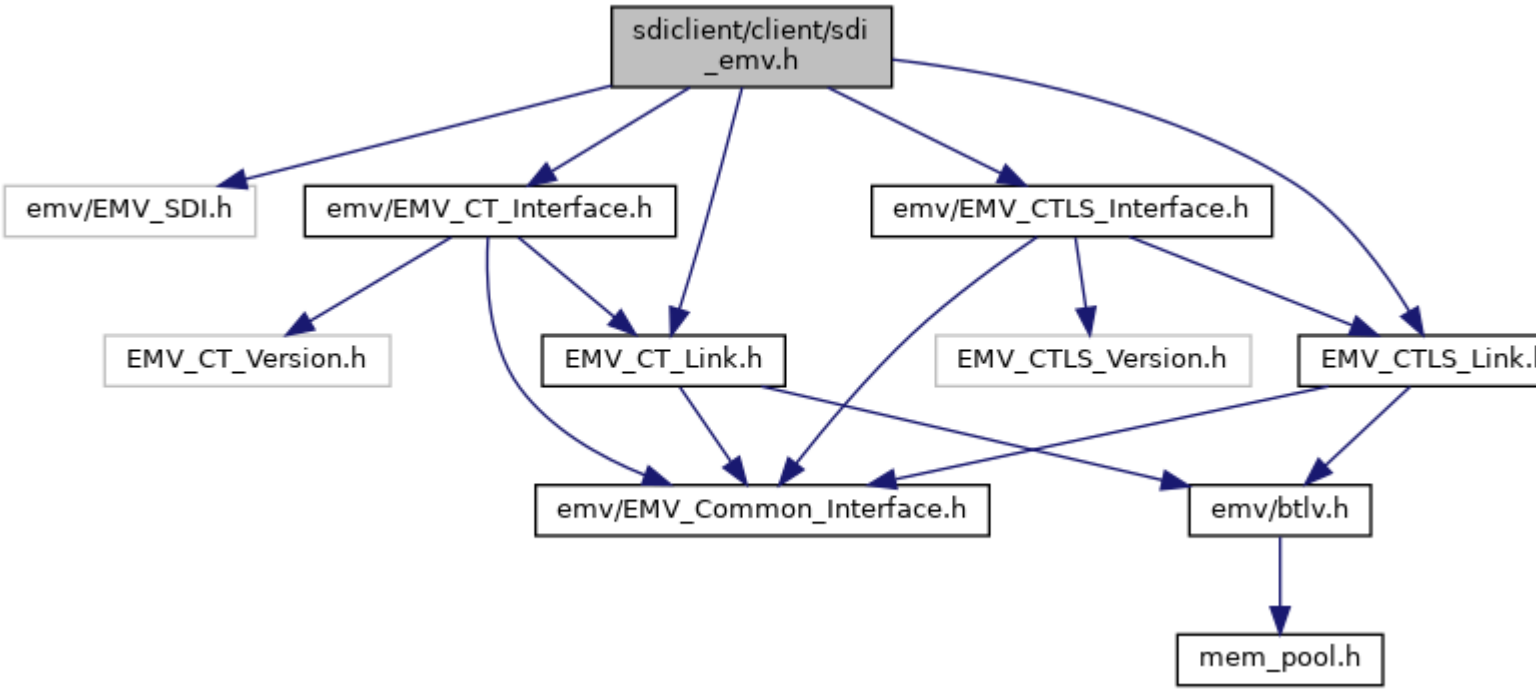
sdi_emv.h File Reference

```
#include "emv/EMV_SDI.h"

#include "emv/EMV_CT_Interface.h"

#include "emv/EMV_CT_Link.h"

#include "emv/EMV_CTLS_Interface.h"

#include "emv/EMV_CTLS_Link.h"
```

Include dependency graph for sdi_emv.h:



Go to the source code of this file.

Macros

#define	SDI_CT_Init_Framework(numberOfAIDs, EMV_Callback, externalData, options) SDI_CT_Init_Framework_Client(EMV_CT_FRAMEWORK_VERSION, (numberOfAIDs), (EMV_Callback), (externalData), (options))

#define SDI_CTLS_Init_Framework(numberOfAIDs, EMV_Callback, externalData, options, ulResult)
SDI_CTLS_Init_Framework_Client(EMV_CTLS_FRAMEWORK_VERSION, (numberOfAIDs), (EMV_Callback), (externalData), (options),(ulResult))

