCbManager(void *pObj, void (*cbFunc)(void *, bool, char *, unsigned char *, int32_t)) = 0;
virtual void registerLinkDownEventCbManager(void *pObj, void (*cbFunc)(void *, unsigned char *, int32_t)) = 0;
virtual void registerOpenFailedCbAVK(void *pObj, void (*cbFunc)(void *)) = 0;
virtual void registerStreamingStartedCbAVK(void *pObj, void (*cbFunc)(void *, bool)) = 0;
virtual void registerStreamingStoppedCbAVK(void *pObj, void (*cbFunc)(void *)) = 0;
virtual void registerConnectionStatusCbAVK(void *pObj, void (*cbFunc)(void *, bool, char *, unsigned char *)) = 0;
virtual void registerConnectionStatusCbAVKRC(void *pObj, void (*cbFunc)(void *, bool)) = 0;
virtual void registerPlayStatusCbAVK(void *pObj, void (*cbFunc)(void *, int32_t)) = 0;
virtual void registerMediaElementCbAVK(void *pObj, void (*cbFunc)(void *, char *, char *,

```

```

char *, char *, int32_t)) = 0;
virtual void registerPlayPositionCbAVK(void *pObj, void (*cbFunc)(void *, int32_t)) = 0;
virtual void registerOpenFailedCbHS(void *pObj, void (*cbFunc)(void *)) = 0;
virtual void registerConnectionStatusCbHS(void *pObj, void (*cbFunc)(void *, bool, char *, unsigned char *)) = 0;
virtual void registerInbandRingSupportedCbHS(void *pObj, void (*cbFunc)(void *, bool)) = 0;
virtual void registerCallStatusCbHS(void *pObj, void (*cbFunc)(void *, int32_t)) = 0;
virtual void registerBatteryStatusCbHS(void *pObj, void (*cbFunc)(void *, int32_t)) = 0;
virtual void registerCallOperNameCbHS(void *pObj, void (*cbFunc)(void *, char *)) = 0;
virtual void registerCurrentCalllsCbHS(void *pObj, void (*cbFunc)(void *, char *)) = 0;
virtual void registerAudioMuteStatusCbHS(void *pObj, void (*cbFunc)(void *, bool, bool)) = 0;
virtual void registerVoiceRecognitionStatusCbHS(void *pObj, void (*cbFunc)(void *, unsigned short)) = 0;
virtual void registerIncommingCallNumberCbHS(void *pObj, void (*cbFunc)(void *, char *)) = 0;
virtual void registerCallIndicatorCbHS(void *pObj, void (*cbFunc)(void *, char *)) = 0;
virtual void registerOpenFailedCbPBC(void *pObj, void (*cbFunc)(void *)) = 0;
virtual void registerConnectionStatusCbPBC(void *pObj, void (*cbFunc)(void *, bool)) = 0;
virtual void registerNotifyGetPhonebookCbPBC(void *pObj, void (*cbFunc)(void *, int32_t)) = 0;
virtual void registerOpenFailedCbMCE(void *pObj, void (*cbFunc)(void *)) = 0;
virtual void registerConnectionStatusCbMCE(void *pObj, void (*cbFunc)(void *, bool)) = 0;
virtual void registerNotifyGetMessageCbMCE(void *pObj, void (*cbFunc)(void *)) = 0;

```

Chap 2. Pure virtual functions

2.1 NXBT manager APIs

2.1.1 initDevManager

int32_t initDevManager(void)
Description This function connects to bsa_server.
Arguments void
Return Value 0 : Success, -1 : Fail

2.1.2 setRecoveryCommand

void setRecoveryCommand(const char *command)
Description This function sets bsa_server command option for recovery.
Arguments command : bsa_server command.
Return Value void

2.1.3 enableAutoConnection

int32_t enableAutoConnection(bool enable)
Description This function decides whether or not to apply the automatic connection scenario.
Arguments enable : True or false
Return Value 0 : Success, -1 : Fail

2.1.4 isAutoConnection

bool isAutoConnection(void)
Description

This function checks automatic connection is true or false.

