IS - 3400 V3.0 RFID Reader

ISO 14443-A

ISO 14443-B

ISO 15693, ICode SLIX1, ICode SLIX2

Mifare Classic

Mifare UltraLight

Mifare Plus

Mifare NTAG

Encryption AES-128Bit, 3DES

RFID - Reader

날짜	버전	내용
2012.02.29	V1.0	V 1.0 Release
2012.10.20	V1.4	V 1.4 Release
2017.06.12	V3.0	V 3.0 Release

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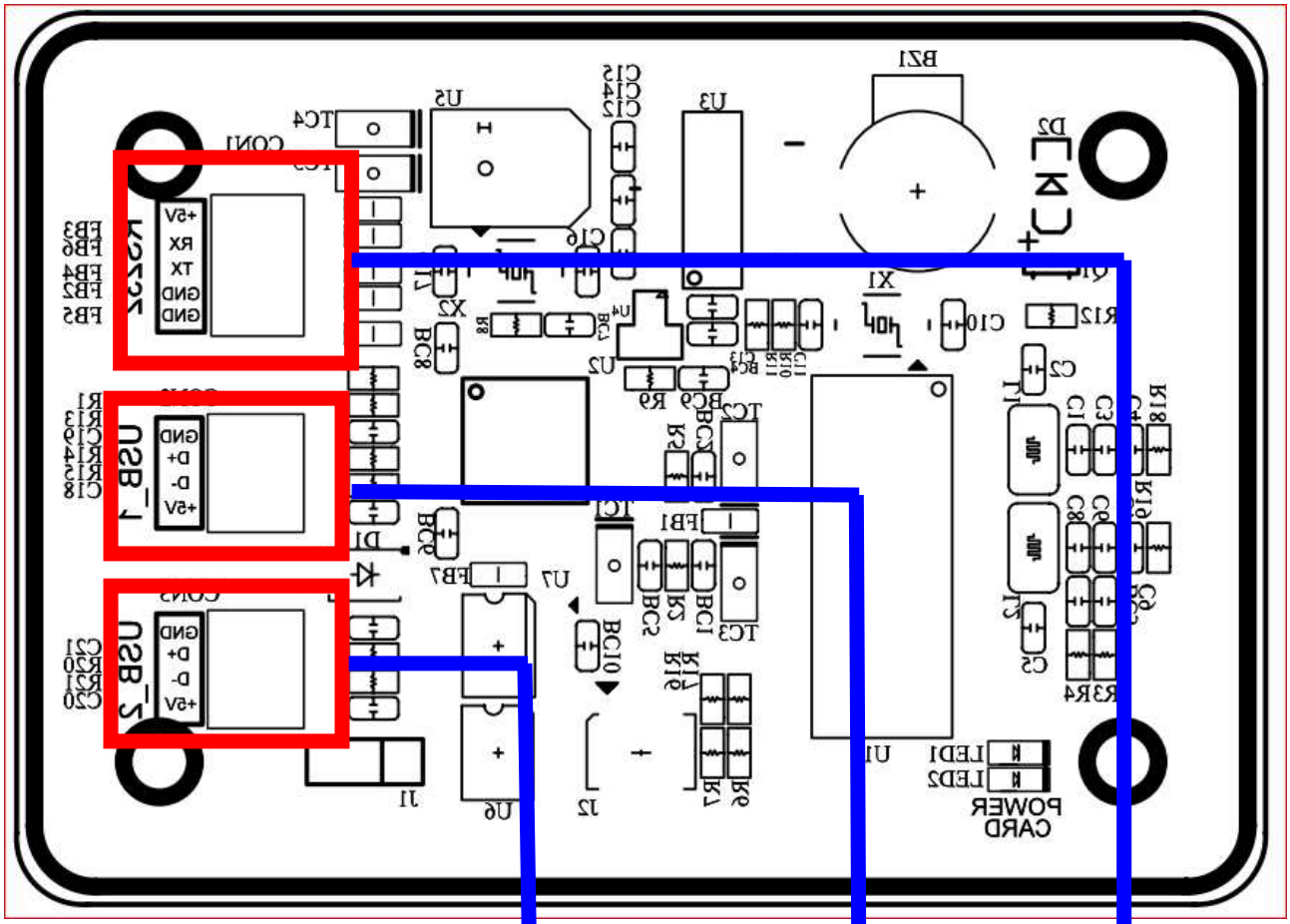
1. Specification

