RF Dongle Specification Data

Model: RFC

○ Product Outline

This product is a RF dongle which can read/write contactless RF card. This product supports ISO 14443A & B and is designed to be compatible with Mifare protocol.

Front (Main B/D)

Back (Antenna)

○ Product Features

- 41mm of maximum communication distance.
- RS232 serial communication with the HOST (19200bps).
- ISO 14443A & B type compatible.
- MIFARE Protocol compatible.
- Single power supply (5 volts).
- One SAM socket support.
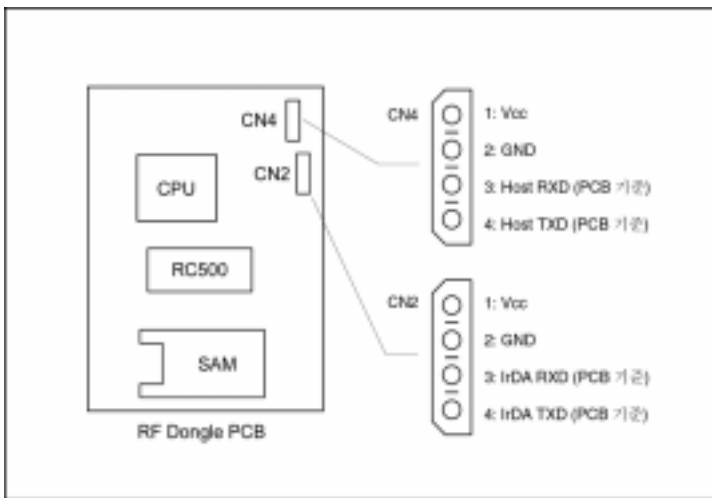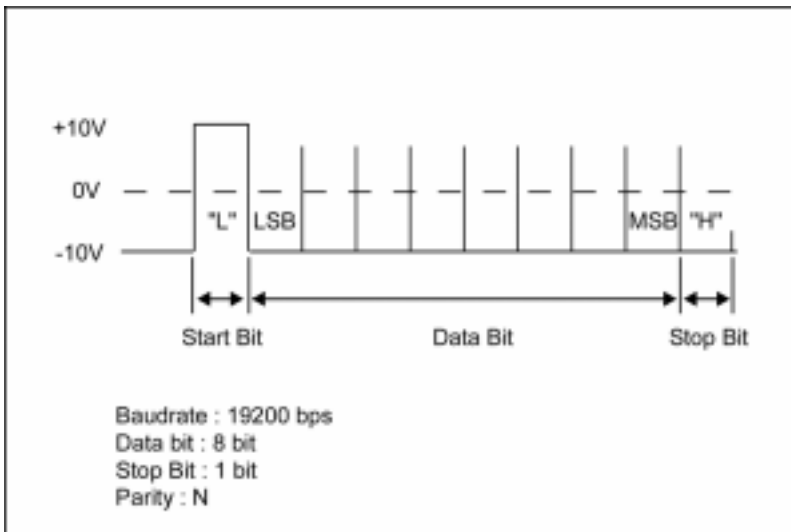- Test protocol support for development.

○ Block Diagram

RF Dongle (RFC)
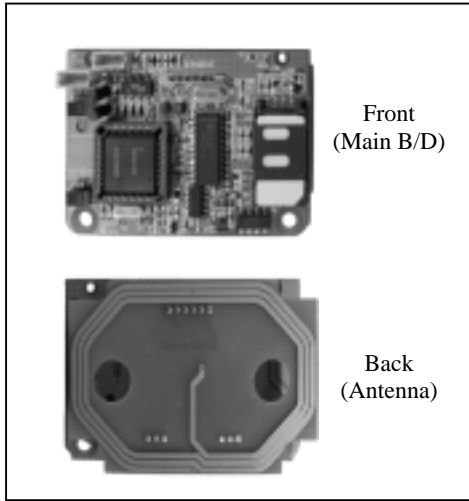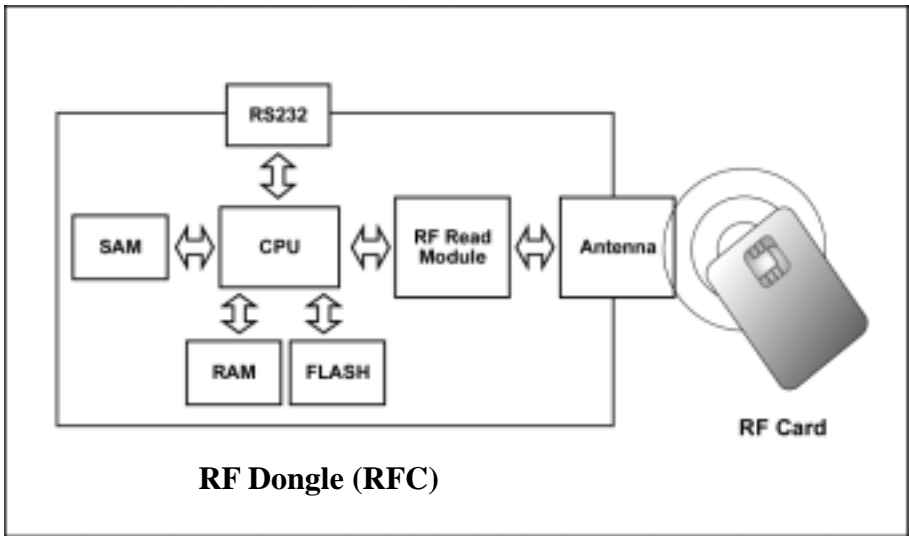
○ Basic Specifications