Arguments

void

Return Value

True : Enabled, False : Disabled

2.1.5 autoConnection

<code>void autoConnection(bool enable)</code>

Description

This function applies automatic connection.

Arguments

enable : True or false

Return Value

void

2.1.6 requestLastAVKConnectedDevIndex

<code>int32_t requestLastAVKConnectedDevIndex(void)</code>
--

Description

This function request latest AVK connected device index from the bt_devices.xml.
--

Arguments

void

Return Value

Device's index

2.1.7 requestLastHSCConnectedDevIndex

<code>int32_t requestLastHSCConnectedDevIndex(void)</code>
--

Description

This function request latest HS connected device index from the bt_devices.xml.

Arguments

void

Return Value

Device's index

2.1.8 acceptPairing

<code>int32_t acceptPairing(void)</code>
--

Description

This function accepts the pairing request.
--

Arguments

void
Return Value 0 : Success, -1 : Fail

2.1.9 rejectPairing

int32_t rejectPairing(void)
Description This function rejects the pairing request.
Arguments void
Return Value 0 : Success, -1 : Fail

2.1.10 unpairDevice

int32_t unpairDevice(int32_t device_index)
Description This function unpairs the paired device.
Arguments device_index : Index of the paired device
Return Value 0 : Success, -1 : Fail

2.1.11 enableAutoPairing

int32_t enableAutoPairing(bool enable)
Description This function decides whether or not to apply automatic pairing.
Arguments enable : True or false
Return Value 0 : Success, -1 : Fail

2.1.12 enableAutoPairing

int32_t enableAutoPairing(bool enable)
Description This function decides whether or not to apply automatic pairing.
Arguments enable : True or false
Return Value

0 : Success, -1 : Fail

2.1.13 isAutoPairing

bool isAutoPairing(void)

Description

This function checks the status of auto-pairing.
--

Arguments

void

Return Value

True : Enabled, False : Disabled

2.1.14 enableDiscoverable

int32_t enableDiscoverable(bool enable)
--

Description

This function decides whether or not to apply the discoverable mode.
--

Arguments

enable : True or false

Return Value

0 : Success, -1 : Fail

2.1.15 isDiscoverable

bool isDiscoverable(void)

Description

This function checks the discoverable mode.

Arguments

void

Return Value

True : Enabled, False : Disabled

2.1.16 renameLocalDevice

int32_t renameLocalDevice(const char *name)
--

Description

This function changes the local device's name.
--

Arguments

name : Name to be changed

Return Value

0 : Success, -1 : Fail

2.1.17 getLocalDevName

char* getLocalDevName(void)
Description This function reads the local device's name.
Arguments void
Return Value Local device's name

2.1.18 getLocalAddress

unsigned char* getLocalAddress(void)
Description This function reads the local device's address.
Arguments void
Return Value Local device's address

2.1.19 getPairedDevCount

int32_t getPairedDevCount(void)
Description This function gets the number of paired devices.
Arguments void
Return Value Number of paired devices

2.1.20 getPairedDevInfoByIndex

int32_t getPairedDevInfoByIndex(int32_t device_index, char *name, unsigned char *bd_addr)
Description This function retrieves information about devices paired by index.
Arguments device_index : Index of the paired devices name : Input buffer to store name bd_addr : Input buffer to store 6bytes address
Return Value 0 : Success, -1 : Fail

2.1.21 getPairedDevAddrByIndex

<code>int32_t getPairedDevAddrByIndex(int32_t device_index, unsigned char *bd_addr)</code>
Description This function retrieves address about devices paired by index.
Arguments device_index : Index of the paired devices bd_addr : Input buffer to store 6bytes address
Return Value 0 : Success, -1 : Fail

2.1.22 getPairedDevNameByIndex

<code>int32_t getPairedDevNameByIndex(int32_t device_index, char *name)</code>
Description This function retrieves name about devices paired by index.
