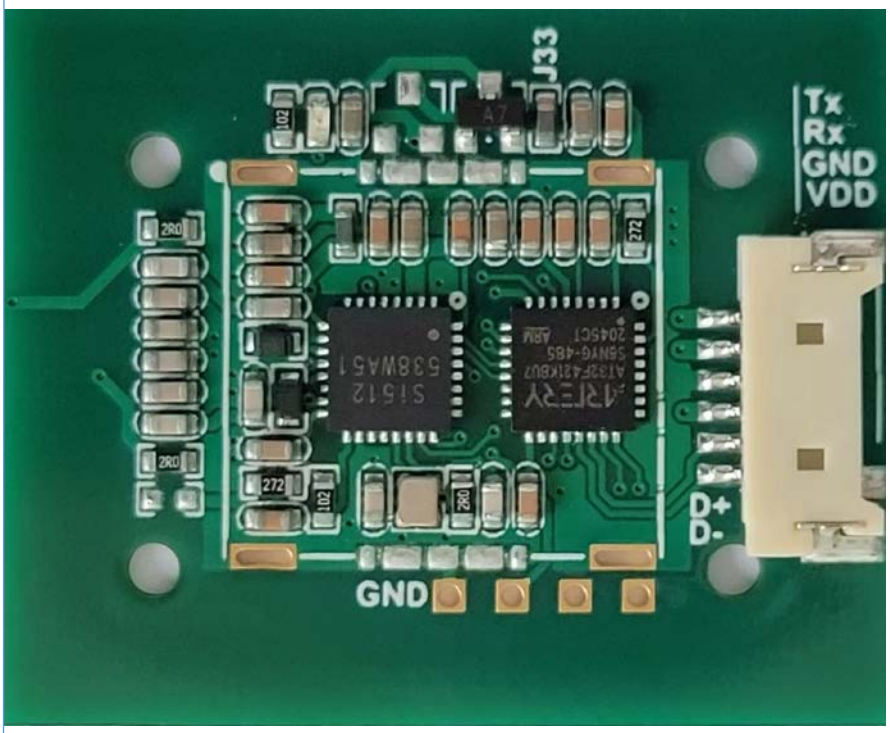
RFID/NFC Module

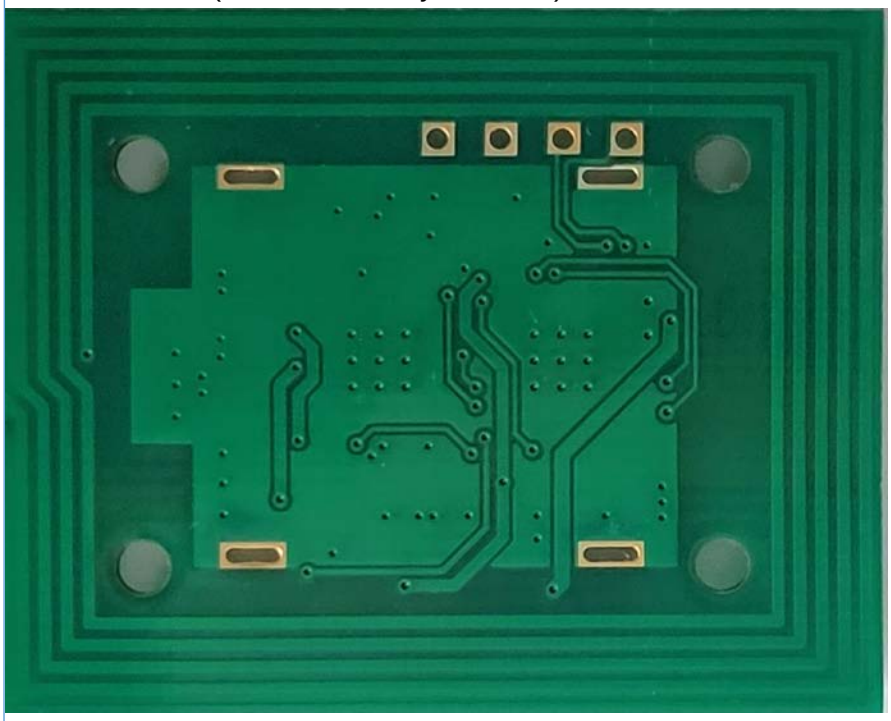
Small size(37mm*30mm*3mm) module with integrated Antenna and 6PIN connector

TOP VIEW（Single side arrangement of components）



SIDE VIEW (PCB-1mm and Connector-1.95mm)

