

**Smartcard API** ..... 1

..... 1

BS2CSNCard ..... 1

BS2SmartCardHeader ..... 2

BS2SmartCardCredentials ..... 4

BS2AccessOnCardData ..... 4

BS2SmartCardData ..... 5

BS2Card ..... 5

# 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

가

0x00		
0x01	CSN	
0x02	Secure	
0x03	Access	
0x06	QR	
0x0A	Wiegand	BS2WiegandConfig.format ( BS2WiegandConfig.CSNIndex BS2WiegandConfig.CardMask가 0
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 cardAuthMode;
    uint8_t useAlphanumericID;
    uint8_t cardAuthModeEx;
    uint8_t numOfFaceTemplate;
    uint8_t reserved[1];
} 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**

AOC	template	<a href="#">BS2SmartCardCredentials</a>
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AOC	template	, numOfFacetemplate	0
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**5. templateSize**

BioStar 2 가 300 가 384 300

**6. issueCount**

**7. duressMask**

**8. cardAuthMode**

FaceStation F2  
FaceStation F2 **cardAuthModeEx**

2	
3	
4	PIN
5	PIN
6	, , PIN
254	
255	( )

**9. useAlphanumericID**

Alphanumeric ID flag

**10. cardAuthModeEx**

FaceStation F2 **cardAuthMode**  
[+ V2.7.1] FaceStation F2

	1	2	3
21			
22			
23			
24		PIN	
25			
26			PIN
27			PIN
28		PIN	
29			
30			PIN
31			
32			PIN

	1	2	3
33			PIN
34			PIN
35			PIN
254			
255	(		

**11. numOfFaceTemplate**

template 가 ( :384, :552)  
 BS2SmartCardCredentials templateData

AOC template BS2SmartCardCredentials

AOC template , numOfTemplate 0

**12. reserved**

**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*

가 , 0

### 3. *endTime*

가 , 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	가 SC Card	, SC Card
			cardObjs

### 3. *credentials*

pin code

### 4. *accessOnData*

AOC 가

## BS2Card

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

### 1. *isSmartCard*

SmartCard flag

## 2. *card*

### 3. *smartCard*

SmartCard

From:

<http://kb.supremainc.com/bs2sdk/> - **BioStar 2 Device SDK**

Permanent link:

[http://kb.supremainc.com/bs2sdk/doku.php?id=ko:smartcard\\_api&rev=1630888100](http://kb.supremainc.com/bs2sdk/doku.php?id=ko:smartcard_api&rev=1630888100)

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