

### INTRODUCTION

The M317A is an ideal module for embedded system that requests a low power design. M317A provides a powerful MIFARE / DESfire applications.

### Standard Configurations:

13.56MHz MIFARE Reader/Writer  
13.56MHz DESfire EV1 Reader/Writer

### FEATURES

- Anti-collision
- Mifare classic with MAD1/MAD2 /MAD3 function
- Full 3DES, 3K3DES and AES crypto methods
- Without NXP SAM AV2 solution
- T=CL ISO7816 interface supported
- Plug-in fitting for 13.56Mhz
- Full MIFARE® functionality.
- Support ISO 14443 A Mifare® Class / UrtraLight Mifare® PRO DESfire, DESfire EV1
- Serial Interface, CMOS-TTL.
- Power supply Active 45mA @3.3VDC
- RF data rate: 106k, 212k, 424k, 848k bps supported

We welcome OEM inquiries  
Custom device programming  
is available

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 集佳股份有限公司  
GIGA-TMS INC.

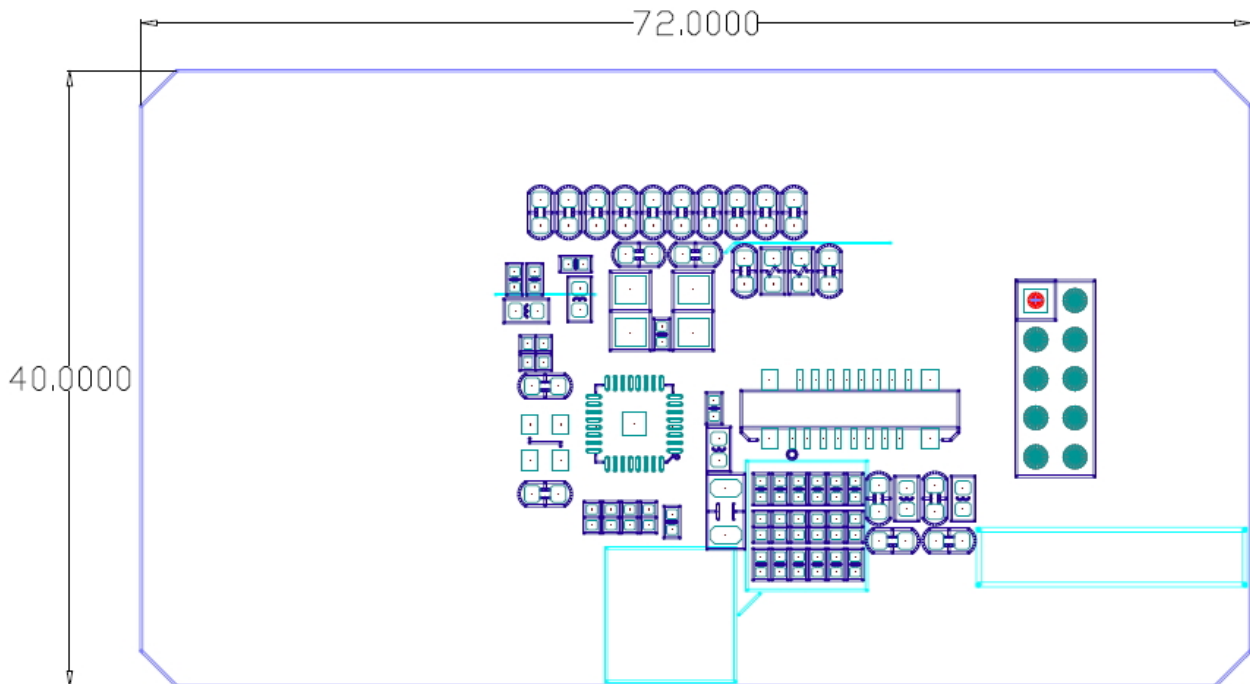
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### SPECIFICATIONS:

<b>POWER REQUIREMENT</b>	3.3V regulated for Operate Voltage . A linear regulator is recommended.
<b>CURRENT REQUIREMENTS</b>	Active 45mA @3.3VDC
<b>INTERFACE</b>	SPI
<b>Protocol</b>	GNET PLUS Binary Mode /ASCII Mode
<b>Card Type</b>	ISO 14443 A Mifare® Class / UltraLight Mifare® PRO DESfire, DESfire EV1
<b>FERQUENCY</b>	13.56MHz
<b>TRANSPONDER</b>	Read / Write
<b>CONFIGURE INTERFACE</b>	SPI
<b>DIMENSIONS</b>	72mm * 40mm * 1.6mm
<b>WEIGHT</b>	< 10 gm
<b>ENVIRONMENT</b>	Operating Temp : -0°C ~ +60°C Humidity : 10 ~ 90 % relative

### PACKAGE DESCRIPTION



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**FCC :**

**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 UNDESIRE OPERATION.**

**Federal Communications Commission Requirements**

The equipment has been tested and found to comply with the limits for Class B Digital Device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

THE CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COMPLIANCE COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

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 receiver.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

**FCC Radiation Exposure Statement**

The equipment complies with FCC radiation exposure limits set forth for uncontrolled equipment and meets the FCC radio frequency (RF) Exposure Guidelines in Supplement C to OET65. The equipment has very low levels of RF energy that it is deemed to comply without testing of specific absorption ratio (SAR).

**IC Statement: (English & Francian) IC Regulations:**

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device. Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

"This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada. This Category II radio communication device complies with Industry Canada Standard RSS-310. Cedispositif de radio communication de catégorie II respecte la norme CNR-310 d'Industrie Canada.