Mifare Block Address

Relevant Devices

This application note applies to the following devices
CM015B-1, CM015M-1, CM025B, CM025M, CM030, CM031, CM032, CM018

Introduction

The memory of Mifare 1k is organized in 16 sectors with 4 blocks. Mifare 4k is organized in 32 sectors with 4 blocks and 8 sectors with 16 blocks.
On chenmingcard's modules, use absolute block address instead of offset.

Sample command stream for serial port devices

(CM015B-1, CM015M-1, CM025B, CM025M, CM031, CM032)

- **Select Card**

Preamble	Len	Command	Checksum
BA	02	01	B9

- **Login Sector0**

Preamble	Len	Command	Sector	Type	Key	Checksum
BA	0A	02	00	AA	FFFFFFFFFFFF	18

- **Read Block1 in Sector0, the absolute block address is 1**

Preamble	Len	Command	Blcok address	Checksum
BA	03	03	01	BB

- **Login Sector1**

Preamble	Len	Command	Sector	Type	Key	Checksum
BA	0A	02	01	AA	FFFFFFFFFFFF	19

- **Read Block1 in Sector1, the absolute block address is 5**

Preamble	Len	Command	Blcok address	Checksum
BA	03	03	05	BF

Sample command stream for IIC interface devices
(CM018, CM030)

- **Select Card**

Device Address	Len	Command
A0	01	01

- **Login Sector0**

Device Address	Len	Command	Sector	Type	Key
A0	09	02	00	AA	FFFFFFFFFFFF

- **Read Block1 in Sector0, the absolute block address is 1**

Device Address	Len	Command	Blcok address
BA	02	03	01

- **Login Sector1**

Device Address	Len	Command	Sector	Type	Key
A0	09	02	00	AA	FFFFFFFFFFFF

- **Read Block1 in Sector1, the absolute block address is 5**

Device Address	Len	Command	Blcok address
A0	02	03	05