Functions

int	SDI_Client_Init (const char *options) Initialize SDI client. More...
EMV_ADK_INFO	SDI_CT_Init_Framework_Client (const char *version, unsigned char numberOfAIDs, EMV_CT_CALLBACK_FnT EMV_Callback, void *externalData, unsigned long options)
void	SDI_CT_Exit_Framework (void)
void	SDI_CT_Exit_Framework_extended (unsigned char options)
const char *	SDI_CT_CLIENT_GetVersion (void)
const char *	SDI_CT_FRAMEWORK_GetVersion (void)
EMV_ADK_INFO	SDI_CT_MapVirtualTerminal (EMV_ADK_VIRTUALTERMMAP_TYPE VirtualTermMapType, unsigned char *TLVSwitchValue, unsigned int TLVBufLen, unsigned char VirtualTerminal)
EMV_ADK_INFO	SDI_CT_StoreCAPKey (EMV_ADK_HANDLE_RECORD_TYPE eHandleCAPKeyType, const EMV_CT_CAPKEY_TYPE *pxKeyData)
EMV_ADK_INFO	SDI_CT_ReadCAPKeys (EMV_CT_CAPREAD_TYPE *pxKeyData, unsigned char *pucMaxnum)
EMV_ADK_INFO	SDI_CT_GetCAPKeyInfo (EMV_CT_CAPREAD_TYPE *pxKeyInfo, unsigned capacity, unsigned offset, unsigned *received, unsigned *configured)
EMV_ADK_INFO	SDI_CT_SetTermData (EMV_CT_TERMDATA_TYPE *pxTermData)
EMV_ADK_INFO	SDI_CT_GetTermData (EMV_CT_TERMDATA_TYPE *pxTermData)
EMV_ADK_INFO	SDI_CT_SetAppliData (EMV_ADK_HANDLE_RECORD_TYPE eHandleAppliType, EMV_CT_APPLI_TYPE *pxAID, EMV_CT_APPLIDATA_TYPE *pxAppliData)
EMV_ADK_INFO	SDI_CT_GetAppliData (EMV_ADK_READAPPLI_TYPE eReadAppliType, EMV_CT_APPLI_TYPE *pxAID, EMV_CT_APPLIDATA_TYPE *pxAppliData)
EMV_ADK_INFO	SDI_CT_ApplyConfiguration (unsigned long options)
EMV_ADK_INFO	SDI_CT_StartTransaction (EMV_CT_SELECT_TYPE *pxSelectInput, EMV_CT_SELECTRES_TYPE *pxSelectRes)
EMV_ADK_INFO	SDI_CT_GetCandidateData (EMV_CT_CANDIDATE_DATA_TYPE *candidateData)
EMV_ADK_INFO	SDI_CT_ContinueOffline (EMV_CT_TRANSAC_TYPE *pxTransactionInput, EMV_CT_TRANSRES_TYPE *pxTransRes, EMV_SDI_CT_TRANSRES_TYPE *pxSdiTransRes)
EMV_ADK_INFO	SDI_CT_ContinueOnline (EMV_CT_HOST_TYPE *pxOnlineInput, EMV_CT_TRANSRES_TYPE *pxTransRes, EMV_SDI_CT_TRANSRES_TYPE *pxSdiTransRes)

EMV_ADK_INFO	SDI_CT_updateTxnTags (unsigned long options, unsigned char *tlvBuffer, unsigned short bufferLength)
EMV_ADK_INFO	SDI_CT_CheckSupportedAID (const EMV_CT_APPLI_TYPE *aid, unsigned char ASI, const unsigned char *defaultLabel, EMV_CT_CandListType *pCandList, unsigned char MaxCand, unsigned char *pCandidateCount, unsigned short *sw12, const unsigned char *adtCardTagList)
EMV_ADK_INFO	SDI_CT_EndTransaction (unsigned long options)
unsigned char	SDI_CT_SmartISO (unsigned char ucOptions, unsigned short usInDataLen, unsigned char *pucDataIn, unsigned short *pusOutDataLen, unsigned char *pucDataOut, unsigned short usOutBufferLength)
unsigned char	SDI_CT_SmartDetect (unsigned char ucOptions)
unsigned char	SDI_CT_SmartReset (unsigned char ucOptions, unsigned char *pucATR, unsigned long *pnATRLength)
unsigned char	SDI_CT_SmartPowerOff (unsigned char ucOptions)
unsigned char	SDI_CT_Send_PIN_Offline (unsigned char *pucPINResultData)
unsigned char	SDI_CT_LED (unsigned char ucLedId, unsigned char ucLedState, unsigned char ucLedColor, unsigned long ulTimeoutMs)
EMV_ADK_INFO	SDI_CT_SER_Init_Framework (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
void	SDI_CT_SER_Exit_Framework (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
EMV_ADK_INFO	SDI_CT_SER_MapVirtualTerminal (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
EMV_ADK_INFO	SDI_CT_SER_StoreCAPKey (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
EMV_ADK_INFO	SDI_CT_SER_ReadCAPKeys (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
EMV_ADK_INFO	SDI_CT_SER_SetTermData (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
EMV_ADK_INFO	SDI_CT_SER_GetTermData (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
EMV_ADK_INFO	SDI_CT_SER_SetAppliData (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
EMV_ADK_INFO	SDI_CT_SER_GetAppliData (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
EMV_ADK_INFO	SDI_CT_SER_StartTransaction (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
EMV_ADK_INFO	SDI_CT_SER_GetCandidateData (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
EMV_ADK_INFO	SDI_CT_SER_ContinueOffline (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
EMV_ADK_INFO	SDI_CT_SER_ContinueOnline (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)