RF Frequency	13.56MHz
Power Supply	4.5 to 5.5V DC Operation
Supply Current	40mA @ 5V
Dimensions	70 x 50 x 6 mm
RF Protocol	ISO14443-A/B, ISO15693 Mifare Classic, Mifare UltraLight, Mifare Plus, Mifare NTAG, ICODE SLIX1, ICODE SLIX 2
Host Interface	RS232, TTL232, USB To Serial(FTDI USB Chip) USB HID Keboard
Antennna	50-ohm Internal antenna
RF Power	150mW @ 5V
Read Range	50mm internal ant
Anticollision	Support(1tags)

2. IS-3400 V3.0 구성

2.1 Connect 구분



USB To Serial
1. Vcc
2. D-
3. D+
4. Gnd

HID KeyBoard
1. Vcc
2. D-
3. D+
4. Gnd

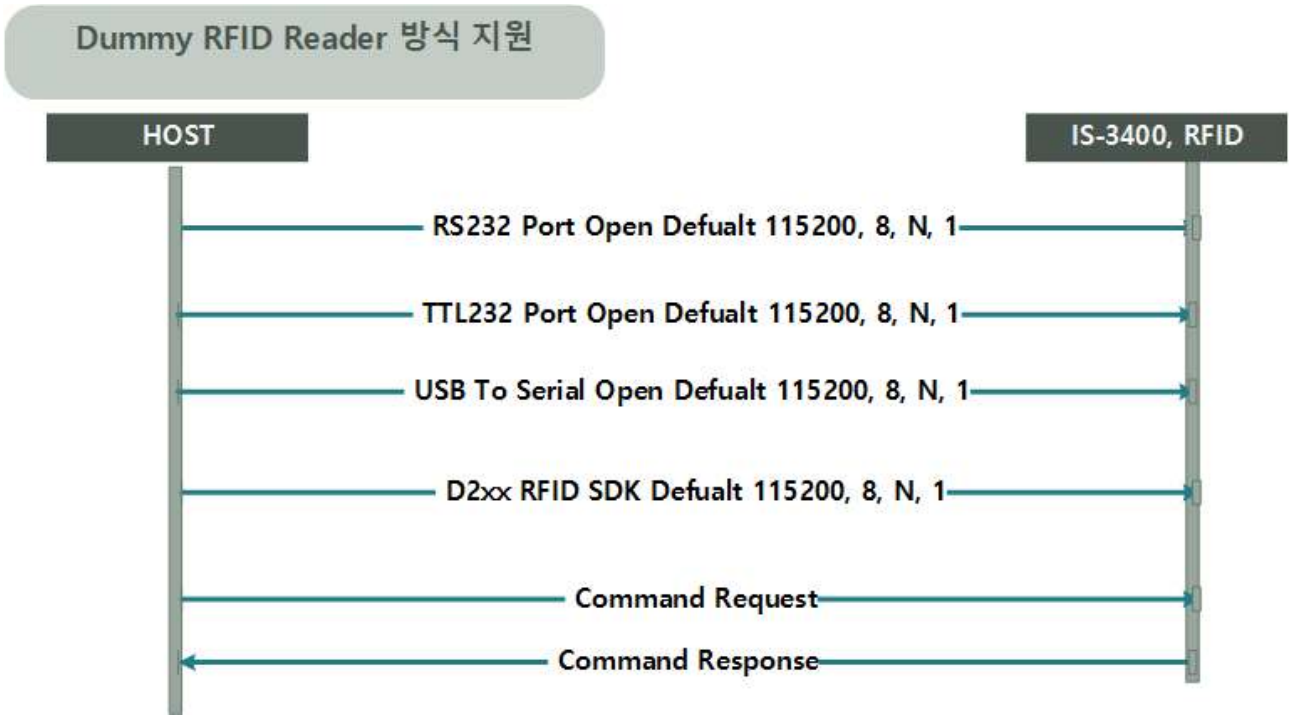
UART RS232
1. Vcc
2. Rx
3. Tx
4. Gnd
5. Gnd

