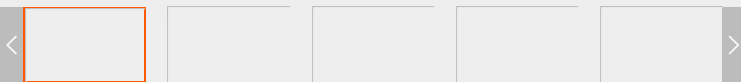
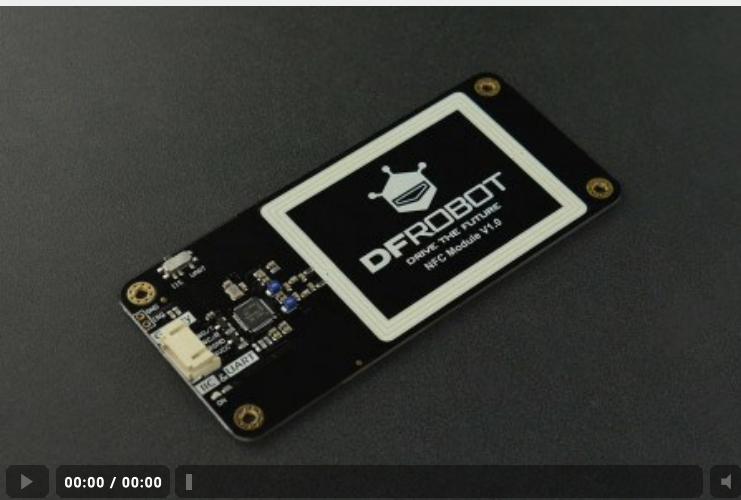


[Modules](#) / [Communications](#) / Gravity: UART & I2C NFC Module

Gravity: UART & I2C NFC Module

SKU:DFR0231-H

Brand:DFRobot

Reward Points: 169

Quantity Based

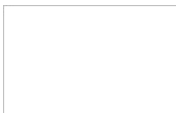
QTY	DISCOUNT
3-4	
5-9	
10+	

Quantity:

ADD TO CART

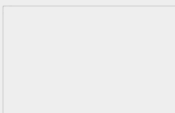


Frequently Bought Together



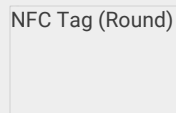
Gravity: UART & I2C NFC Module

+



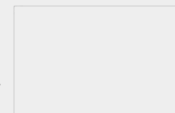
NFC Classic Sticker

+



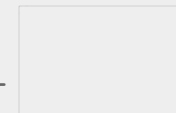
NFC Tag (Round)

+



RFID ca... (13.56Mhz)

+



Realtek... NFC Module

=



You have chosen:0
Total amount:

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INTRODUCTION

Gravity: UART & I2C NFC Module adopts NXP PN532, a highly integrated [NFC](#) communication controller, which supports various types of NFC smart cards or tags like the commonly used MIFARE Classic series and NTAG series in the market. Apart from the large [PCB](#) antenna design of better communication area and distance , the upgraded version joins the [Gravity](#) family by adopting a standard [Gravity](#) PH2.0-4P interface with I2C & UART composite rather than 2.54mm headers, making the wiring more convenient. A switch is added for conveniently switching between these two interfaces. When using the UART, you can easily read and write various NFC cards by using the common USB to UART converter and PN532 compatible PC software. When using the I2C interface, it can be used for various 3V3/5V controller such as [Arduino](#), [micro:bit](#), [FireBeetle ESP32](#) and [FireBeetle ESP8266](#).

About NFC

Near Field Communication (NFC), also known as short-range wireless communication, is a short-range high-frequency wireless communication technology that allows non-contact point-to-point data transmission (within ten centimeters) to exchange data between electronic devices. . This technology evolved from contactless radio frequency identification (RFID) and is backward compatible with RFID. It was first developed by Sony and Philips, and is mainly used to provide M2M (Machine to Machine) communication in handheld devices such as mobile phones. Because of the natural security of near field communication, NFC technology is widely used in POS mobile payment, bus cards, bank cards, access cards, water cards and other occasions.

Connection Diagram

Gravity: UART & I2C NFC Module I2C connection diagram (Arduino UNO)

Gravity: UART & I2C NFC Module UART connection diagram (USB to UART+PC)

Gravity: UART & I2C NFC Module UART connection diagram (MEGA2560)

Downloaded from [Arrow.com](#)

FEATURES

- NXP highly integrated NFC controller
- Gravity I2C & UART composite interface, flexible use
- Support various kinds of mainstream NFC smart cards or tags
- Compatible with 3.3V/5V controller

APPLICATIONS

- Contactless payment system
- Links for Bluetooth and WiFi devices
- Social sharing features like contacts, photos, and videos
- Smartphone NFC application

SPECIFICATION

- IC: NXP PN532
- Input Voltage (VCC) : 3.3V~5.5V
- Interface: Gravity I2C & UART (PH2.0-4P, Logic Level 0-3.3V)
- UART Baud Rate: 115200 bps
- I2C Address: 0x48
- Communication Frequency: 13.56 MHz
- Maximum Communication Distance: $\geq 10\text{mm}$, depend on the size of the NFC card/tag
- Protocol Support:
 - Reader/Writer Mode: ISO/IEC 14443A, ISO/IEC 14443B, MIFARE, FeliCa
 - Card Emulation Mode: ISO 14443A/MIFARE Classic 1K or 4K, FeliCa
 - Peer-to-Peer: ISO/IEC18092, ECM340
- Dimension: 110×50 mm / 4.33×1.97 in
- Weight: 20 g

DOCUMENTS

- [Product wiki](#)
- [More Documents](#)

SHIPPING LIST

- Gravity: UART & I2C NFC Module x1
- Gravity-4P I2C/UART Sensor Wire x1
- XH2.54-2P Black Header x1
- MIFARE Classic NFC Tag Sticker (Rectangle) x1

REVIEW

FAQ

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 n the discussion...



Khalifardy Miqdarsah • 7 days ago

Can I connect this modul to raspberry pi ?

^ • Reply • Share >



Andrew Fulmer • 9 months ago

Does the *Gravity: UART & I2C NFC Module* have the capability to communicate with a phone's NFC chip?

^ • Reply • Share >



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