EMV_ADK_INFO	SDI_CT_SER_updateTxnTags (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
EMV_ADK_INFO	SDI_CT_SER_CheckSupportedAID (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
EMV_ADK_INFO	SDI_CT_SER_EndTransaction (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
unsigned char	SDI_CT_SER_SmartISO (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
unsigned char	SDI_CT_SER_SmartDetect (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
unsigned char	SDI_CT_SER_SmartReset (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
unsigned char	SDI_CT_SER_SmartPowerOff (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
unsigned char	SDI_CT_SER_SmartPIN (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
unsigned char	SDI_CT_SER_Send_PIN_Offline (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
EMV_ADK_INFO	SDI_CTLS_Init_Framework_Client (const char *version, unsigned char numberOfAIDs, EMV_CTLS_CALLBACK_FnT EMV_Callback, void *externalData, unsigned long options, unsigned long *ulResult)
void	SDI_CTLS_Exit_Framework (void)
void	SDI_CTLS_Exit_Framework_extended (unsigned char options)
const char *	SDI_CTLS_CLIENT_GetVersion (void)
const char *	SDI_CTLS_FRAMEWORK_GetVersion (void)
EMV_ADK_INFO	SDI_CTLS_MapVirtualTerminal (EMV_ADK_VIRTUALTERMMAP_TYPE VirtualTermMapType, unsigned char *TLVSwitchValue, unsigned int TLVBufLen, unsigned char VirtualTerminal)
EMV_ADK_INFO	SDI_CTLS_StoreCAPKey (EMV_ADK_HANDLE_RECORD_TYPE eHandleCAPKeyType, const EMV_CTLS_CAPKEY_TYPE *pxKeyData)
EMV_ADK_INFO	SDI_CTLS_ReadCAPKeys (EMV_CTLS_CAPREAD_TYPE *pxKeyData, unsigned char *pucMaxnum)
EMV_ADK_INFO	SDI_CTLS_GetCAPKeyInfo (EMV_CTLS_CAPREAD_TYPE *pxKeyInfo, unsigned capacity, unsigned offset, unsigned *received, unsigned *configured)
EMV_ADK_INFO	SDI_CTLS_SetTermData (EMV_CTLS_TERMDATA_TYPE *pxTermData)
EMV_ADK_INFO	SDI_CTLS_GetTermData (EMV_CTLS_TERMDATA_TYPE *pxTermData)
EMV_ADK_INFO	SDI_CTLS_SetAppliDataSchemeSpecific (EMV_ADK_HANDLE_RECORD_TYPE eHandleAppliType, EMV_CTLS_APPLI_KERNEL_TYPE *pxAID, EMV_CTLS_APPLIDATA_SCHEME_SPECIFIC_TYPE *pxAppliData)
EMV_ADK_INFO	SDI_CTLS_GetAppliDataSchemeSpecific (EMV_ADK_READAPPLI_TYPE eReadAppliType, EMV_CTLS_APPLI_KERNEL_TYPE *pxAID, EMV_CTLS_APPLIDATA_SCHEME_SPECIFIC_TYPE *pxAppliData)

EMV_ADK_INFO	SDI_CTLS_ApplyConfiguration (unsigned long options)
EMV_ADK_INFO	SDI_CTLS_SetupTransaction (EMV_CTLS_START_TYPE *pxStartInput, EMV_CTLS_STARTRES_TYPE *pxStartRes)
EMV_ADK_INFO	SDI_CTLS_ContinueOffline (EMV_CTLS_TRANSRES_TYPE *pxTransRes, EMV_SDI_CTLS_TRANSRES_TYPE *pxSdiTransRes)
EMV_ADK_INFO	SDI_CTLS_ContinueOfflineExt (EMV_CTLS_CONT_OFFL_TYPE *pxContOfflInput, EMV_CTLS_TRANSRES_TYPE *pxTransRes, EMV_SDI_CTLS_TRANSRES_TYPE *pxSdiTransRes)
EMV_ADK_INFO	SDI_CTLS_ContinueOnline (EMV_CTLS_HOST_TYPE *pxOnlineInput, EMV_CTLS_TRANSRES_TYPE *pxTransRes, EMV_SDI_CTLS_TRANSRES_TYPE *pxSdiTransRes)
EMV_ADK_INFO	SDI_CTLS_EndTransaction (unsigned long options)
unsigned char	SDI_CTLS_SmartISO (unsigned char ucOptions, unsigned short usInDataLen, unsigned char *pucDataIn, unsigned short *pusOutDataLen, unsigned char *pucDataOut, unsigned short usOutBufferLength)
unsigned char	SDI_CTLS_SmartReset (unsigned char ucOptions, unsigned char *pucCardInfo, unsigned long *pnInfoLength)
unsigned char	SDI_CTLS_SmartPowerOff (unsigned char ucOptions)
unsigned char	SDI_CTLS_CardRemoval (long timeoutMillis)
unsigned char	SDI_CTLS_LED (unsigned char ucLedId, unsigned char ucLedState)
unsigned char	SDI_CTLS_LED_SetMode (unsigned char ucLedMode)
unsigned char	SDI_CTLS_Break (void)
EMV_ADK_INFO	SDI_CTLS_GetCandidateData (EMV_CTLS_CANDIDATE_DATA_TYPE *candidateData)
EMV_ADK_INFO	SDI_CTLS_SER_Init_Framework (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
void	SDI_CTLS_SER_Exit_Framework (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
EMV_ADK_INFO	SDI_CTLS_SER_MapVirtualTerminal (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
EMV_ADK_INFO	SDI_CTLS_SER_StoreCAPKey (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
EMV_ADK_INFO	SDI_CTLS_SER_ReadCAPKeys (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
EMV_ADK_INFO	SDI_CTLS_SER_SetTermData (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
EMV_ADK_INFO	SDI_CTLS_SER_GetTermData (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
EMV_ADK_INFO	SDI_CTLS_SER_SetAppliDataSchemeSpecific (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
EMV_ADK_INFO	SDI_CTLS_SER_GetAppliDataSchemeSpecific (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)