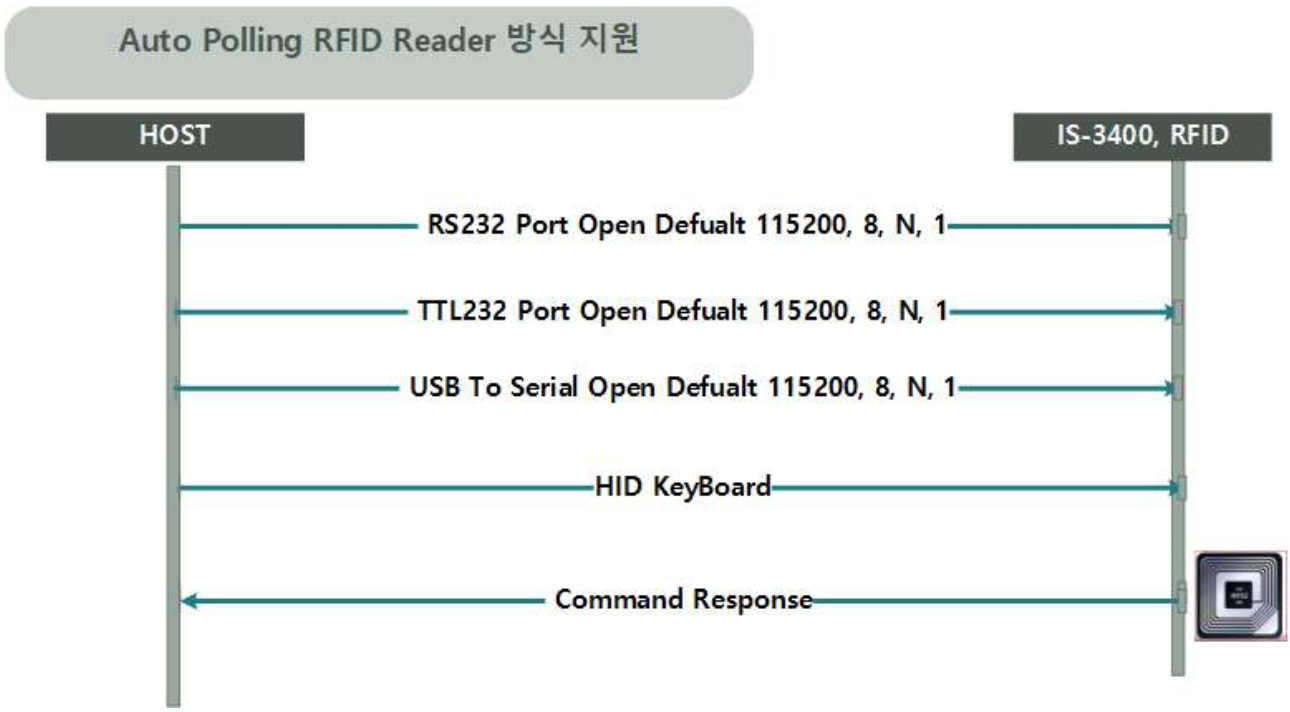
2.2 USB Driver

(1) HID USB KeyBoard
- Driver 설치가 필요 없이 자동으로 인식 됩니다.

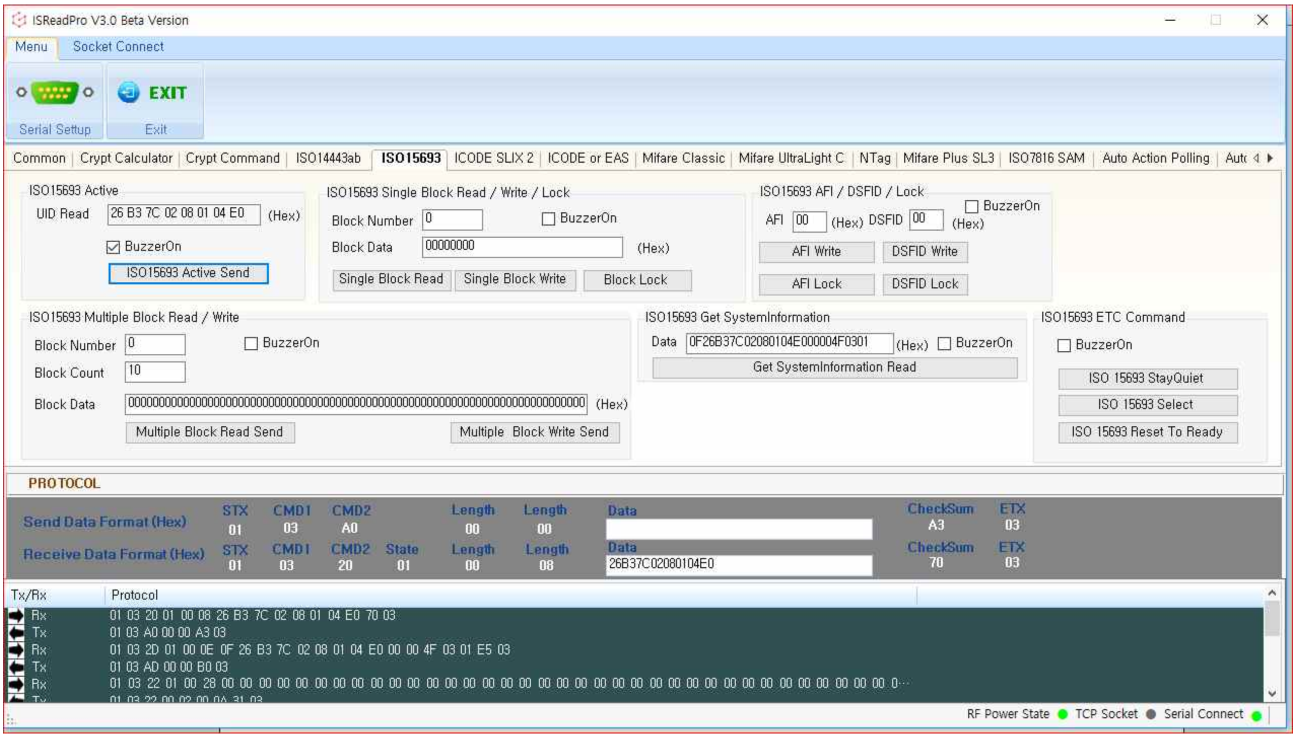
(2) USB To Serial Driver
- USB Chip : FTDI230x
- 다운로드 사이트
  http://www.ftdichip.com/Drivers/VCP.htm

