USB Box Development Book

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1. **Initialize the device**

UsbBox_EnableDevice()

function	UsbBox_DisableDevice

2. Release the device

UsbBox_DisableDevice()

function	UsbBox_EnableDevice

3. Device model

UsbBox_SetDeviceType(int nType)

nType	Device model 0 =single line 1 = 2 line 2 =4 line 3 =8 line 4 =1 line with earphone The setting will affect the return value of the number of lines

4. Recording trigger

UsbBox_SetRecordMethod(int nReference,int nMethod)

nReference	Channel Number 0-32
nMethod	Triggered by 0 =Voltage (default as analog phone) 1 = Voice（digital phone handset or audio adptor ） 2 = Polarity reversal (subscribed service)

5. Recording file format

UsbBox_SetRecordFormat(int nFormat);

nFormat	Format 0 = waveformat IMA-ADPCM 4KB/S 1 = MP3format

6. Voice return（callback mode）

UsbBox_VoiceCallBack(USBVOICECALLACK pfun)

pfun	Recording realtime data Format: IMA-ADPCM Function: real time moitor

7. Event return (callbackmode)

UsbBox_EventCallBack(USBEVENTCALLBACK pfun)

pfun	Event return method 1. Call back (recommended)

	2.Message

8. Message reception(message mode)

UsbBox_SetMsg(HWND hMsgWnd)

hMsgWnd	Get device event by message Get event by 2 methods 1. Callback (recommended) 2. message USBOBX_MSG

9. Get line voltage

UsbBox_GetVoltage(int nReference)

nReference	Channel0-32 Relativechannel voltage return

10. Get line ringtone number

UsbBox_GetRingCount(int nReference);

nReference	Channel0-32 Relative channel ringtone times return

11. Get the current recording duration

UsbBox_GetRecordTime(int nReference)

nReference	Channel0-32 Relative channel recording duration return (ms)

12. Get Caller ID

UsbBox_GetCallerNumber(int nReference,char *pszCaller)

nReference	Channel 0-32
pszCaller	来电号码存储buffer 返回号码长度

13. Get DTMF dialing

UsbBox_GetDtmfNumber(int nReference,char *pszCaller)

nReference	Channel 0-32
pszCaller	DTMF按键存储buffer 返回号码长度

14. Clear Caller ID

UsbBox_ClearCallerNumber(int nReference)

nReference	Channel 0-32

15. Clear DTMF number

UsbBox_ClearDtmfNumber(int nReference);

nReference	Channel 0-32

16. Get the line status

UsbBox_GetState(int nReference)

nReference	Channel Number0-32
	Status:
	CH_STATE_OFFLINE=0,
	// Line disconnected
	CH_STATE_HOOKON,
	// Hook on
	CH_STATE_HOOKOFF,
	// Hook off
	CH_STATE_RINGON ,
	// Ringing
	CH_STATE_INRECORD,
	// Inbound recording
	CH_STATE_OUTRECORD,
	// Outbound recording
	CH_STATE_SOUND,
	// Voice trigger
	CH_STATE_MUTE,
	// Voice mute
	CH_STATE_UNAVAILABLE =255, // Channel unavailble status

17. Hook off

UsbBox_Pickup(int nReference)

nReference	Channel0-32

18. Hook on

UsbBox_HookOn(int nReference)

nReference	Channel0-32

19. Enable microphone (earphone version)

UsbBox_MicOn(int nReference)

nReference	Channel0-32

20. Disable microphone (earphone version)

UsbBox_MicOff(int nReference)

nReference	Channel Number0-32

21. Dialing

UsbBox_Diall(int nReference,char *pszDtmf)

nReference	Channel 0-32
pszDtmf	Telephone number
function	UsbBox_Pickup Sleep(500) UsbBox_Diall Sleep(3000) UsbBox_HookOn

22. Autodial(No need to call other API)

UsbBox_AutoDial(int nReference,char *pszDtmf)

nReference	Channel 0-32
pszDtmf	Telephone number
function	UsbBox_Diall

23. Start playing audio file

UsbBox_PlayFile(int nReference,char *pszPlayFile)

nReference	Channel 0-32
pszPlayFile	Audio file full folder (IMA-ADPCM format)
function	UsbBox_StopPlay

24. Stop playing audio file

UsbBox_StopPlay(int nReference)

nReference	Channel0-32

25. Start recording

UsbBox_StartRecord(int nReference)

nReference	Channel 0-32
function	UsbBox_StopRecord Stop recording UsbBox_SetRecordFolder setup recording folder(auto stored)

26. Stop recording

UsbBox_StopRecord(int nReference)

nReference	Channel0-32

27. Setup the recording folder

UsbBox_SetRecordFolder(char *pszRecordFolder)

pszRecordFolder	Recording file folder SDKsaves the recording file to the folder and return to event after the recording completed.