EMV_ADK_INFO	SDI_CTLS_SER_SetupTransaction (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
EMV_ADK_INFO	SDI_CTLS_SER_ContinueOffline (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
EMV_ADK_INFO	SDI_CTLS_SER_ContinueOnline (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
EMV_ADK_INFO	SDI_CTLS_SER_EndTransaction (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
unsigned char	SDI_CTLS_SER_SmartISO (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
unsigned char	SDI_CTLS_SER_SmartReset (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
unsigned char	SDI_CTLS_SER_SmartPowerOff (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
unsigned char	SDI_CTLS_SER_CardRemoval (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
unsigned char	SDI_CTLS_SER_LED_SetMode (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
unsigned char	SDI_CTLS_SER_LED (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
unsigned char	SDI_CTLS_SER_Break (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)
EMV_ADK_INFO	SDI_CTLS_SER_GetCandidateData (const unsigned char *dataIn, unsigned short dataInLen, unsigned char *dataOut, unsigned short *dataOutLen)

Macro Definition Documentation

? SDI_CT_Init_Framework

```
#define SDI_CT_Init_Framework ( numberOfAIDs,
                                EMV_Callback,
                                externalData,
                                options
                              ) SDI_CT_Init_Framework_Client(EMV_CT_FRAMEWORK_VERSION, (numberOfAIDs), (EMV_Callback), (externalData), (options))
```

? SDI_CTLS_Init_Framework

```
#define SDI_CTLS_Init_Framework ( numberOfAIDs,
                                  EMV_Callback,
                                  externalData,
```

options,
ulResult
SDI_CTLS_Init_Framework_Client
) (EMV_CTLS_FRAMEWORK_VERSION, (numberOfAIDs), (EMV_Callback), (externalData), (options),(ulResult))

Function Documentation

? SDI_Client_Init()

int SDI_Client_Init (const char * *options*)

Initialize SDI client.

Initializes EMV-ADK link libraries to use SDI server. It should be called at application start-up if SDI server use is wanted (although some functionality might be available without).

Author
GSS R&D Germany

Parameters
[in] options future use

Returns
0=okay, else error

? SDI_CT_ApplyConfiguration()

EMV_ADK_INFO SDI_CT_ApplyConfiguration (unsigned long *options*)

? SDI_CT_CheckSupportedAID()

EMV_ADK_INFO SDI_CT_CheckSupportedAID (const EMV_CT_APPLI_TYPE * *aid*,
unsigned char *ASI*,
const unsigned char * *defaultLabel*,
EMV_CT_CandListType * *pCandList*,
unsigned char *MaxCand*,
unsigned char * *pCandidateCount*,
unsigned short * *sw12*,
const unsigned char * *adtCardTagList*
)

? SDI_CT_CLIENT_GetVersion()

const char* SDI_CT_CLIENT_GetVersion (void)

? SDI_CT_ContinueOffline()

EMV_ADK_INFO SDI_CT_ContinueOffline (EMV_CT_TRANSAC_TYPE * *pxTransactionInput*,
EMV_CT_TRANSRES_TYPE * *pxTransRes*,
EMV_SDI_CT_TRANSRES_TYPE * *pxSdiTransRes*
)

? SDI_CT_ContinueOnline()

EMV_ADK_INFO SDI_CT_ContinueOnline (EMV_CT_HOST_TYPE * *pxOnlineInput*,
EMV_CT_TRANSRES_TYPE * *pxTransRes*,
EMV_SDI_CT_TRANSRES_TYPE * *pxSdiTransRes*
)

? SDI_CT_EndTransaction()

EMV_ADK_INFO SDI_CT_EndTransaction (unsigned long *options*)

? SDI_CT_Exit_Framework()

void SDI_CT_Exit_Framework (void)

? SDI_CT_Exit_Framework_extended()

void SDI_CT_Exit_Framework_extended (unsigned char *options*)

? SDI_CT_FRAMEWORK_GetVersion()

const char* SDI_CT_FRAMEWORK_GetVersion (void)

? SDI_CT_GetAppliData()

EMV_ADK_INFO SDI_CT_GetAppliData (EMV_ADK_READAPPLI_TYPE *eReadAppliType*,

EMV_CT_APPLI_TYPE * *pxAID*,
EMV_CT_APPLIDATA_TYPE * *pxAppliData*
)

? SDI_CT_GetCandidateData()

EMV_ADK_INFO SDI_CT_GetCandidateData (EMV_CT_CANDIDATE_DATA_TYPE * *candidateData*)

? SDI_CT_GetCAPKeyInfo()

EMV_ADK_INFO SDI_CT_GetCAPKeyInfo (EMV_CT_CAPREAD_TYPE * *pxKeyInfo*,
unsigned *capacity*,
unsigned *offset*,
unsigned * *received*,
unsigned * *configured*
)

? SDI_CT_GetTermData()

EMV_ADK_INFO SDI_CT_GetTermData (EMV_CT_TERMDATA_TYPE * *pxTermData*)

? SDI_CT_Init_Framework_Client()

EMV_ADK_INFO SDI_CT_Init_Framework_Client (const char * *version*,
unsigned char *numberOfAIDs*,
EMV_CT_CALLBACK_FnT *EMV_Callback*,
void * *externalData*,
unsigned long *options*
)

? SDI_CT_LED()

unsigned char SDI_CT_LED (unsigned char *ucLedId*,
unsigned char *ucLedState*,
unsigned char *ucLedColor*,
unsigned long *ulTimeoutMs*
)

? SDI_CT_MapVirtualTerminal()

```
EMV_ADK_INFO
SDI_CT_MapVirtualTerminal ( EMV_ADK_VIRTUALTERMMAP_TYPE VirtualTermMapType,
                            unsigned char *              TLVSwitchValue,
                            unsigned int                 TLVBufLen,
                            unsigned char                VirtualTerminal
                          )
```