3. IS-3400 RFID 운영 방식

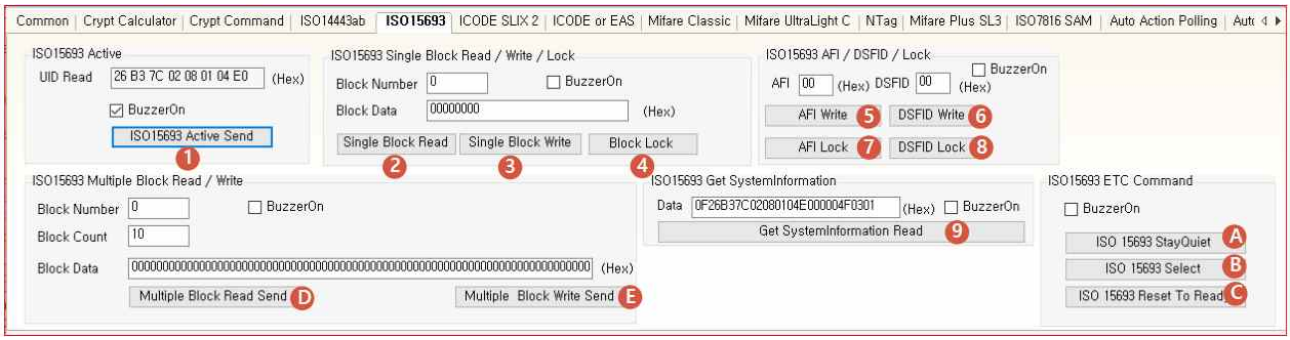




4. ISReaderPro V3.0 사용법



4.1 ISO15693 사용법



① ISO15693 Tag를 ACTIVE 시킵니다. 성공 하면 ②~Ⓔ 명령을 실행 시킬수 있습니다.
②~Ⓔ 명령을 실행 하기 위해서는 반드시 Active 성공 후 사용 가능 합니다.
② 싱글 블록을 읽습니다. Block Number를 넣고 해당 블록 데이터를 읽어 옵니다.
③ 싱글 블록에 데이터 기록 합니다. Block Number를 넣고 해당 블록 데이터를 기록 할수 있습니다.
④ 해당 블록에 더 이상 기록 할 수 없도록 락을 설정 합니다.
락은 해제 할수 없습니다.
⑤ AFI Byte에 데이터를 기록 합니다. 확인은 ⑨에서 가능 합니다.
확인 데이터는 해당 Tag 데이터쉬트를 참조 해야 합니다.
⑥ DSFID Byte에 데이터를 기록 합니다. 확인은 ⑨에서 가능 합니다.
확인 데이터는 해당 Tag 데이터쉬트를 참조 해야 합니다.
⑦ AFI Byte에 락을 설정 합니다.
⑧ DSFID Byte에 락을 설정 합니다.
⑨ 태그 정보를 확인 합니다. 해당 Tag 데이터쉬트를 참조 해야 합니다.
Ⓐ 태그를 종료 시킵니다. RF Off 후 다시 RF On 정상 동작
Ⓑ 태그를 선택 합니다.
Ⓒ 태그를 리셋 시킵니다.
Ⓓ 멀티 블록을 읽어 옵니다.
Block Number 0 ~ Blocok Counter 10
0 블록에서 ~ 9블록 까지 읽어 옵니다.
Ⓔ 멀티 블록을 데이터를 기록 합니다.
Block Number 0 ~ Blocok Counter 10
0 블록에서 ~ 9블록 까지 데이터를 기록 합니다.

