REYAX
TECHNOLOGY CORPORATION, LTD

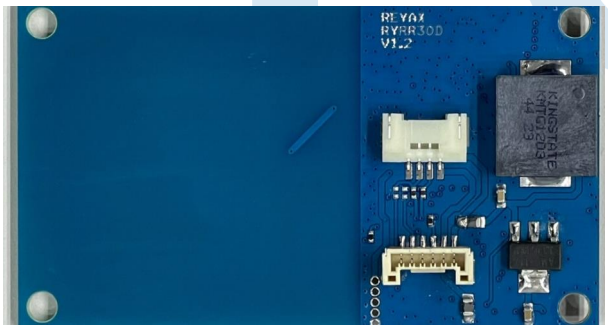
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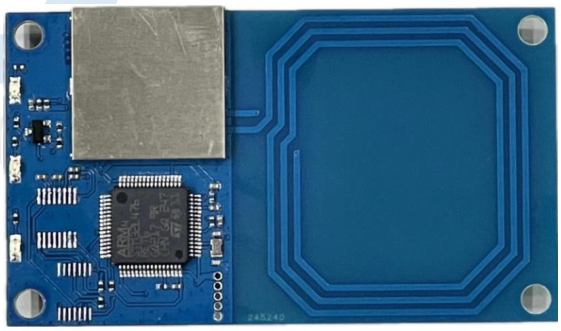
RYRR30D

Apple® Wallet VAS & Google® SmartTap pass

+3.3V UART/RS-232/USB Interface 13.56MHz NFC Antenna Module

Datasheet





Represented by:

first FC components
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PRODUCT DESCRIPTION

The RYRR30D can read and decrypt Near Field Communication (NFC) pass raw data from Android® or iPhone® devices. The RYRR30D can also read general RFID cards and TAGs and supports multiple protocols.

The RYRR30D supports +3.3V UART / RS-232 and USB2.0 interface. When using the +3.3V UART / RS232 interface, you can use AT command to configure the ID and Key. If decrypt NFC pass is successful, The NFC pass raw data will be output from the +3.3V UART / RS-232 interface.

When using the USB2.0 interface, you can edit the text file to configure the ID and Key. If decrypt NFC pass is successful, The NFC pass raw data will be output from the keyborad interface.

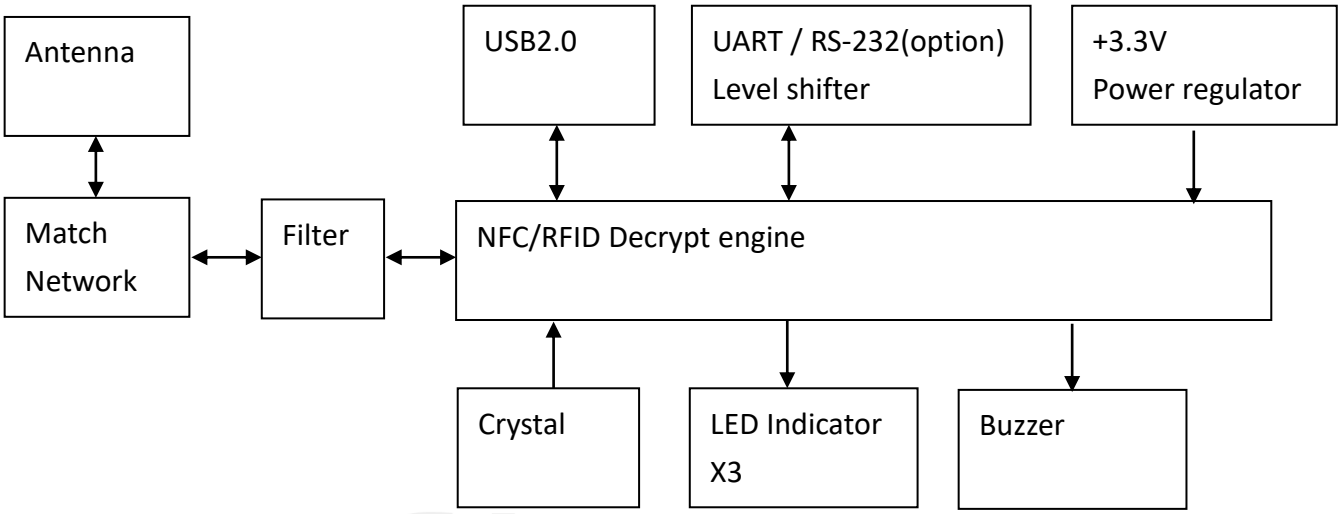
FEATURES

- Apple® Wallet VAS & Google® SmartTap pass Certification.
- Apple® ECP V1.0 compliance.
- Supports Near Field Communication (NFC) Standards NFCIP-1 (ISO/IEC 18092) Active P2P.
- Completely Integrated Protocol Handling for ISO15693, ISO14443A, ISO14443B and FeliCa
- Firmware upgrade via UART Interface.
- Operation Temperature range: -40 to +85°C.