? SDI_CT_ReadCAPKeys()

```
EMV_ADK_INFO SDI_CT_ReadCAPKeys ( EMV_CT_CAPREAD_TYPE * pxKeyData,
                                  unsigned char *       pucMaxnum
                                )
```

? SDI_CT_Send_PIN_Offline()

```
unsigned char SDI_CT_Send_PIN_Offline ( unsigned char * pucPINResultData )
```

? SDI_CT_SER_CheckSupportedAID()

```
EMV_ADK_INFO SDI_CT_SER_CheckSupportedAID ( const unsigned char * dataIn,
                                            unsigned short       dataInLen,
                                            unsigned char *      dataOut,
                                            unsigned short *     dataOutLen
                                          )
```

? SDI_CT_SER_ContinueOffline()

```
EMV_ADK_INFO SDI_CT_SER_ContinueOffline ( const unsigned char * dataIn,
                                          unsigned short       dataInLen,
                                          unsigned char *      dataOut,
                                          unsigned short *     dataOutLen
                                        )
```

? SDI_CT_SER_ContinueOnline()

```
EMV_ADK_INFO SDI_CT_SER_ContinueOnline ( const unsigned char * dataIn,
                                         unsigned short       dataInLen,
```

```
                                                unsigned char *         dataOut,
                                                unsigned short *        dataOutLen
                                              )
```

? SDI_CT_SER_EndTransaction()

```
EMV_ADK_INFO SDI_CT_SER_EndTransaction ( const unsigned char *  dataIn,
                                         unsigned short         dataInLen,
                                         unsigned char *        dataOut,
                                         unsigned short *       dataOutLen
                                       )
```

? SDI_CT_SER_Exit_Framework()

```
void SDI_CT_SER_Exit_Framework ( const unsigned char *  dataIn,
                                 unsigned short         dataInLen,
                                 unsigned char *        dataOut,
                                 unsigned short *       dataOutLen
                               )
```

? SDI_CT_SER_GetAppliData()

```
EMV_ADK_INFO SDI_CT_SER_GetAppliData ( const unsigned char *  dataIn,
                                       unsigned short         dataInLen,
                                       unsigned char *        dataOut,
                                       unsigned short *       dataOutLen
                                     )
```

? SDI_CT_SER_GetCandidateData()

```
EMV_ADK_INFO SDI_CT_SER_GetCandidateData ( const unsigned char *  dataIn,
                                           unsigned short         dataInLen,
                                           unsigned char *        dataOut,
                                           unsigned short *       dataOutLen
                                         )
```

? SDI_CT_SER_GetTermData()

```
EMV_ADK_INFO SDI_CT_SER_GetTermData ( const unsigned char *  dataIn,
```

unsigned short *dataInLen*,
unsigned char * *dataOut*,
unsigned short * *dataOutLen*
)

? SDI_CT_SER_Init_Framework()

EMV_ADK_INFO SDI_CT_SER_Init_Framework (const unsigned char * *dataIn*,
unsigned short *dataInLen*,
unsigned char * *dataOut*,
unsigned short * *dataOutLen*
)

? SDI_CT_SER_MapVirtualTerminal()

EMV_ADK_INFO SDI_CT_SER_MapVirtualTerminal (const unsigned char * *dataIn*,
unsigned short *dataInLen*,
unsigned char * *dataOut*,
unsigned short * *dataOutLen*
)

? SDI_CT_SER_ReadCAPKeys()

EMV_ADK_INFO SDI_CT_SER_ReadCAPKeys (const unsigned char * *dataIn*,
unsigned short *dataInLen*,
unsigned char * *dataOut*,
unsigned short * *dataOutLen*
)

? SDI_CT_SER_Send_PIN_Offline()

unsigned char SDI_CT_SER_Send_PIN_Offline (const unsigned char * *dataIn*,
unsigned short *dataInLen*,
unsigned char * *dataOut*,
unsigned short * *dataOutLen*
)

? SDI_CT_SER_SetAppliData()

```
EMV_ADK_INFO SDI_CT_SER_SetAppliData ( const unsigned char *  dataIn,
                                       unsigned short        dataInLen,
                                       unsigned char *       dataOut,
                                       unsigned short *      dataOutLen
                                     )
```

? SDI_CT_SER_SetTermData()

```
EMV_ADK_INFO SDI_CT_SER_SetTermData ( const unsigned char *  dataIn,
                                      unsigned short        dataInLen,
                                      unsigned char *       dataOut,
                                      unsigned short *      dataOutLen
                                    )
```

? SDI_CT_SER_SmartDetect()

```
unsigned char SDI_CT_SER_SmartDetect ( const unsigned char *  dataIn,
                                       unsigned short        dataInLen,
                                       unsigned char *       dataOut,
                                       unsigned short *      dataOutLen
                                     )
```

? SDI_CT_SER_SmartISO()

```
unsigned char SDI_CT_SER_SmartISO ( const unsigned char *  dataIn,
                                    unsigned short        dataInLen,
                                    unsigned char *       dataOut,
                                    unsigned short *      dataOutLen
                                  )
```

? SDI_CT_SER_SmartPIN()

```
unsigned char SDI_CT_SER_SmartPIN ( const unsigned char *  dataIn,
                                    unsigned short        dataInLen,
                                    unsigned char *       dataOut,
                                    unsigned short *      dataOutLen
                                  )
```

? SDI_CT_SER_SmartPowerOff()

```
unsigned char SDI_CT_SER_SmartPowerOff ( const unsigned char *  dataIn,
                                         unsigned short         dataInLen,
                                         unsigned char *        dataOut,
                                         unsigned short *       dataOutLen
                                       )
```