Arguments device_index : Index of the paired devices name : Input buffer to store name
Return Value 0 : Success, -1 : Fail

2.1.23 getPairedDevIndexByAddr

<code>int32_t getPairedDevIndexByAddr(unsigned char *bd_addr)</code>
Description This function retrieves index about devices paired by device's address.
Arguments bd_addr : Input buffer to store 6bytes address
Return Value 0 : Success, -1 : Fail

2.1.24 getPairedDevNameByAddr

<code>char* getPairedDevNameByAddr(unsigned char *bd_addr)</code>
Description This function retrieves name about devices paired by devices's address.
Arguments bd_addr : Input buffer to store 6bytes address
Return Value Paired device's name

2.1.25 setALSADevName

```
void setALSADevName(const char *playback, const char *capture, const char *playback_bt,  
const char *capture_bt, bool use_pcm_sync)
```

Description

This function sets ALSA device name.

Arguments

playback : Playback device for I2S codec

capture : Capture device for I2S codec

playback_bt : Playback device for I2S BT

capture_bt : Capture device for I2S BT

use_pcm_sync

- True : Sync mode (Using PCM link)
- False : Async mode

Return Value

void

2.2 NXBT AVK service APIs

2.2.1 openAudioAVK

int32_t openAudioAVK(void)
Description This function opens the AVK ALSA audio device.
Arguments void
Return Value 0 : Succeed, -1 : Failed, -2 : HS audio is currently running

2.2.2 closeAudioAVK

void closeAudioAVK(void)
Description This function closes the AVK ALSA audio device.
Arguments void
Return Value void

2.2.3 isAudioStatusAVK

bool isAudioStatusAVK(void)
Description This function checks whether it is opened with AVK ALSA audio device.
Arguments void
Return Value True : Opened, False : Closed or Not opened

2.2.4 isConnectedAVK(void)

bool isConnectedAVK(void)
Description This function checks whether it is connected with AVK service.
Arguments void
Return Value True : Connected, False : Disconnected

2.2.5 connectToAVK

int32_t connectToAVK(int32_t device_index)
Description This function tries to connect to the AVK profile service.
Arguments device_index : Index of the paired devices
Return Value 0 : Success, -1 : Fail, -2 : Cancel

2.2.6 disconnectFromAVK

int32_t disconnectFromAVK(unsigned char *bd_addr)
Description This function tries to disconnect from AVK profile service.
Arguments bd_addr : Address of AVK connected device
Return Value 0 : Success, -1 : Fail

2.2.7 getConnectionNumberAVK

int32_t getConnectionNumberAVK(void)
Description This function gets the number of paired devices.
Arguments void
Return Value Number of AVK connected device

2.2.8 getConnectionDevAddrAVK

int32_t getConnectionDevAddrAVK(int32_t connected_index, unsigned char *bd_addr)
Description This function gets the address of AVK connected device by index.
Arguments connected_index : Index of AVK connected device bd_addr : Input buffer to store 6bytes address
Return Value 0 : Success, -1 : Fail

2.2.9 requestGetElementAttr

<code>int32_t requestGetElementAttr(unsigned char *bd_addr)</code>
Description This function requests for getting elements.
Arguments bd_addr : Address of AVK connected device
Return Value 0 : Success, -1 : Fail

2.2.10 playStartAVK

<code>int32_t playStartAVK(unsigned char *bd_addr)</code>
Description This function starts audio playback.
Arguments bd_addr : Address of AVK connected device
Return Value 0 : Success, -1 : Fail

2.2.11 playStopAVK

<code>int32_t playStopAVK(unsigned char *bd_addr)</code>
Description This function stops audio playback.
Arguments bd_addr : Address of AVK connected device
Return Value 0 : Success, -1 : Fail

2.2.12 playPauseAVK

<code>int32_t playPauseAVK(unsigned char *bd_addr)</code>
Description This function pauses audio playback.
Arguments bd_addr : Address of AVK connected device
Return Value 0 : Success, -1 : Fail

2.2.13 playNextAVK

<code>int32_t playNextAVK(unsigned char *bd_addr)</code>
--

Description
This function plays the next song.