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BLOCK DIAGRAM

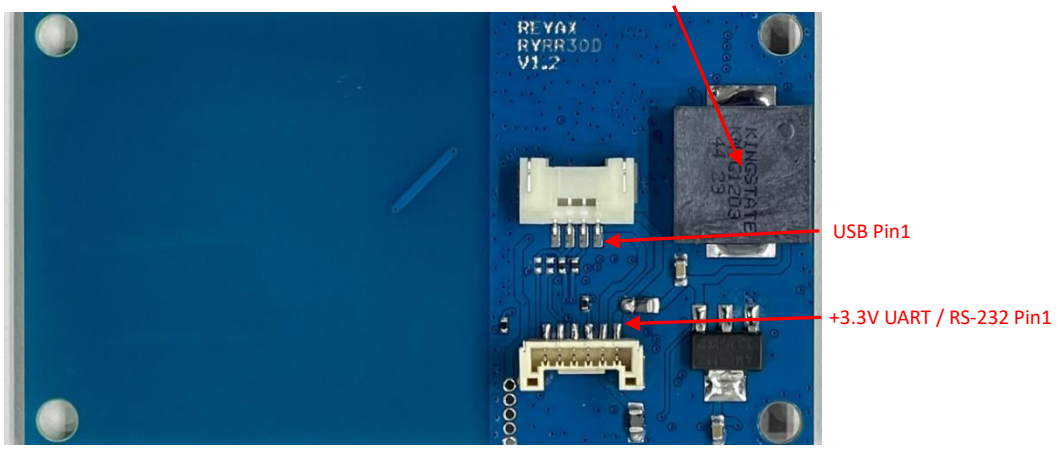


SPECIFICATION

Item	Min.	Typical	Max.	Unit	Condition
Operation Voltage	4.74	5	5.25	V	+5V
RF Output Power			30	dBm	
RF Transmit Peak current		550		mA	
Average Current		150		mA	
Communication Range		3		cm	iPhone 14 Pro
Digital I/O Voltage		+3.3V			TXD/RXD/ INDICATOR_OUTPUT/NRST
RS-232 TXD/RXD	-7		7	V	
USB Version		2.0			
Reset Time		100		ms	
Baud Rate		115200		bps	8,N,1
RF Frequency Range	13.553	13.56	13.567	MHz	
Operating Temperature	-40	25	+85	˚C	
Antenna					Internal
Weight		11.7		g	

