SDiD 1010 User Instructions
Preliminary Version
V 0.1

FCC Notice:

This device complies with Part 15 of the FCC Rules.
Operation is subject to the following two conditions:

1) This device may not cause harmful interference, and
2) This device must accept any interference received, including interference that may cause undesired operation.

Any change or modification not expressly approved by the manufacturer could void the user's authority to operate the equipment.

Overview

The SDiD 1010 is a Near Field Communications, NFC, device as well as a Radio Frequency Identification, RFID, Reader in the form of a Secure Digital Input/Output, SDIO, card.
The SDiD 1010 card enables PDAs, cellular phones and other handheld devices to operate as Near Field two-way communication devices and Radio Frequency Identification Readers and Writers.
The SDiD 1010 is a complete Secure Digital, SD, Card design that incorporates the antenna, NFC/RFID transceiver, SDIO interface and all necessary software drivers.

Features

Near Field Communication device:
- NFCIP-1, ISO 18092 Compliant NFCIP-1, ISO 18092 Compliant.
- Data exchange speeds of 106, 212, 424 kbit/sec.

Radio Frequency Identification Reader/Writer:
- ISO 14443A Compliant.
- Supports MIFARE and FELICA protocols.
- Data exchange speeds of 106, 212, 424 kbit/sec.

Secure Data, SD, Card:
- SDIO compliant, version 1.10.
- SD-1, SP-4, SPI mode.

Host Support:
- Utilizable on terminals with SDIO enabled SD card socket.
- Supports Microsoft® Pocket PC 2002/2003, Windows Mobile^{TM} 2003.
- Supports Palm OS® 4.1 and more recent versions.

Read and Write Range:
- Up to 4 cm, depending on tag.

Operating Frequency:
- 13.56 MHz, license-free ISM band.

Integrated Antenna:
- Compact Antenna.
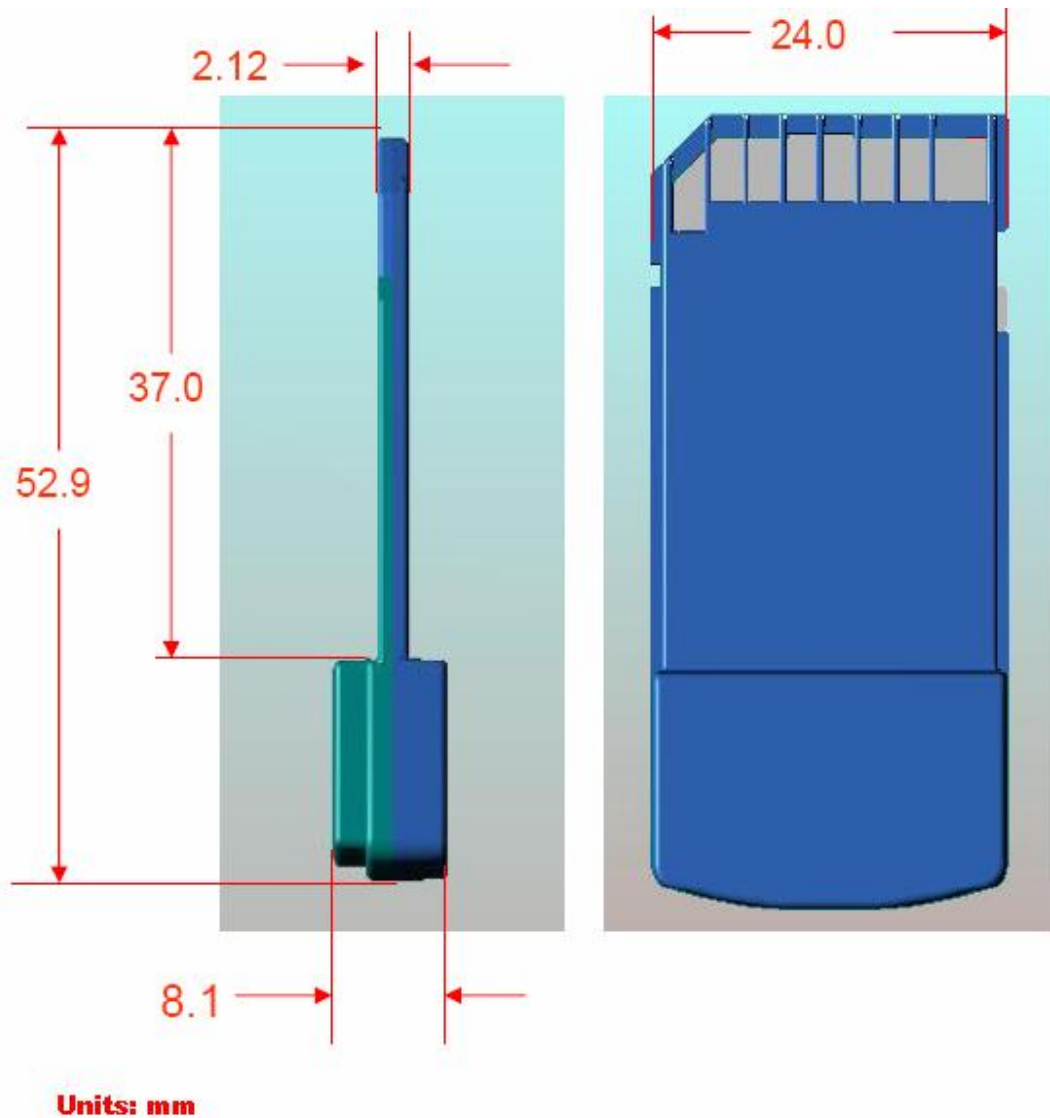
Low Power Consumption:
- 90 mA typical operational current.

Card Status LED Indicator:
- Standby, search and data communications indication.

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Physical Dimensions

Parameter	Nominal Value
Outline Dimensions (LxWxH):	52.9x24.0x2.1
Weight:	Less than 10g

Units: mm

LED Specification

The SDiD 1010 has an integrated LED that is used to indicate the card status. The following table shows the different LED states and the corresponding card status:

LED Status Indicator	
Card Status	LED State
Standby Mode	OFF
Reader/Writer Mode	Two blinks every two seconds
Virtual Mode (Tag Mode)	One blink every five seconds

Operating Instructions

1) Insert the SDiD 1010 card into the SD card slot of the host device. The integrated LED on the SDiD 1010 will initially be ON for two seconds and it will turn OFF after.
2) Start the application software in the host device.
3) When the card is configured to act as a reader/writer the LED will blink twice every two seconds. At this point the SDiD 1010 card is ready to read/write from/to a target.
4) When in virtual mode, the SDiD 1010 will act as a tag and the LED will blink once every two seconds. In this mode, data can be extracted from the SDiD 1010 card by an external reader.
5) When the SDiD 1010 card is in the Standby Mode, the LED will be OFF and the SDiD 1010 card will not be able to read/write from/to cards and will not be able to act as a card until the appropriate mode is selected in the Host Software Application.