Arguments
bd_addr : Address of AVK connected device
Return Value
0 : Success, -1 : Fail

2.2.14 playPrevAVK

int32_t playPrevAVK(unsigned char *bd_addr)
Description
This function plays the previous song.
Arguments
bd_addr : Address of AVK connected device
Return Value
0 : Success, -1 : Fail

2.3 NXBT HS service APIs

2.3.1 isConnectedHS

bool isConnectedHS(void)
Description This function checks whether it is connected with HS service.
Arguments void
Return Value True : Connected, False : Disconnected

2.3.2 requestIndicator

int32_t requestIndicator(void)
Description This function requests indicator call string.
Arguments void
Return Value 0 : Success, -1 : Fail

2.3.3 requestCurrentCalls

int32_t requestIndicator(void)
Description This function requests indicator call string.
Arguments void
Return Value 0 : Success, -1 : Fail

2.3.4 getConnectionDevAddrHS

int32_t getConnectionDevAddrHS(unsigned char *bd_addr)
Description This function gets the address of HS connected device by index.
Arguments bd_addr : Address of HS connected device
Return Value 0 : Success, -1 : Fail

2.3.5 connectToHS

int32_t connectToHS(int32_t device_index)
Description This function tries to connect to the HS profile service.
Arguments device_index : Index of the paired devices
Return Value 0 : Success, -1 : Fail

2.3.6 disconnectFromHS

int32_t disconnectFromHS(void)
Description This function tries to disconnect from HS profile service.
Arguments void
Return Value 0 : Success, -1 : Fail

2.3.7 pickUpCall

int32_t pickUpCall(void)
Description This function picks up the call.
Arguments void
Return Value 0 : Success, -1 : Fail

2.3.8 hangUpCall

int32_t hangUpCall(void)
Description This function hangs up the call.
Arguments void
Return Value 0 : Success, -1 : Fail

2.3.9 openAudioHS

int32_t openAudioHS(void)

Description
This function opens HS audio.
Arguments
void
Return Value
0 : Success, -1 : Fail

2.3.10 closeAudioHS

int32_t closeAudioHS(void)
Description
This function closes HS audio.
Arguments
void
Return Value
0 : Success, -1 : Fail

2.3.11 isOpenedAudioHS

bool isOpenedAudioHS(void)
Description
This function checks audio HS is opened.
Arguments
void
Return Value
True : Enabled, False : Disabled

2.3.12 muteMicrophoneHS

void muteMicrophoneHS(bool mute)
Description
This function decides whether or not to mute microphone.
Arguments
mute : True or false
Return Value
void

2.3.13 isMutedMicrophoneHS

bool isMutedMicrophoneHS(void)
Description This function checks mic is muted.
Arguments void
Return Value True : Enabled, False : Disabled

2.3.14 dialPhoneNumber

int32_t dialPhoneNumber(const char *number)
Description This function tries to dial.
Arguments number : Destination phone number
Return Value 0 : Success, -1 : Fail

2.3.15 reDialPhoneNumber

int32_t reDialPhoneNumber(void)
Description This function tries to redial.
Arguments void
Return Value 0 : Success, -1 : Fail

2.3.16 setATCommandDTMF

int32_t setATCommandDTMF(char key)
Description This function sends AT command.
Arguments key : Dial keypad's key
Return Value 0 : Success, -1 : Fail

2.3.17 requestCallOperName

int32_t requestCallOperName(void)
--

Description
This function requests the call operator's name.
Arguments
void
Return Value
0 : Success, -1 : Fail

2.3.18 **getCurrentBattChargingStatus**

<code>int32_t getCurrentBattChargingStatus(void)</code>
Description
This function gets battery status value.
Arguments
void
Return Value
Battery charging status value (0 ~ 5)

2.3.19 **startVoiceRecognition**

<code>int32_t startVoiceRecognition(void)</code>
Description
This function starts voice recognition.