? SDI_CT_SER_SmartReset()

```
unsigned char SDI_CT_SER_SmartReset ( const unsigned char *  dataIn,
                                      unsigned short         dataInLen,
                                      unsigned char *        dataOut,
                                      unsigned short *       dataOutLen
                                    )
```

? SDI_CT_SER_StartTransaction()

```
EMV_ADK_INFO SDI_CT_SER_StartTransaction ( const unsigned char *  dataIn,
                                           unsigned short         dataInLen,
                                           unsigned char *        dataOut,
                                           unsigned short *       dataOutLen
                                         )
```

? SDI_CT_SER_StoreCAPKey()

```
EMV_ADK_INFO SDI_CT_SER_StoreCAPKey ( const unsigned char *  dataIn,
                                      unsigned short         dataInLen,
                                      unsigned char *        dataOut,
                                      unsigned short *       dataOutLen
                                    )
```

? SDI_CT_SER_updateTxnTags()

```
EMV_ADK_INFO SDI_CT_SER_updateTxnTags ( const unsigned char *  dataIn,
                                        unsigned short         dataInLen,
                                        unsigned char *        dataOut,
                                        unsigned short *       dataOutLen
                                      )
```

? SDI_CT_SetAppliData()

```
EMV_ADK_INFO SDI_CT_SetAppliData ( EMV_ADK_HANDLE_RECORD_TYPE  eHandleAppliType,
                                   EMV_CT_APPLI_TYPE *        pxAID,
                                   EMV_CT_APPLIDATA_TYPE *    pxAppliData
                                 )
```

? SDI_CT_SetTermData()

```
EMV_ADK_INFO SDI_CT_SetTermData ( EMV_CT_TERMDATA_TYPE *  pxTermData )
```

? SDI_CT_SmartDetect()

```
unsigned char SDI_CT_SmartDetect ( unsigned char  ucOptions )
```

? SDI_CT_SmartISO()

```
unsigned char SDI_CT_SmartISO ( unsigned char     ucOptions,
                                unsigned short    usInDataLen,
                                unsigned char *   pucDataIn,
                                unsigned short *  pusOutDataLen,
                                unsigned char *   pucDataOut,
                                unsigned short    usOutBufferLength
                              )
```

? SDI_CT_SmartPowerOff()

```
unsigned char SDI_CT_SmartPowerOff ( unsigned char  ucOptions )
```

? SDI_CT_SmartReset()

```
unsigned char SDI_CT_SmartReset ( unsigned char     ucOptions,
                                  unsigned char *   pucATR,
                                  unsigned long *   pnATRLength
                                )
```

? SDI_CT_StartTransaction()

```
EMV_ADK_INFO SDI_CT_StartTransaction ( EMV_CT_SELECT_TYPE *     pxSelectInput,
                                       EMV_CT_SELECTRES_TYPE *  pxSelectRes
```

)

? SDI_CT_StoreCAPKey()

EMV_ADK_INFO
SDI_CT_StoreCAPKey (EMV_ADK_HANDLE_RECORD_TYPE *eHandleCAPKeyType*,
const EMV_CT_CAPKEY_TYPE * *pxKeyData*
)

? SDI_CT_updateTxnTags()

EMV_ADK_INFO SDI_CT_updateTxnTags (unsigned long *options*,
unsigned char * *tlvBuffer*,
unsigned short *bufferLength*
)

? SDI_CTLS_ApplyConfiguration()

EMV_ADK_INFO SDI_CTLS_ApplyConfiguration (unsigned long *options*)

? SDI_CTLS_Break()

unsigned char SDI_CTLS_Break (void)

? SDI_CTLS_CardRemoval()

unsigned char SDI_CTLS_CardRemoval (long *timeoutMillis*)

? SDI_CTLS_CLIENT_GetVersion()

const char* SDI_CTLS_CLIENT_GetVersion (void)

? SDI_CTLS_ContinueOffline()

EMV_ADK_INFO SDI_CTLS_ContinueOffline (EMV_CTLS_TRANSRES_TYPE * *pxTransRes*,
EMV_SDI_CTLS_TRANSRES_TYPE * *pxSdiTransRes*
)

? SDI_CTLS_ContinueOfflineExt()

EMV_ADK_INFO
SDI_CTLS_ContinueOfflineExt (EMV_CTLS_CONT_OFFL_TYPE * *pxContOfflInput*,
EMV_CTLS_TRANSRES_TYPE * *pxTransRes*,
EMV_SDI_CTLS_TRANSRES_TYPE * *pxSdiTransRes*
)

? SDI_CTLS_ContinueOnline()

EMV_ADK_INFO SDI_CTLS_ContinueOnline (EMV_CTLS_HOST_TYPE * *pxOnlineInput*,
EMV_CTLS_TRANSRES_TYPE * *pxTransRes*,
EMV_SDI_CTLS_TRANSRES_TYPE * *pxSdiTransRes*
)

? SDI_CTLS_EndTransaction()

EMV_ADK_INFO SDI_CTLS_EndTransaction (unsigned long *options*)

? SDI_CTLS_Exit_Framework()

void SDI_CTLS_Exit_Framework (void)

? SDI_CTLS_Exit_Framework_extended()

void SDI_CTLS_Exit_Framework_extended (unsigned char *options*)

? SDI_CTLS_FRAMEWORK_GetVersion()

const char* SDI_CTLS_FRAMEWORK_GetVersion (void)