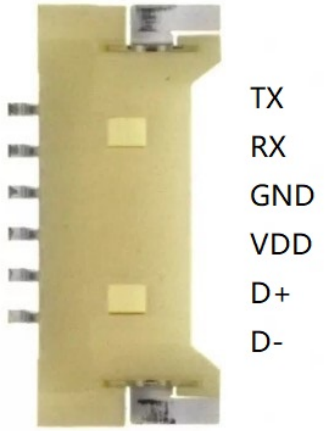
BOTTOM VIEW (smooth and easy adhesive)



Key Features:

- Reader/writer functionality compatible with ISO/IEC14443A&B, MIFARE, FeliCa and NFC Forum tag types (MIFARE UltraLight, FeliCa, MIFARE DESFire)
- Card emulation functionality
- Operating distance up to 50 mm
- Integrated MIFARE reader support
- Available with extended Temperature range
- Low Power Card detection mode selectable
- Flexible host interface

PIN Definition:



Connecter type :
MOLEX: 53780-0670
HCTL: HC-CB1.25-6AWT

UART interface:

PIN	Signal	I/O Type	Description
PIN1	TX	IO	Serial port transmit pin
PIN2	RX	IO	Serial port receive pin
PIN3	GND	PWR	Power GND
PIN4	VDD	PWR	3.3V
PIN5	D+	IO	GPIO
PIN6	D-	IO	GPIO

Key technical data:

Product features	Description
Host interfaces	Serial Uart up to 115200 bit/s（default） 2 USER defined GPIO
Carrier frequency	13.56 MHz
Baud rates	up to 424 kbit/s
Reader / writer	ISO/IEC 14443 A&B MIFARE（Classic, UltraLight, DESFire, Plus） NFC Forum Tag Type support FeliCa
Peer-to-peer	ISO/IEC 18092 (active and passive)
Card emulation	ISO 14443 A & Mifare
Supply voltage	2.6 - 3.6 V
Typical current	85 mA (Max);3.7mA(Average in 400ms list card mode);
Software	Examples code (C#, C++，android java)

NOTE:Flash capacity limited, not all features met at the same time

APPLICATION EXAMPLES:

- NFC enabled POS terminals
- Gaming and entertainment systems
- Industrial and medical applications
- Easy pairing of Bluetooth, Wi-Fi, or WUSB devices
- Automotive applications

CAUTION:

- The performance of this product may be degraded in the presence of metal or magnets.
- This product is a communication device using inductive technology and uses 13.56MHz frequency.
- Arbitrary disassembly, modification, removal of parts, etc. of the product affect the characteristics of the product.
- The voltage supplied to the product must be stable to reduce the effect of noise.
- Please do not input excessive voltage from the power supply terminal.
- Please do not give physical or chemical impact to the product.
- To prevent interference from other radios, please do not expose the product.
- Do not install where there is a strong magnetic field as it adversely affects the products performance.

ORDER INFORMATION:

Model	Size	Con	Interface	Power	Other
B22	3730	6P	T(UART TTL)	33(3.3V)	N (NFC function,Card Mode Enable,NDEF)
	3715	6P	U(USB HID)	33(3.3V)	M(FM1208 card function)
			I(I2C)		D (DesFire Card function)
					A (Mifare One Card function)

Example1: B22-3730-6P-33-AM (3.3V with Mifare One and FM1208 function) n)

Example2: B22-3715-6P-33-N (3.3V with NFC function)

INTEGRATION INSTRUCTIONS :

List of applicable FCC rules
Complies with part 15.225
Summarize the specific operational use conditions
The module must not be co-located or operating in conjunction with any other antenna or transmitter.

Limited module procedures

Not applicable

Trace antenna designs
Not applicable

RF exposure considerations
This module complies with FCC/IC RF radiation exposure limits set forth for an uncontrolled environment.
The host manual shall include the RF exposure statements.

Antennas
The antenna is permanently attached to the module.
Antenna type: PCB pattern antenna

Label and compliance information
The module is labeled with its own FCC. If the FCC ID is not visible when the module is installed inside another device , then the outside of the device into which the module is installed must also display a label referring to the enclosed module. In that case, the final end product must be labeled in a visible area with the following:
“Contains FCC ID: 2AXQD-NFC5000”,

Information on test modes and additional testing requirements
This module is tested in a standalone. Co-location of this module with other transmitters that operate simultaneously are required to be evaluated using the FCC multi-transmitter procedures.

Additional testing, Part 15 Subpart B disclaimer
The modular transmitter is only FCC authorized for the specific rule parts (i.e., FCC transmitter rules) listed on the grant, and that the host product manufacturer is responsible for compliance to any other FCC rules that apply to the host not covered by the modular transmitter grant of certification.
The host product may need to be evaluated against the FCC Part 15B criteria for unintentional radiators in order to be properly authorized for operation as a Part 15 digital device.

- FCC Statement

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.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device should be installed and operated with minimum 20 cm between the radiator and your body.