Arguments
Void
Return Value
0 : Success, -1 : Fail

2.3.20 **stopVoiceRecognition**

<code>int32_t stopVoiceRecognition(void)</code>
Description
This function stops voice recognition.
Arguments
Void
Return Value
0 : Success, -1 : Fail

2.4 NXBT PBC service APIs

2.4.1 isConnectedPBC

bool isConnectedPBC(void)
Description This function checks whether it is connected with PBC service.
Arguments void
Return Value True : Connected, False : Disconnected

2.4.2 connectToPBC

int32_t connectToPBC(int32_t device_index)
Description This function tries to connect to the PBC profile service.
Arguments device_index : Index of the paired devices
Return Value 0 : Success, -1 : Fail

2.4.3 disconnectFromPBC

int32_t disconnectFromPBC(void)
Description This function tries to disconnect from the PBC profile service.
Arguments void
Return Value 0 : Success, -1 : Fail

2.4.4 abortPBC

int32_t abortPBC(void)
Description This function tries to abort the PBC profile service.
Arguments void
Return Value 0 : Success, -1 : Fail

2.4.5 getContactFromPBC

int32_t getContactFromPBC(void)
Description This function imports contacts from PBC profile service.
Arguments void
Return Value 0 : Success, -1 : Fail

2.4.6 getCallHistoryFromPBC

int32_t getCallHistoryFromPBC(void)
Description This function gets the call log from PBC profile service.
Arguments void
Return Value 0 : Success, -1 : Fail

2.5 NXBT MCE service APIs

2.5.1 isConnectedMCE

bool isConnectedMCE(void)
Description This function checks whether it is connected with MCE service.
Arguments void
Return Value True : Connected, False : Disconnected

2.5.2 connectToMCE

int32_t connectToMCE(int32_t device_index)
Description This function tries to connect to the MCE profile service.
Arguments device_index : Index of the paired devices
Return Value 0 : Success, -1 : Fail

2.5.3 disconnectFromMCE

int32_t disconnectFromMCE(void)
Description This function tries to disconnect from the MCE profile service.
Arguments device_index : Index of the paired devices
Return Value 0 : Success, -1 : Fail

2.5.4 abortMCE

int32_t abortMCE(void)
Description This function tries to abort the MCE profile service.
Arguments void
Return Value 0 : Success, -1 : Fail

2.5.5 startNotifyServerFromMCE

int32_t startNotifyServerFromMCE(void)
Description This function starts MNS(Message Notification Server) from the MCE profile service.
Arguments void
Return Value 0 : Success, -1 : Fail

2.5.6 stopNotifyServerFromMCE

int32_t stopNotifyServerFromMCE(void)
Description This function stops MNS(Message Notification Server) from the MCE profile service.
Arguments void
Return Value 0 : Success, -1 : Fail

2.5.7 getParserBmsg

int32_t getParserBmsg(char *fullName, char *phoneNumber, char *msgBody)
Description This function gets the parsed B message.
Arguments fullName : The sender phoneNumber : Sender's phone number msgBody : Message content
Return Value 0 : Success, -1 : Fail

2.6 NXBT UI callback functions

2.6.1 registerMGTDisonnectedCbManager

void registerMGTDisonnectedCbManager(void *pObj, void (*cbFunc)(void *))
Description Notify when MGT is disconnected.
Arguments pObj UI handler cbFunc UI callback stub function - Private handler
Return Value void

2.6.2 registerPairingFailedCbManager

void registerPairingFailedCbManager(void *pObj, void (*cbFunc)(void *, int32_t))
Description Notify when pairing is failed.
Arguments pObj UI handler cbFunc UI callback stub function - Private handler - Fail reason ➔ 0x05 : Rejected
Return Value void

2.6.3 registerPairedDevicesCbManager

void registerPairedDevicesCbManager(void *pObj, void (*cbFunc)(void *))
Description Notify when paired device list is updated.