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PIN DESCRIPTION

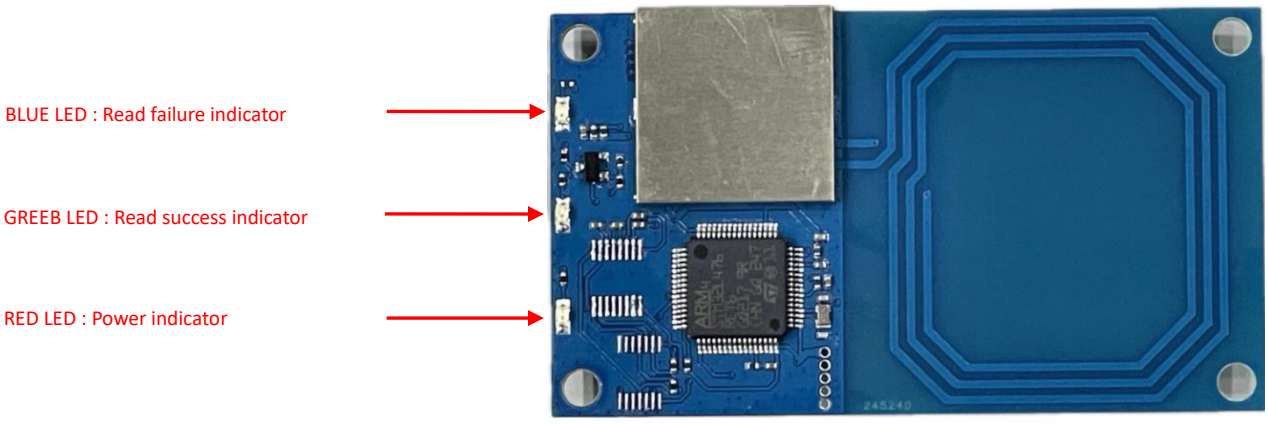


USB Interface Connector CVILUX CI4604M1HR0-NH

Pin	Name	I/O	Condition
1	GND	P	Power Ground
2	USB-	I/O	USB Data Negative
3	USB+	I/O	USB Data Positive
4	+5V	P	Power Input

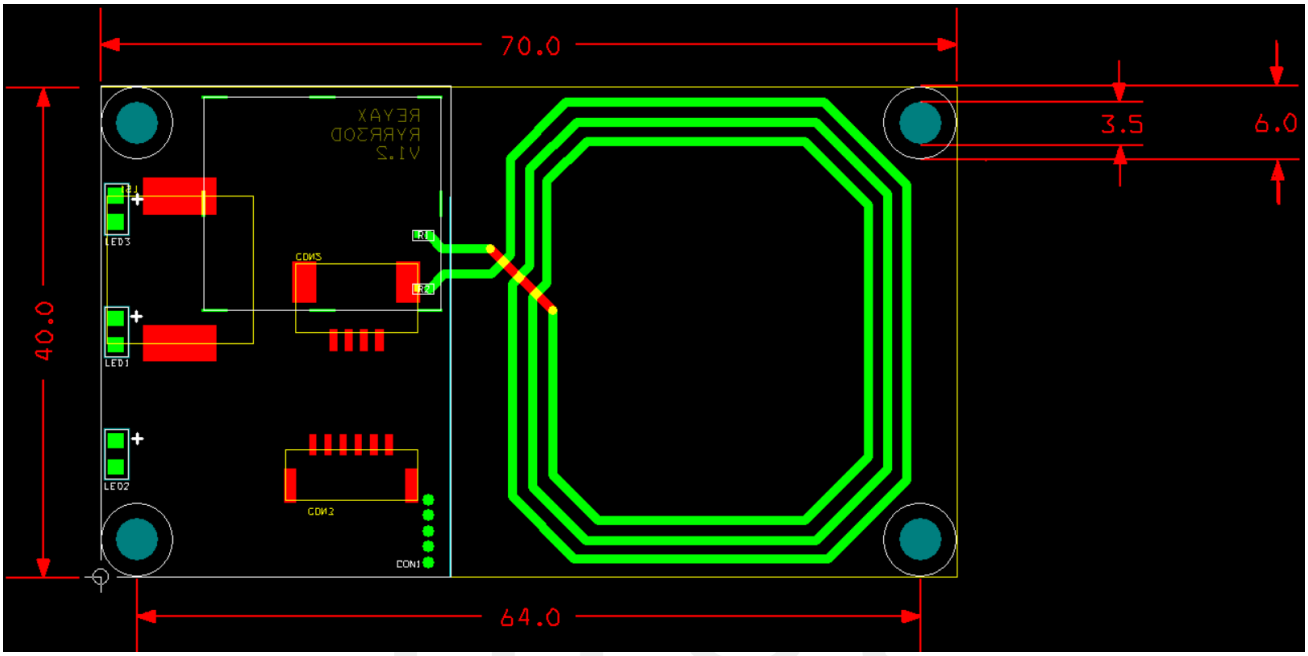
+3.3V UART / RS-232 Interface Connector JWT A1257WV0-6PS

Pin	Name	I/O	Condition
1	+5V	P	Power Input
2	GND	P	Power Ground
3	INDICATOR_OUTPUT	O	When read RFID card the pin will output Hi.
4	+3.3V or RS-232 TXD	O	Serial data Output
5	+3.3V or RS-232 RXD	I	Serial data input
6	NRST	I	Keep Low over 100 ms to reset the module.



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DIMENSIONS



unit : mm

ORDER INFORMATION

Ordering No.	USB2.0	+3.3V UART / RS-232 Interface
RYRR30D	V	+3.3V UART
RYRR30D_RS-232	V	RS-232

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