	EVENT_NEWRECORDFILE UsbBox_GetRecordFilePath Get auto recording files path

28. Get recording file path

UsbBox_GetRecordFilePath(int nReference,char *pszPath)

nReference	Channel 0-32
pszPath	Full path of recording file st
function	UsbBox_SetRecordFolder

29. Clear recording file path

UsbBox_ClearRecordFilePath(int nReference)

nReference	Channel0-32

30. Get the number of device connections

UsbBox_GetDeviceCount()

Related events	EVENT_USBCONNECT

31. Get number of device channel

UsbBox_GetChannelCount()

function	UsbBox_SetDeviceType (Calculated by the device type setting)

32. Get device serial No.

UsbBox_GetDeviceSerial(int nReference)

nReference	USB device serial number 0-4 connected 4 devices max.

33. Get device version

UsbBox_GetDeviceVersion(int nReference,char *pszVersion)

nReference	USB device serial number 0-4 connected 4 devices max.
pszVersion	Device software version
function	UsbBox_GetDeviceSerial

34. Get SDK version

UsbBox_GetDllVersion(char *pszVersion);

pszVersion	Save SDK version

35. Audio format conversion

UsbBox_Adpcm2PCM(char *pszAdpcm,intnLength,short *pszPCM)

Covert IMA-ADPCM to PCM

pszAdpcm	Adpcm buffer
nLength	Adpcm data length
pszPCM	PCM buffer

36. Hook off voltage

UsbBox_SetVoltage(int nReference,int nMinPickupVoltage,int nMaxPickupVoltage)

nReference	Channel0-32	
nMinPickupVoltage	Min. hook off volatage	3V Recommended
nMaxPickupVoltage	Max. hook off voltage	internal 20V external 30V Recommended

37. Line status detection

UsbBox_SetTime(int nReference,int nPickupTime,int nHookOnTime,int nRingTime,int nOffTime,int nRelayTime)

nReference	Channel 0-32	
nPickupTime	Off hook detection	80ms recommended
nHookOnTime	On hook detection	100ms recommended
nRingTime	Ringer detection	200ms recommended
nOffTime	Power off detection	1000ms recommended
nRelayTime	Polarity reversal time	200ms recommended

38. Instant recording on off-hook

UsbBox_StartRecordByPickup(int nReference,int nStartByPickup)

nReference	Channel0-32
nStartByPickup	0 = Disable 1 = Enable

39. Recording delay after dialing completed

UsbBox_SetWaitRecordTime(int nReference,int nWaitTime)

nReference	Channel0-32
nWaitTime	Recording waiting time for dialing out Recommend:3s

40. Voice trigger recording

UsbBox_TriggerParam(int nReference,int nSoundTime,int nMuteTime,int nVolume)

nReference	Channel0-32	
nSoundTime	Threshold acknowledge	100ms recommended
nMuteTime	Silence acknowledge	5000ms recommended
nVolume	Voice trigger volumn level, 1-32	10 recommended, the

		smaller the more sensitive

41. PBX access code (The preliminary digits that a user must dial to get the outgoing trunk)

UsbBox_SetOutNumber(int nReference,char *pszNumber)

nReference	Channel0-32
pszNumber	0 or 9 is the most common access code for PBX external line The dialing out number will be time delayed after this acess code

42. Line playing volume

UsbBox_SetPlayVolume(int nReference,int nVolume)

nReference	Channel0-32
nVolume	Line playing volume 0-16 0 = mute 10 = recommended

43. Line recording volume

UsbBox_SetRecordVolume(int nReference,int nVolume);

nReference	Channel0-32
nVolume	Line recording volume 0-16 0 = mute 10 = recommended

44. Line AGC

UsbBox_SetAGC(int nReference,int nAGC)

nReference	Channel0-32
nAGC	AGC 0 = Disable 1 = Enable

45. Stop receiving DTMF key press time

UsbBox_StopSaveDtmfTime(int nTimeSeconds)

nTimeSeconds	If the interval between two DTMFs exceeds N seconds after dialing, the subsequent DTMF keys will not be saved. Set=0, the entire process will be saved. Recommeded 7 sec

46. Missed Call settings

UsbBox_MissedCallTime(int nTimeMs);

nTimeMs	If there is no answer after 2 ringing times exceeding N ms, it will be granted as missed call.