? SDI_CTLS_GetAppliDataSchemeSpecific()

EMV_ADK_INFO
SDI_CTLS_GetAppliDataSchemeSpecific (EMV_ADK_READAPPLI_TYPE *eReadAppliTyp*,
EMV_CTLS_APPLI_KERNEL_TYPE * *pxAID*,
EMV_CTLS_APPLIDATA_SCHEME_SPECIFIC_TYPE * *pxAppliData*

)

? SDI_CTLS_GetCandidateData()

EMV_ADK_INFO
SDI_CTLS_GetCandidateData (EMV_CTLS_CANDIDATE_DATA_TYPE * *candidateData*)

? SDI_CTLS_GetCAPKeyInfo()

```
EMV_ADK_INFO SDI_CTLS_GetCAPKeyInfo ( EMV_CTLS_CAPREAD_TYPE *  pxKeyInfo,
                                      unsigned                 capacity,
                                      unsigned                 offset,
                                      unsigned *               received,
                                      unsigned *               configured
                                    )
```

? SDI_CTLS_GetTermData()

EMV_ADK_INFO SDI_CTLS_GetTermData (EMV_CTLS_TERMDATA_TYPE * *pxTermData*)

? SDI_CTLS_Init_Framework_Client()

```
EMV_ADK_INFO SDI_CTLS_Init_Framework_Client ( const char *          version,
                                              unsigned char         numberOfAIDs,
                                              EMV_CTLS_CALLBACK_FnT EMV_Callback,
                                              void *                externalData,
                                              unsigned long         options,
                                              unsigned long *       ulResult
                                            )
```

? SDI_CTLS_LED()

```
unsigned char SDI_CTLS_LED ( unsigned char  ucLedId,
                             unsigned char  ucLedState
                           )
```

? SDI_CTLS_LED_SetMode()

unsigned char SDI_CTLS_LED_SetMode (unsigned char *ucLedMode*)

? SDI_CTLS_MapVirtualTerminal()

```
EMV_ADK_INFO
SDI_CTLS_MapVirtualTerminal ( EMV_ADK_VIRTUALTERMMAP_TYPE VirtualTermMapType,
                              unsigned char *             TLVSwitchValue,
                              unsigned int                TLVBufLen,
                              unsigned char               VirtualTerminal
                            )
```

? SDI_CTLS_ReadCAPKeys()

```
EMV_ADK_INFO SDI_CTLS_ReadCAPKeys ( EMV_CTLS_CAPREAD_TYPE * pxKeyData,
                                    unsigned char *         pucMaxnum
                                  )
```

? SDI_CTLS_SER_Break()

```
unsigned char SDI_CTLS_SER_Break ( const unsigned char * dataIn,
                                   unsigned short        dataInLen,
                                   unsigned char *       dataOut,
                                   unsigned short *      dataOutLen
                                 )
```

? SDI_CTLS_SER_CardRemoval()

```
unsigned char SDI_CTLS_SER_CardRemoval ( const unsigned char * dataIn,
                                         unsigned short        dataInLen,
                                         unsigned char *       dataOut,
                                         unsigned short *      dataOutLen
                                       )
```

? SDI_CTLS_SER_ContinueOffline()

```
EMV_ADK_INFO SDI_CTLS_SER_ContinueOffline ( const unsigned char * dataIn,
                                            unsigned short        dataInLen,
                                            unsigned char *       dataOut,
                                            unsigned short *      dataOutLen
                                          )
```

? SDI_CTLS_SER_ContinueOnline()

```
EMV_ADK_INFO SDI_CTLS_SER_ContinueOnline ( const unsigned char *  dataIn,
                                           unsigned short         dataInLen,
                                           unsigned char *        dataOut,
                                           unsigned short *       dataOutLen
                                         )
```

? SDI_CTLS_SER_EndTransaction()

```
EMV_ADK_INFO SDI_CTLS_SER_EndTransaction ( const unsigned char *  dataIn,
                                           unsigned short         dataInLen,
                                           unsigned char *        dataOut,
                                           unsigned short *       dataOutLen
                                         )
```

? SDI_CTLS_SER_Exit_Framework()

```
void SDI_CTLS_SER_Exit_Framework ( const unsigned char *  dataIn,
                                   unsigned short         dataInLen,
                                   unsigned char *        dataOut,
                                   unsigned short *       dataOutLen
                                 )
```

? SDI_CTLS_SER_GetAppliDataSchemeSpecific()

```
EMV_ADK_INFO SDI_CTLS_SER_GetAppliDataSchemeSpecific ( const unsigned char *  dataIn,
                                                       unsigned short         dataInLen,
                                                       unsigned char *        dataOut,
                                                       unsigned short *       dataOutLen
                                                     )
```

? SDI_CTLS_SER_GetCandidateData()

```
EMV_ADK_INFO SDI_CTLS_SER_GetCandidateData ( const unsigned char *  dataIn,
                                             unsigned short         dataInLen,
                                             unsigned char *        dataOut,
                                             unsigned short *       dataOutLen
                                           )
```

? SDI_CTLS_SER_GetTermData()

```
EMV_ADK_INFO SDI_CTLS_SER_GetTermData ( const unsigned char *  dataIn,
                                        unsigned short        dataInLen,
                                        unsigned char *       dataOut,
                                        unsigned short *      dataOutLen
                                      )
```

? SDI_CTLS_SER_Init_Framework()

```
EMV_ADK_INFO SDI_CTLS_SER_Init_Framework ( const unsigned char *  dataIn,
                                           unsigned short        dataInLen,
                                           unsigned char *       dataOut,
                                           unsigned short *      dataOutLen
                                         )
```