4.2 ICODE SLIX 2 사용법

① ICODE SLIX2 Tag를 ACTIVE 시킵니다. 성공 하면 ②~Ⓖ 명령을 실행 시킬수 있습니다.
②~Ⓖ 명령을 실행 하기 위해서는 반드시 Active 성공 후 사용 가능 합니다.

② ICODE SLIX2 Tag를 인증을 진행 할수 있습니다.

③ ICODE SLIX2 Tag 의 인증 패스워드를 변경 할수 있습니다. 인증 후 패스워드 변경이 가능 합니다.

④ 64비트 암호화를 사용 할수 있도록 Tag를 인증 절차를 변경 합니다.

⑤ 인증 암호를 다시는 변경 할수 없도록 LOCK을 설정 합니다.

⑥ 16Bit Counter를 읽어 옵니다.

⑦ 16Bit Counter를 1증가 시킵니다.

⑨ 16Bit Counter를 증가 시킬 때 인증 후 사용 가능 하도록 변경 합니다.

Ⓐ 16Bit Counter를 증가 시킬 때 인증 후 사용 가능한 형태를 해제 합니다.

Ⓑ ICODE 블록을 읽기/쓰기를 인증 후 사용 가능 하도록 변경 할 수 있습니다.
Block Number는 ICODE SLIX2 데이터 쉬트를 참조 하세요

Ⓒ ICODE 블록을 읽기/쓰기를 인증 후 사용 가능 하도록 변경 한 부분을 다시 변경 할수 없도록 LOCK을 설정 합니다.

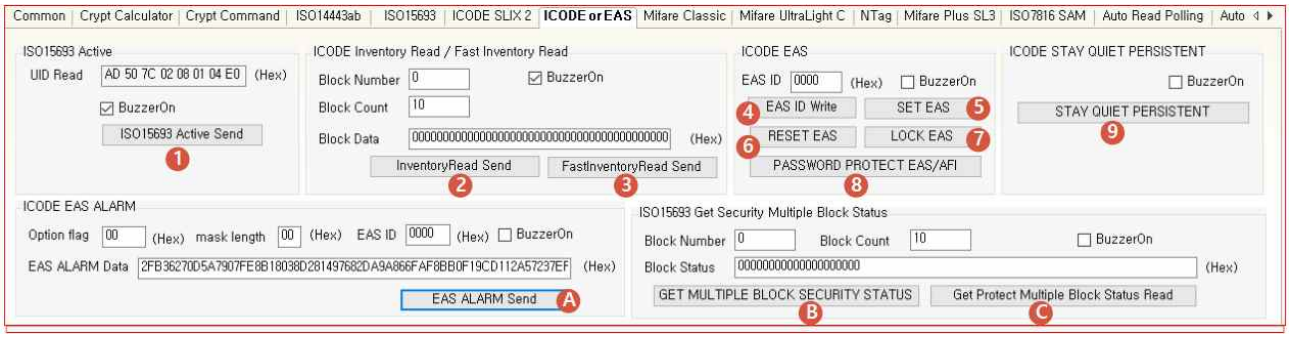
Ⓓ RFID Tag로 기능을 전부 해제 합니다.
- Destroy 인증 후 사용 가능 합니다.

Ⓔ RFID Tag로 기능을 전부 해제 합니다.
- Privacy 인증 후 사용 가능 합니다.

Ⓕ ICODE SLIX 의 32-byte ECC signature 코드를 읽어 온다.

Ⓖ ICODE SLIX 의 GET NXP SYSTEM INFORMATION command provides information about the IC access conditions and supported features.

4.3 ICODE SLIX 1, 2 EAS 사용법



① CODE SLIX Tag를 ACTIVE 시킵니다. 성공 하면 ②~Ⓒ 명령을 실행 시킬수 있습니다.
②~Ⓖ 명령을 실행 하기 위해서는 반드시 Active 성공 후 사용 가능 합니다.
② 여러 TAG가 같이 있어도 충돌 없이 블록 데이터를 읽어 옵니다.
③ 여러 TAG가 같이 있어도 충돌 없이 빠르게 블록 데이터를 읽어 옵니다.
Datarate 53 kbit (high data rate) or 13 kbit (lowdata rate).
④ EAS (Electronic Article Surveillance) 전자 도난 방지시스템의 ID를 변경 합니다.
⑤ EAS (Electronic Article Surveillance) 전자 도난 방지시스템을 동작 시킵니다.
⑥ EAS (Electronic Article Surveillance) 전자 도난 방지시스템 동작을 해제 합니다.
⑦ EAS (Electronic Article Surveillance) 전자 도난 방지시스템의 ID, 동작 상태를 변경 할수 없도록 LOCK 시킵니다.
⑧ EAS ID, 동작 상태를 인증 후 변경 가능 하도록 변경 합니다.
⑨ 태그를 종료 시킵니다. RF Off 후 일정 시간이 경과 후 다시 실행 됩니다.
- 경과 시간은 사용 TAG의 데이터쉬트를 참조 바랍니다.
Ⓐ EAS (도난방지시스템)을 기능을 동작시 EAS Alram이 동작 됩니다.
Ⓑ ICODE SLIX 의 블록의 LOCK 상태를 알려 보여줍니다.
Ⓒ ICODE SLIX 의 블록의 Protect 상태를 알려 보여줍니다.
- 이 명령어는 사용 하는 TAG의 데이터 쉬트에서 명령 기능이 지원하는 TAG만 가능 합니다.

