GENERAL DESCRIPTION

RhombusMF201—C transceiver unit is designed for reading the Serial Number of the Mifare I compatible IC cards and is a major component in RFID (Radio Frequency Identification) reader system. It can be applied in office/home security, personal identification, access control, anti-forgery and production control systems etc.

FEATURES

- Built-in transceiver antenna;
- Maximum effective distance up to 75mm;
- Less than 200ms decoding time;
- Low power dissipation with single power supply;
- ABA Track2 (8H) interface;
- Support Mifare I compatible IC cards;
- Built-in bi-color LED and buzzer;

INTERFACE DESCRIPTION

| NUMBER | COLOR | SYMBOL | DESCRIPTION | | | |
|--------|-------|--------|-------------------------------------|--|--|--|
| 1 | Red | VCC | Positive Power Supply | | | |
| 2 | Black | GND | GND | | | |
| 3 | Green | DATA | Output as DATA in ABA | | | |
| 4 | White | CLK | Output as CLK in ABA | | | |
| 5 | Brown | С | Output as CARD PRESENT in ABA | | | |
| 6 | Blue | LED | Input, internally pulled up to +5V. | | | |
| | | | Connected to | | | |
| 7 | Grey | BUZ | Input, internally pulled up to +5V. | | | |
| | | | Connected to | | | |

CHARACTERISTICS

• Absolute Maximum Ratings

| ITEM | SYMBOL | VALUE | UNIT | |
|-----------------|------------------|---------|------|--|
| Power Supply | VCC | 15 | V | |
| Operating Temp. | T _{OPR} | 0~+7 | °C | |
| Storage Temp. | T _{STR} | -55~+12 | °C | |

• Electrical and Mechanical Specification

Under $T_A = 25^{\circ}C$, VCC= +12V unless specified

| ITEM | SYMBOL | MIN | TYP | MAX | UNIT |
|--------------------|------------------|-----|-------|-----|------|
| Power Supply | VCC | 10 | 12 | 15 | V |
| Current Supply | Ι _C | | 80 | 12 | mA |
| Operation Freq. | F _{RE} | | 13.56 | | MHZ |
| Effective Distance | DIS | 0 | 50 | 75 | mm |
| Decoding Time | T _{DEC} | | 12 | 20 | ms |

Effective Distance depends on tags and operating environment.

Note: Rhombus' products must work with linear regulated power supply, and other kinds of power supply are prohibited.