? SDI_CTLS_SER_LED()

```
unsigned char SDI_CTLS_SER_LED ( const unsigned char *  dataIn,
                                 unsigned short        dataInLen,
                                 unsigned char *       dataOut,
                                 unsigned short *      dataOutLen
                               )
```

? SDI_CTLS_SER_LED_SetMode()

```
unsigned char SDI_CTLS_SER_LED_SetMode ( const unsigned char *  dataIn,
                                         unsigned short        dataInLen,
                                         unsigned char *       dataOut,
                                         unsigned short *      dataOutLen
                                       )
```

? SDI_CTLS_SER_MapVirtualTerminal()

```
EMV_ADK_INFO SDI_CTLS_SER_MapVirtualTerminal ( const unsigned char *  dataIn,
                                               unsigned short        dataInLen,
                                               unsigned char *       dataOut,
                                               unsigned short *      dataOutLen
                                             )
```

? SDI_CTLS_SER_ReadCAPKeys()

```
EMV_ADK_INFO SDI_CTLS_SER_ReadCAPKeys ( const unsigned char *  dataIn,
                                        unsigned short        dataInLen,
                                        unsigned char *       dataOut,
                                        unsigned short *      dataOutLen
                                      )
```

? SDI_CTLS_SER_SetAppliDataSchemeSpecific()

```
EMV_ADK_INFO SDI_CTLS_SER_SetAppliDataSchemeSpecific ( const unsigned char *  dataIn,
                                                       unsigned short        dataInLen,
                                                       unsigned char *       dataOut,
                                                       unsigned short *      dataOutLen
                                                     )
```

? SDI_CTLS_SER_SetTermData()

```
EMV_ADK_INFO SDI_CTLS_SER_SetTermData ( const unsigned char *  dataIn,
                                        unsigned short        dataInLen,
                                        unsigned char *       dataOut,
                                        unsigned short *      dataOutLen
                                      )
```

? SDI_CTLS_SER_SetupTransaction()

```
EMV_ADK_INFO SDI_CTLS_SER_SetupTransaction ( const unsigned char *  dataIn,
                                             unsigned short        dataInLen,
                                             unsigned char *       dataOut,
                                             unsigned short *      dataOutLen
                                           )
```

? SDI_CTLS_SER_SmartISO()

```
unsigned char SDI_CTLS_SER_SmartISO ( const unsigned char *  dataIn,
                                      unsigned short        dataInLen,
                                      unsigned char *       dataOut,
                                      unsigned short *      dataOutLen
                                    )
```

? SDI_CTLS_SER_SmartPowerOff()

```
unsigned char SDI_CTLS_SER_SmartPowerOff ( const unsigned char *  dataIn,
                                           unsigned short         dataInLen,
                                           unsigned char *        dataOut,
                                           unsigned short *       dataOutLen
                                         )
```

? SDI_CTLS_SER_SmartReset()

```
unsigned char SDI_CTLS_SER_SmartReset ( const unsigned char *  dataIn,
                                        unsigned short         dataInLen,
                                        unsigned char *        dataOut,
                                        unsigned short *       dataOutLen
                                      )
```

? SDI_CTLS_SER_StoreCAPKey()

```
EMV_ADK_INFO SDI_CTLS_SER_StoreCAPKey ( const unsigned char *  dataIn,
                                        unsigned short         dataInLen,
                                        unsigned char *        dataOut,
                                        unsigned short *       dataOutLen
                                      )
```

? SDI_CTLS_SetAppliDataSchemeSpecific()

```
EMV_ADK_INFO
SDI_CTLS_SetAppliDataSchemeSpecific ( EMV_ADK_HANDLE_RECORD_TYPE                  eHandleAppliTy
                                      ,
                                      EMV_CTLS_APPLI_KERNEL_TYPE *                pxAID,
                                      EMV_CTLS_APPLIDATA_SCHEME_SPECIFIC_TYPE *   pxAppliData
                                    )
```

? SDI_CTLS_SetTermData()

```
EMV_ADK_INFO SDI_CTLS_SetTermData ( EMV_CTLS_TERMDATA_TYPE *  pxTermData )
```

? SDI_CTLS_SetupTransaction()

EMV_ADK_INFO SDI_CTLS_SetupTransaction (EMV_CTLS_START_TYPE * *pxStartInput*,
EMV_CTLS_STARTRES_TYPE * *pxStartRes*
)

? SDI_CTLS_SmartISO()

unsigned char SDI_CTLS_SmartISO (unsigned char *ucOptions*,
unsigned short *usInDataLen*,
unsigned char * *pucDataIn*,
unsigned short * *pusOutDataLen*,
unsigned char * *pucDataOut*,
unsigned short *usOutBufferLength*
)

? SDI_CTLS_SmartPowerOff()

unsigned char SDI_CTLS_SmartPowerOff (unsigned char *ucOptions*)

? SDI_CTLS_SmartReset()

unsigned char SDI_CTLS_SmartReset (unsigned char *ucOptions*,
unsigned char * *pucCardInfo*,
unsigned long * *pnInfoLength*
)

? SDI_CTLS_StoreCAPKey()

EMV_ADK_INFO
SDI_CTLS_StoreCAPKey (EMV_ADK_HANDLE_RECORD_TYPE *eHandleCAPKeyType*
,
const EMV_CTLS_CAPKEY_TYPE * *pxKeyData*
)