5. Protocol Format

5.1 Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command1	1	Command	Hex	상위 명령어
Command2	1	Command	Hex	하위 명령어
Data Length	2	Hi Byte	Hex	Packet Lens
Data Length		Low Byte	Hex	
Data	N		Hex	Request Data
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

Command2 수행 후 성공 하면 부저 비프음 발생 명령

Command2 최상위 비트를 1로 만들면 비프음 발생, 최상위 비트가 0이면 비프음 발생 하지 않음

[Exmaple] Card Serial Num 비프음 발생 Command

Command = 0x20 | 0x80;

BIT 7	BIT 6	BIT 5	BIT 4	BIT 3	BIT 2	BIT 1	BIT 0
1	0	1	0	0	0	0	0
비프음 발생	Command						

5.2 Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command1	1	Command	Hex	상위 명령어
Command2	1	Command	Hex	하위 명령어
State	1		Hex	응답의 상태 0x01 : 정상, 0xFF 에러
Data Length	2	Hi Byte	Hex	Packet Lens
Data Length		Low Byte	Hex	
Data	N		Hex	Request Data
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

6. Check Sum 계산법

Check Sum = (BYTE)(Command1 + Command2 + Length(0) + Length(1) + Data(0) + Data(1) + Data(n))

Example 1:

0x01 0x00 0x16 0x00 0x00 0x16 0x03

CMD1		CMD2		Length(0)		Length(1)	Check Sum
0x00	+	0x16	+	0x00	+	0x00	0x16

0x16 = 0x00 + 0x16 + 0x00 + 0x00

♦ Stx, Etx, CheckSum 은 제외

Check Sum = (BYTE)(Command1 + Command2 + STATE + Length(0) + Length(1) + Data(0) + Data(1) + Data(n))

Example 1:

0x01 0x00 0x16 0x01 0x00 0x00 0x16 0x03

CMD1		CMD2		STATE	Length(0)		Length(1)	Check Sum
0x00	+	0x16	+	0x01 +	0x00	+	0x00	0x17

0x17 = 0x00 + 0x16 + 0x01 + 0x00 + 0x00

♦ Stx, Etx, CheckSum 은 제외

7. Protcol ISO15693

7.1 ISO15693 Active Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x20	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

7.2 ISO15693 Active Response (IS-3400 → Target , PC)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x20	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	0x00	Hex	Packet Lens
Data Length		8	Hex	
Data	8	UID	Hex	UID 8 Byte
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

7.3 ISO15693 Single Block Read Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x21	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x01	Hex	
Data	1	0x00 ~ 0xff	Hex	Block Number
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

7.4 ISO15693 Single Block Read Response (IS-3400 → Target , PC)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x21	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x04	Hex	
Data	4		Hex	Block Data
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

7.5 ISO15693 Multiple Block Read Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x22	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x02	Hex	
Data	1	0x00 ~ 0xff	Hex	Block Number
Data	1	0x00 ~ 0xff	Hex	Block Counter (블록 개수)
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

7.6 ISO15693 Multiple Block Read Response (IS-3400 → Target , PC)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x22	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	N	Hex	Packet Lens
Data Length		N	Hex	
Data	N		Hex	Block Data
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

7.7 ISO15693 Single Block Write Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x23	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x05	Hex	
Data	1	0x00 ~ 0xFF	Hex	Block Number
	4		Hex	Write Block Data
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

7.8 ISO15693 Single Block Write Response (IS-3400 → Target , PC)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x23	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

7.9 ISO15693 Multiple Block Write Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x24	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		N + 2	Hex	
Data	1	0x00 ~ 0xFF	Hex	Block Number
	1	0x00 ~ 0xFF	Hex	Block Counter(블록 개수)
	N		Hex	Write Block Data
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

7.10 ISO15693 Multiple Block Write Response (IS-3400 → Target , PC)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x24	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