Arguments pObj UI handler cbFunc UI callback stub function - Private handler
Return Value void

2.6.4 registerUnpairedDevicesCbManager

void registerUnpairedDevicesCbManager(void *pObj, void (*cbFunc)(void *))
Description Notify when device is unpaired.
Arguments pObj UI handler cbFunc UI callback stub function - Private handler
Return Value void

2.6.5 registerPairingRequestCbManager

void registerPairingRequestCbManager(void *pObj, void (*cbFunc)(void *, bool, char *, unsigned char *, int32_t))
Description Notify when receive the pairing request.
Arguments pObj UI handler cbFunc UI callback stub function - Private handler - Automatic mode - Device's name - Device's address - Pairing code (6 digits)
Return Value void

2.6.6 registerLinkDownEventCbManager

void registerLinkDownEventCbManager(void *pObj, void (*cbFunc)(void *, unsigned char *, int32_t))
Description Notify when receive the link down event.
Arguments pObj UI handler cbFunc UI callback stub function - Private handler - Device's address - Reason code ➔ 0x08 : RF signal is disconnected

<ul style="list-style-type: none"> ➔ 0x13 : Turn off the BT module on the remote device or unpair the connected local device ➔ 0x16 : Unpairing connected remote devices from the local device
Return Value void

2.6.7 registerOpenFailedCbAVK

void registerOpenFailedCbAVK(void *pObj, void (*cbFunc)(void *))
Description Notify when AVK open is failed.
Arguments pObj UI handler cbFunc UI callback stub function - Private handler
Return Value void

2.6.8 registerStreamingStartedCbAVK

void registerStreamingStartedCbAVK(void *pObj, void (*cbFunc)(void *, bool))
Description Notify when A2DP streaming is started.
Arguments pObj UI handler cbFunc UI callback stub function - Private handler - True : ALSA open succeed, False : ALSA open failed
Return Value void

2.6.9 registerStreamingStoppedCbAVK

void registerStreamingStoppedCbAVK(void *pObj, void (*cbFunc)(void *))
Description Notify when A2DP streaming is stopped.
Arguments pObj UI handler cbFunc UI callback stub function - Private handler
Return Value

void

2.6.10 registerConnectionStatusCbAVK

<code>void registerConnectionStatusCbAVK(void *pObj, void (*cbFunc)(void *, bool, char *, unsigned char *))</code>
--

Description

Notify when AVK connection status is changed.

Arguments

pObj	UI handler
cbFunc	UI callback stub function
-	Private handler
-	Connection status
-	Device's name
-	Device's address

Return Value

void

2.6.11 registerConnectionStatusCbAVKRC

<code>void registerConnectionStatusCbAVKRC(void *pObj, void (*cbFunc)(void *, bool))</code>

Description

Notify when AVKRC connection status is changed.

Arguments

pObj	UI handler
cbFunc	UI callback stub function
-	Private handler
-	Connection status

Return Value

void

2.6.12 registerPlayStatusCbAVK

<code>void registerPlayStatusCbAVK(void *pObj, void (*cbFunc)(void *, int32_t))</code>
--

Description

Notify when play status is changed.

Arguments

pObj	UI handler
cbFunc	UI callback stub function
-	Private handler
-	Play Status

<p>➔ 0x00 : Stopped</p> <p>➔ 0x01 : Playing</p> <p>➔ 0x02 : Paused</p>
<p>Return Value</p> <p>void</p>

2.6.13 registerMediaElementCbAVK

void registerMediaElementCbAVK(void *pObj, void (*cbFunc)(void *, char *, char *, char *, char *, int32_t))
<p>Description</p> <p>Notify when media elements are updated.</p>
<p>Arguments</p> <p>pObj UI handler</p> <p>cbFunc UI callback stub function</p> <ul style="list-style-type: none"> - Private handler - Title - Artist - Album - Genre - Playing time (milliseconds)
<p>Return Value</p> <p>void</p>

2.6.14 registerPlayPositionCbAVK

void registerPlayPositionCbAVK(void *pObj, void (*cbFunc)(void *, int32_t))
<p>Description</p> <p>Notify when play position is updated.</p>
<p>Arguments</p> <p>pObj UI handler</p> <p>cbFunc UI callback stub function</p> <ul style="list-style-type: none"> - Private handler - Play position (milliseconds)
<p>Return Value</p> <p>void</p>

2.6.15 registerOpenFailedCbHS

void registerOpenFailedCbHS(void *pObj, void (*cbFunc)(void *))
<p>Description</p>

Notify when HS open is failed.