RF Card Standard	ISO 14443 Type A & B (Mifare compatible)			
Operating Frequency	13.56MHz			
Max. Communication Distance	41mm			
Power Supply	DC 5V			
Current	Idle	88mA	Peak	193mA
Operating Environment	Temperature: 0 ~ 50°C, Humidity: 0 ~ 95%			
Dimension	78mm (W) X 53mm (D) X 19mm (H)			
Communication (Host)	RS232C, 19200 bps			
CPU	T89F64 (ATMEL)			

O Connector Interface (CN2: IrDa Interface, CN4: Host Interface)

CN4
CN4
1: Vcc
2: GND
3: Host RXD (PCB 기준)
4: Host TXD (PCB 기준)

CN2
CPU
CN2
1: Vcc
2: GND
3: IrDA RXD (PCB 기준)
4: IrDA TXD (PCB 기준)

RC500

SAM

RF Dongle PCB

PIN No	Symbol	Description
1	Vcc	+5V
2	GND	
3	RxD	Received Data
4	TxD	Transmitted Data

O Host Interface

+10V

0V

-10V

"L" | LSB | MSB "H"

Start Bit | Data Bit | Stop Bit

Baudrate : 19200 bps
Data bit : 8 bit
Stop Bit : 1 bit
Parity : N

O Host Communication

Terminal (Application)   Dongle (Terminal)

Antenna enable

Response (Normal)

Command (Sector, block, key configuration, and read/write)

Response (Normal, R-Data)
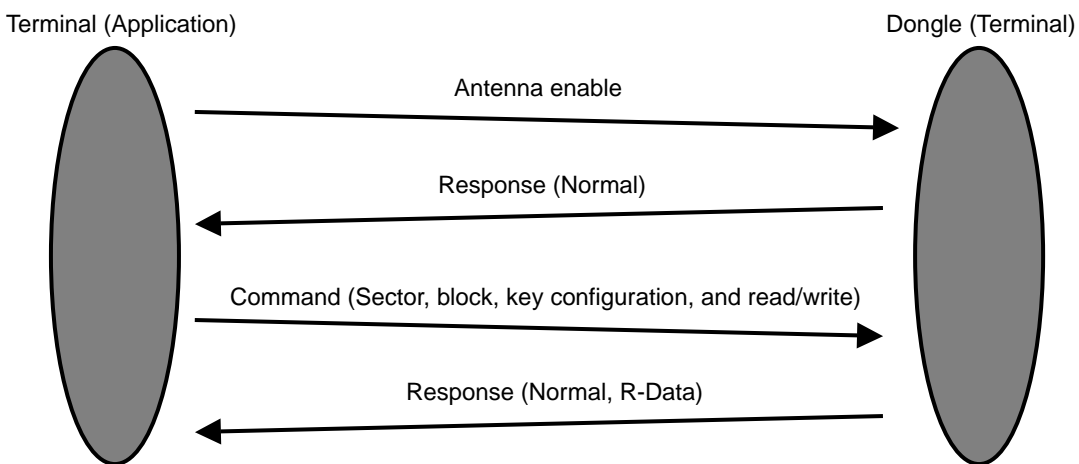
○ External Dimension

(Unit: mm)
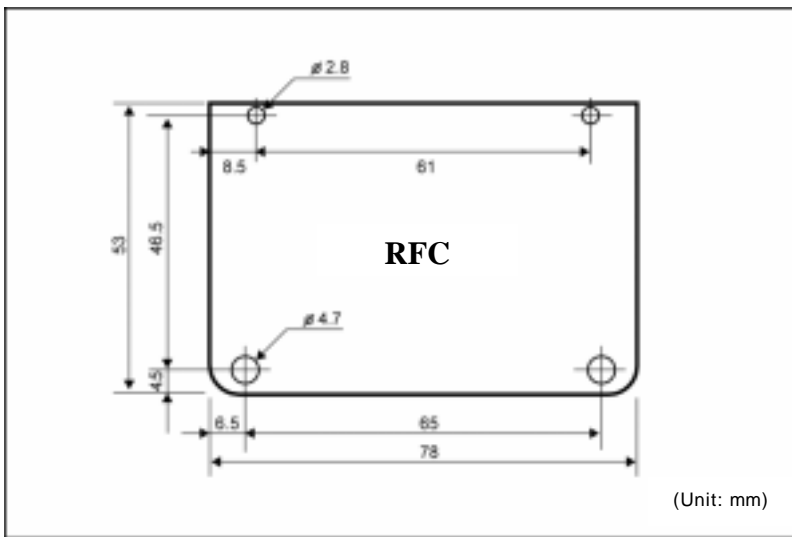
○ Cautions

- Do not insert/remove SAM or disassemble the product while power is supplied. It may cause critical damage to the product.

- Only use 5 volts of power supply. Power supply of different voltage may cause damage to the product.

○ Test Protocol Features

- ISO 14443A & B compatible protocol.

- User configurable Card Sector and Block.

- User configurable authentication KEY.