7.11 ISO15693 Stay Quiet Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x25	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

7.12 ISO15693 Stay Quiet Response (IS-3400 → Target , PC)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x25	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

7.13 ISO15693 Select Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x26	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

7.14 ISO15693 Select Response (IS-3400 → Target , PC)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x26	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

7.15 ISO15693 Reset To Ready Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x27	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

7.16 ISO15693 Reset To Ready Response (IS-3400 → Target , PC)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x27	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

7.17 ISO15693 Block Lock Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x28	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x01	Hex	
Data	1	0x00 ~ 0xff	Hex	Block Number
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

7.18 ISO15693 Block Lock Response (IS-3400 → Target , PC)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x28	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

7.19 ISO15693 AFI Write Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x29	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x01	Hex	
Data	1	0x00 ~ 0xff	Hex	AFI Data
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

7.20 ISO15693 AFI Write Response (IS-3400 → Target , PC)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x29	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

7.21 ISO15693 AFI Lock Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x2A	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

7.22 ISO15693 AFI Lock Response (IS-3400 → Target , PC)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x2A	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

7.23 ISO15693 DSFID Write Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x2B	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x01	Hex	
Data	1	0x00 ~ 0xff	Hex	DSFID Data
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

6.24 ISO15693 DSFID Write Response (IS-3400 → Target , PC)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x2B	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

7.25 ISO15693 DSFID Lock Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x2C	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

7.26 ISO15693 DSFID Lock Response (IS-3400 → Target , PC)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x2C	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

7.27 ISO15693 Security Multiple Block Status Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x2E	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x02	Hex	
Data	1	0x00 ~ 0xff	Hex	Block Number
Data	1	0x00 ~ 0xff	Hex	Block Counter (블록 개수)
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

7.28 ISO15693 Security Multiple Block Status Response
(IS-3400 → Target , PC)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x2E	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	0x00	Hex	Packet Lens
Data Length		N	Hex	
Data	N		Hex	Security Multiple Block Status
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

8. Protcol ICODE SLIX2

8.1 ICODE SLIX2 Authenticate Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x39	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x05	Hex	
Data	1	0x01 ~ 0x10	Hex	0x01 : Read 인증 0x02 : Write 인증 0x04 : Privacy 인증 0x08 : Destroy 인증 0x10 : EAS/AFI 인증
Data	4	Password	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

8.2 ICODE SLIX2 Authenticate Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x39	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

8.3 ICODE SLIX2 Change Password Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x32	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x05	Hex	
Data	1	0x01 ~ 0x10	Hex	0x01 : Read 인증 0x02 : Write 인증 0x04 : Privacy 인증 0x08 : Destroy 인증 0x10 : EAS/AFI 인증
Data	4	Password	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

8.4 ICODE SLIX2 Change Password Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x32	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

8.5 ICODE SLIX2 64Bit Password Set Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x50	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

8.6 ICODE SLIX2 64Bit Password Set Response (IS-3400 → Target , PC)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x50	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

8.9 ICODE SLIX2 Password Lock Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x33	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

8.10 ICODE SLIX2 Password Lock Response (IS-3400 → Target , PC)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x33	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

8.11 ICODE SLIX2 Block Page Protect Write Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x34	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x05	Hex	
Data	1	Block Number	Hex	
Data	1	Protection Byte	Hex	0x00 : Read/Write Public 0x01 : Read Protection 0x02 : Write Protection 0x03 : Read/Write Protection
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

8.12 ICODE SLIX2 Block Page Protect Write Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x34	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

8.13 ICODE SLIX2 Block Page Protect Lock Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x35	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x05	Hex	
Data	1	Block Number	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

8.14 ICODE SLIX2 Block Page Protect Lock Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x35	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

8.15 ICODE SLIX2 Destroy Enable Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x36	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

8.16 ICODE SLIX2 Destroy Enable Response (IS-3400 → Target , PC)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x36	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

8.17 ICODE SLIX2 Privacy Enable Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x37	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

8.18 ICODE SLIX2 Privacy Enable Response (IS-3400 → Target , PC)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x37	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

8.19 ICODE SLIX2 16Bit Counter Read Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x51	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

8.20 ICODE SLIX2 16Bit Counter Read Response (IS-3400 → Target , PC)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x51	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x02	Hex	
Data	2		Hex	16Bit Counter Data
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

8.21 ICODE SLIX2 16Bit Counter Increment Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x52	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

8.22 ICODE SLIX2 16Bit Counter Increment Response (IS-3400 → Target , PC)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x52	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

8.23 ICODE SLIX2 16Bit Counter Protect Set Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x53	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