Arguments pObj UI handler cbFunc UI callback stub function - Private handler
Return Value void

2.6.16 registerConnectionStatusCbHS

void registerConnectionStatusCbHS(void *pObj, void (*cbFunc)(void *, bool, char *, unsigned char *))
Description Notify when HS connection status is changed.
Arguments pObj UI handler cbFunc UI callback stub function - Private handler - Connection status - Device's name - Device's address
Return Value void

2.6.17 registerInbandRingSupportedCbHS

void registerInbandRingSupportedCbHS(void *pObj, void (*cbFunc)(void *, bool))
Description Notify that in-band ring is supported or not.
Arguments pObj UI handler cbFunc UI callback stub function - Private handler - Supported or not
Return Value void

2.6.18 registerCallStatusCbHS

void registerCallStatusCbHS(void *pObj, void (*cbFunc)(void *, int32_t))
Description

Notify when call status is changed.	
Arguments	
pObj	UI handler
cbFunc	UI callback stub function
	<ul style="list-style-type: none"> - Private handler - Call status <ul style="list-style-type: none"> ➔ 0x00 : UNKNOWN_CALL ➔ 0x01 : HANG_UP_CALL ➔ 0x02 : INCOMMING_CALL ➔ 0x03 : READY_OUTGOING_CALL ➔ 0x04 : OUTGOING_CALL ➔ 0x05 : PICK_UP_CALL ➔ 0x06 : DISCONNECTED_CALL
Return Value	
void	

2.6.19 registerBatteryStatusCbHS

void registerBatteryStatusCbHS(void *pObj, void (*cbFunc)(void *, int32_t))	
Description	
Notify when the battery status changes or when the value is requested.	
Arguments	
pObj	UI handler
cbFunc	UI callback stub function
	<ul style="list-style-type: none"> - Private handler - Battery charging status value (0 ~ 5)
Return Value	
void	

2.6.20 registerCallOperNameCbHS

void registerCallOperNameCbHS(void *pObj, void (*cbFunc)(void *, char *))	
Description	
Notify when the operator's name is requested.	
Arguments	
pObj	UI handler
cbFunc	UI callback stub function
	<ul style="list-style-type: none"> - Private handler - Call operator's name

Return Value

void

2.6.21 registerCurrentCallsCbHS

```
void registerCurrentCallsCbHS(void *pObj, void (*cbFunc)(void *, char *))
```

Description

Notify when receive the CLCC event.

Arguments

pObj UI handler

cbFunc UI callback stub function

- Private handler

- CLCC string

➔ <idx>,<dir>,<status>,<mode>,<mpty>[,<number>,<type>]

➔ <idx>

➔ The numbering (starting with 1) of the call given by the sequence of setting up or receiving the calls (active, held or waiting) as seen by the served subscriber.

➔ <dir>

➔ 0 (outgoing), 1 (incoming)

➔ <status>

➔ 0 = Active

➔ 1 = Held

➔ 2 = Dialing (outgoing calls only)

➔ 3 = Alerting (outgoing calls only)

➔ 4 = Incoming (incoming calls only)

➔ 5 = Waiting (incoming calls only)

➔ <mode>

➔ 0 (Voice), 1 (Data), 2 (FAX)

➔ <mpty>

➔ 0 (Not Multiparty), 1 (Multiparty)

➔ <number> – (optional)

➔ Phone number

➔ <type> – (optional)

➔ values 128-143 : The phone number format may be a national or international format, and may contain prefix and/or escape digits.

➔ values 144-159 : The phone number format is an international number, including the country code prefix.