	Recommended 7000ms.

47. Pickup waiting time for PC dialing

UsbBox_SoftDialWaitTime(int nTimeSeconds)

nTimeSeconds	On PC dialing mode, waiting time before handset picking up, otherwise the call will be ended. Recommend:3s

48. DTMF waiting time

UsbBox_DtmfCallerIDTime(int nTimeMs)

nTimeMs	Waiting time for completed DTMFreceiving Recommend:1000ms

49. Enable network dial-up (TCP) function

UsbBox_EnableNetDial_TCP(int nPort)

nPort	TCP port for listening for SOCKET dial-up. Default: 4700

50. Disable network dial-up (TCPprotocol) function

UsbBox_DisableNetDial_TCP()

51. Enable network dial-up (WEBSOCKET) function

UsbBox_EnableNetDial_WS(int nPort)

nPort	Websocketport for listening websocket dial-upDefault:1818

52. Disable network dial-up(WEBSOCKET) function

UsbBox_DisableNetDial_WS()

53. Get SOCKET dialing command

UsbBox_GetSocketDialCommand(char *pszCommand)

pszCommand	Get dialing command string

54. Get ws dial command

UsbBox_GetWsDialCommand(char *pszCommand)

pszCommand	Get dialing command string

55. Announcement for incoming call

UsbBox_SetAnnouncement(int nReference,int nEnable)

nReference	Channel0-32
nEnable	nEnable 0=Disable 1=Enable The device will play the audio file on incoming calls

56. Annoucement file parameter

UsbBox_SetAnnouncementFile(int nReference,char *pszFilePath)

nReference	Channel0-32
pszFilePath	File path, example c:\\annoucement.wav" The file format is IMA-ADPCM 32BIT

57. Ansewering machine

UsbBox_SetAnswerMachine(int nReference,int nEnable)

nReference	Channel0-32
nEnable	nEnable 0 = Disable

58. Play greetings for answering machine

UsbBox_SetAnswerMchineFile(int nReference,char *pszFilePath)

nReference	Channel0-32
pszFilePath	File path i.e C:\\greetings.wav File format required: IMA-ADPCM 32BIT

59. Answering machine time select

UsbBox_AnswerMachineTimer(int nReference,int nFromHour,int nFromMin,int nToHour,int nToMin)

nReference	Channel0-32
nFromHour	Set hour for starting answering machine
nFromMin	Set minute for starting answering machine
nToHour	Set hour for ending answering machine
nToMin	Set minute for ending answering machine

60. Answering maching settings

UsbBox_AnswerMachineParam(int nReference,int nWaitRingCount,intnMaxSeconds)

nReference	Channel0-32	
nWaitRingCount	Ringer count before active answering machine	Recommende: 3 times

nMaxSeconds	Max answering maching time (sec) Recommend: 60s	

61. POST message upload function

Enable/Disable POST message upload function to URL

UsbBox_SetPostMessage(int nEnable)

nEable	nEnable 0 = Disable 1 = Enable

62. POST file upload function

UsbBox_SetPostFile(int nEnable)

Enable / Disable POST file upload function to URL

nEable	nEnable 0= Disable1 = Enable

63. Setup POST message upload

Setup POST message upload URL

UsbBox_SetPostMessageURL(char *pszMessageURL)

pszMessageURL	Message upload URL i.ehttp://192.168.1.100:80/api/Event?

64. Setup POST file upload

Setup POST file upload URL

UsbBox_ SetPostFileURL(char *pszMessageURL)

pszMessageURL	File upload URL i.ehttp://192.168.1.100:80/api/Files

65. Setup web commnunication ID and Name

Set system name system ID for POST upload

UsbBox_SetSystemInfo(char *pszSysName,char *pszSysID)

pszSysName	System name utf8<32 characters
PszSysID	System ID Must be an 8-digit number. The unique identifier for communicating with the web page.

66. FTPfile upoad

Enable /Disable file uploading to FTP

UsbBox_SetFTP(intnEnable)

nEnable	Option for file uploading to FTPnEnable 0 = disable 1 = enable

67. FTP Server

UsbBox_SetFTPParam(char*pszHost,char*pszUserName,char*pszPassword,intnPort)

Settings

pszHost	FTP server IP
pszUserName	FTPuser name
pszPassword	FTPpassword
nPort	FTPport defualt: 21