8.24 ICODE SLIX2 16Bit Counter Protect Set Response (IS-3400 → Target , PC)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x53	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

8.25 ICODE SLIX2 16Bit Counter Protect Reset Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x54	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

8.26 ICODE SLIX2 16Bit Counter Protect Reset Response (IS-3400 → Target , PC)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x54	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

8.27 ICODE SLIX2 Read SIGNATURE Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x4B	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

8.28 ICODE SLIX2 Read SIGNATURE Response (IS-3400 → Target , PC)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x4B	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x20	Hex	
Data	32	0x00~0xFF	Hex	32-byte ECC signature
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

8.29 ICODE SLIX2 Get NXP SystemInformation Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x49	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

8.30 ICODE SLIX2 Get NXP SystemInformation Response (IS-3400 → Target , PC)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x49	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	0x00	Hex	Packet Lens
Data Length		N	Hex	
Data	N	0x00~0xFF	Hex	NXP SystemInformation Data
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

9. Protcol ICODE SLIX 1, 2 EAS

9.1 ICODE Inventory Read Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x40	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x02	Hex	
Data	1	0x00 ~ 0xff	Hex	Block Number
Data	1	0x00 ~ 0xff	Hex	Block Counter (블록 개수)
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

9.2 ICODE Inventory Read Response (IS-3400 → Target , PC)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x40	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	N	Hex	Packet Lens
Data Length		N	Hex	
Data	N		Hex	Block Data
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

9.3 ICODE EAS ID Write Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x47	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x02	Hex	
Data	2	0x0000 ~ 0xffff	Hex	EAS ID
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

9.4 ICODE EAS ID Write Response (IS-3400 → Target , PC)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x40	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	0	Hex	Packet Lens
Data Length		0	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

9.5 ICODE EAS Set Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x42	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

9.6 ICODE EAS Set Response (IS-3400 → Target , PC)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x42	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	0	Hex	Packet Lens
Data Length		0	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

9.7 ICODE EAS Reset Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x43	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

9.8 ICODE EAS Reset Response (IS-3400 → Target , PC)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x43	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	0	Hex	Packet Lens
Data Length		0	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

9.9 ICODE EAS Lock Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x45	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

9.10 ICODE EAS Lock Response (IS-3400 → Target , PC)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x45	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	0	Hex	Packet Lens
Data Length		0	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

9.11 ICODE EAS Password Protect EAS/AFI Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x44	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

9.12 ICODE EAS Password Protect EAS/AFI Response (IS-3400 → Target , PC)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x44	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	0	Hex	Packet Lens
Data Length		0	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

9.13 ICODE Stay Quiet Persistent Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x4A	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x00	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

9.14 ICODE Stay Quiet Persistent Response (IS-3400 → Target , PC)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x4A	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	0	Hex	Packet Lens
Data Length		0	Hex	
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

9.15 ICODE EAS ALRAM Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x46	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x04	Hex	
Data	1	0x00 ~ 0xff	Hex	Option Flag
Data	1	0x00 ~ 0xff	Hex	make length
Data	2	0x0000~0xffff	Hex	EAS ID
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

9.16 ICODE EAS ALRAM Response (IS-3400 → Target , PC)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x46	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	N	Hex	Packet Lens
Data Length		N	Hex	
Data	N		Hex	EAS ALARM DATA
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

9.17 ICODE Get Multiple Block Security Status Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x2E	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x02	Hex	
Data	1	0x00 ~ 0xff	Hex	Block Number
Data	1	0x00 ~ 0xff	Hex	Block Count
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

9.18 ICODE Get Multiple Block Security Status Response (IS-3400 → Target , PC)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x2E	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	N	Hex	Packet Lens
Data Length		N	Hex	
Data	N		Hex	Block Status
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

9.19 ICODE Get Protect Multiple Block Status Request (Target , PC → IS-3400)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x38	Hex	
Data Length	2	0x00	Hex	Packet Lens
Data Length		0x02	Hex	
Data	1	0x00 ~ 0xff	Hex	Block Number
Data	1	0x00 ~ 0xff	Hex	Block Count
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data

9.20 ICODE Get Protect Multiple Block Status Response (IS-3400 → Target , PC)

ITEM	BYTE	DESC		REMARK
STX	1	0x01	Hex	Start Data
Command 1	1	0x03	Hex	0x03 : ISO15693 Command
Command 2	1	0x38	Hex	
STATE	1	0x01, 0xFF	Hex	0x01 : 정상, 0xFF : 실패
Data Length	2	N	Hex	Packet Lens
Data Length		N	Hex	
Data	N		Hex	Block Status
Check Sum	1		Hex	"Check Sum 계산법" 참조
ETX	1	03	Hex	End Data