➔ values 160-175 : National number. No prefix nor escape digits included.

Return Value

void

2.6.22 registerAudioMuteStatusCbHS

void registerAudioMuteStatusCbHS(void *pObj, void (*cbFunc)(void *, bool, bool))

Description

Notify when audio HS and mic mute status are changed.

Arguments

pObj	UI handler
cbFunc	UI callback stub function
-	Private handler
-	Mute status
-	Audio HS status

Return Value

void

2.6.23 registerVoiceRecognitionStatusCbHS

void registerVoiceRecognitionStatusCbHS(void *pObj, void (*cbFunc)(void *, unsigned short))
--

Description

Notify when voice recognition status is changed.

Arguments

pObj	UI handler
cbFunc	UI callback stub function
-	Private handler
-	Voice recognition status

Return Value

void

2.6.24 registerIncommingCallNumberCbHS

registerIncommingCallNumberCbHS(void *pObj, void (*cbFunc)(void *, char *))
--

Description

Notify the phone number when is incomming call.

Arguments

pObj	UI handler
cbFunc	UI callback stub function
-	Private handler
-	CLIP string
➔	CLIP string structure (Calling line identification notification)

<ul style="list-style-type: none"> ➔ <number>, type> ➔ <number> ➔ Phone number ➔ <type> ➔ values 128-143: The phone number format may be a national or international format, and may contain prefix and/or escape digits. ➔ values 144-159: The phone number format is an international number, including the country code prefix. ➔ values 160-175: National number. No prefix nor escape digits included.
Return Value void

2.6.25 registerCallIndicatorCbHS

void registerCallIndicatorCbHS(void *pObj, void (*cbFunc)(void *, char *))
Description Notify when receive the CIND event.
Arguments pObj UI handler cbFunc UI callback stub function <ul style="list-style-type: none"> - Private handler - CIND string ➔ CIND string structure (Call indicator) ➔ ("call",(0,1)),("callsetup",(0-3)),("service",(0-1)),("signal",(0-5)),("roam",(0,1)),("battchg",(0-5)),("callheld",(0-2))
Return Value void

2.6.26 registerOpenFailedCbPBC

void registerOpenFailedCbPBC(void *pObj, void (*cbFunc)(void *))
Description Notify when PBC open is failed.
Arguments pObj UI handler cbFunc UI callback stub function <ul style="list-style-type: none"> - Private handler
Return Value void

2.6.27 registerConnectionStatusCbPBC

void registerConnectionStatusCbPBC(void *pObj, void (*cbFunc)(void *, bool))
Description Notify when PBC connection status is changed.
Arguments pObj UI handler cbFunc UI callback stub function - Private handler - Connection status
Return Value void

2.6.28 registerNotifyGetPhoneBookCbPBC

void registerNotifyGetPhoneBookCbPBC(void *pObj, void (*cbFunc)(void *))
Description Notify when contact or call log is received. It is created as 'pb_data.vcf' file in "/etc/bluetooth/"
Arguments pObj UI handler cbFunc UI callback stub function - Private handler
Return Value void

2.6.29 registerOpenFailedCbMCE

void registerOpenFailedCbMCE(void *pObj, void (*cbFunc)(void *))
Description Notify when MCE open is failed.
Arguments pObj UI handler cbFunc UI callback stub function - Private handler
Return Value void

2.6.30 registerConnectionStatusCbMCE

void registerConnectionStatusCbMCE(void *pObj, void (*cbFunc)(void *, bool))
Description

Notify when MCE connection status is changed.	
Arguments	
pObj	UI handler
cbFunc	UI callback stub function
-	Private handler
-	Connection status
Return Value	
void	

2.6.31 registerNotifyGetMessageCbMCE

void registerNotifyGetMessageCbMCE(void *pObj, void (*cbFunc)(void *))	
Description	
Notify when SMS message is received. It is created as 'get_msg.txt' file in "/etc/bluetooth/"	
Arguments	
pObj	UI handler
cbFunc	UI callback stub function
-	Private handler
Return Value	
void	