Smartcard API

API .

- [BS2_ScanCard](): .
- [BS2_WriteCard](): SmartCard .
- [BS2_EraseCard](): SmartCard .

BS2CSNCard

```
typedef struct {
    uint8_t type;
    uint8_t size;
    uint8_t data[BS2_CARD_DATA_SIZE];
} BS2CSNCard;
```

1. *type*

. . ,

Access
.

0x00		
0x01	CSN	
0x02	Secure	
0x03	Access	
0x0A	Wiegand	BS2WiegandConfig.format (BS2WiegandConfig.CSNIndex BS2WiegandConfig.CardMask O .
0x0B	Config	
0x1A	Wiegand	BS2WiegandMultiConfig.formats[0]
0x2A	Wiegand	BS2WiegandMultiConfig.formats[1]
0x3A	Wiegand	BS2WiegandMultiConfig.formats[2]
0x4A	Wiegand	BS2WiegandMultiConfig.formats[3]
0x5A	Wiegand	BS2WiegandMultiConfig.formats[4]
0x6A	Wiegand	BS2WiegandMultiConfig.formats[5]
0x7A	Wiegand	BS2WiegandMultiConfig.formats[6]
0x8A	Wiegand	BS2WiegandMultiConfig.formats[7]
0x9A	Wiegand	BS2WiegandMultiConfig.formats[8]
0xAA	Wiegand	BS2WiegandMultiConfig.formats[9]
0xBA	Wiegand	BS2WiegandMultiConfig.formats[10]
0xCA	Wiegand	BS2WiegandMultiConfig.formats[11]
0xDA	Wiegand	BS2WiegandMultiConfig.formats[12]
0xEA	Wiegand	BS2WiegandMultiConfig.formats[13]

0xFA	Wiegand	BS2WiegandMultiConfig.formats[14]

2. *size*

3. *data*

BS2SmartCardHeader

```
typedef struct {
    uint16_t hdrCRC;
    uint16_t cardCRC;
    BS2_CARD_TYPE cardType;
    uint8_t numOfTemplate;
    uint16_t templateSize;
    uint16_t issueCount;
    uint8_t duressMask;
    uint8_t reserved[5];
} BS2SmartCardHeader;
```

1. *hdrCRC*
card header . (cardCRC - reserved)

2. *cardCRC*
card data . (BS2SmartCardHeader.cardType - BS2SmartCardData.accessOnData)

3. *cardType*

0x00	
0x01	CSN
0x02	Secure
0x03	Access
0x0A	Wiegand
0x0B	Config

4. *numOfTemplate*

5. *templateSize*
. 384 .
BioStar 2 300
300
.

6. *issueCount*
.

7. *duressMask*

.

BS2SmartCardCredentials

```
typedef struct {
    uint8_t pin[BS2_PIN_HASH_SIZE];
    uint8_t templateData[BS2_SMART_CARD_MAX_TEMPLATE_COUNT *
BS2_FINGER_TEMPLATE_SIZE];
} BS2SmartCardCredentials;
```

1. *pin*
pin code   .

2. *templateData*
                        4   .

BS2AccessOnCardData

```
typedef struct {
    uint16_t accessGroupID[BS2_SMART_CARD_MAX_ACCESS_GROUP_COUNT];
    BS2_DATETIME startTime;
    BS2_DATETIME endTime;
} BS2AccessOnCardData;
```

1. *accessGroupID*
                        .

2. *startTime*
                        , 0   .

3. *endTime*
                        , 0   .

BS2SmartCardData

```
typedef struct {
    BS2SmartCardHeader header;
    uint8_t cardID[BS2_CARD_DATA_SIZE];
    BS2SmartCardCredentials credentials;
    BS2AccessOnCardData accessOnData;
} BS2SmartCardData;
```

1. *header*
SmartCard   .

2. *cardID*
                        .

Access on Card   32 byte   Card ID   ,
Secure Credential card   24 byte   Card ID   .
Secure Credential Card(SCC)   , 32 byte   Card ID(24 bytes), issueCount(4 byte)   Time
Stamp(4 byte)   .
    , BS2UserBlob   cardObjs array   SC Card   , SC Card   cardObjs
                .

3. *credentials*
pin code   .

4. *accessOnData*
AOC   .

BS2Card

```
typedef struct {
    uint8_t isSmartCard;
    union {
        BS2CSNCard card;
        BS2SmartCardData smartCard;
    };
}BS2Card;
```

1. *isSmartCard*
SmartCard   flag   .

2. *card*

3. *smartCard*
SmartCard