

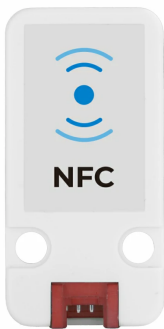
# Unit NFC

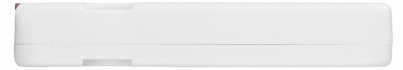
SKU:U216



ST25R3916  
NFC-A/B/F/V  
Reader / Writer  
Card Emulation

PORT. A. I2C  
GND 5V SDA SCL





## Description

**Unit NFC** is a near-field communication read/write unit operating at 13.56 MHz. The module features the ST25R3916 high-performance NFC front-end IC, supporting mainstream protocols including ISO 14443A, ISO 14443B, FeliCa™, and ISO 15693, enabling reliable read/write operations and data exchange with a wide variety of NFC/RFID tags and cards. The IC supports reader/writer mode, card emulation mode, and custom protocol mode, with automatic antenna tuning, high-sensitivity reception, and comprehensive protocol handling capabilities.

This unit communicates with the host device via I2C interface, ensuring reliable and stable data transmission. The product features a LEGO-compatible hole design for easy structural integration and screw-mount installation, making it suitable for a wide range of near-field communication and identity verification applications, including access control systems, identity authentication, and smart transportation.

## Features

- 13.56 MHz high-frequency near-field communication
- Equipped with ST25R3916 high-performance IC
- Supports ISO14443A, ISO14443B, FeliCa™, and ISO15693 protocols
- Supports three operating modes: Reader/Writer / Card Emulation / Custom Protocol
- I2C communication interface
- LEGO-compatible mounting holes
- Development Platform
  - UiFlow2

- Arduino IDE

## Includes

- 1 x Unit NFC
- 1 x HY2.0-4P Grove Cable (20cm)

## Applications

- Access Control Systems
- Identity Verification
- Smart Transportation

## Specifications

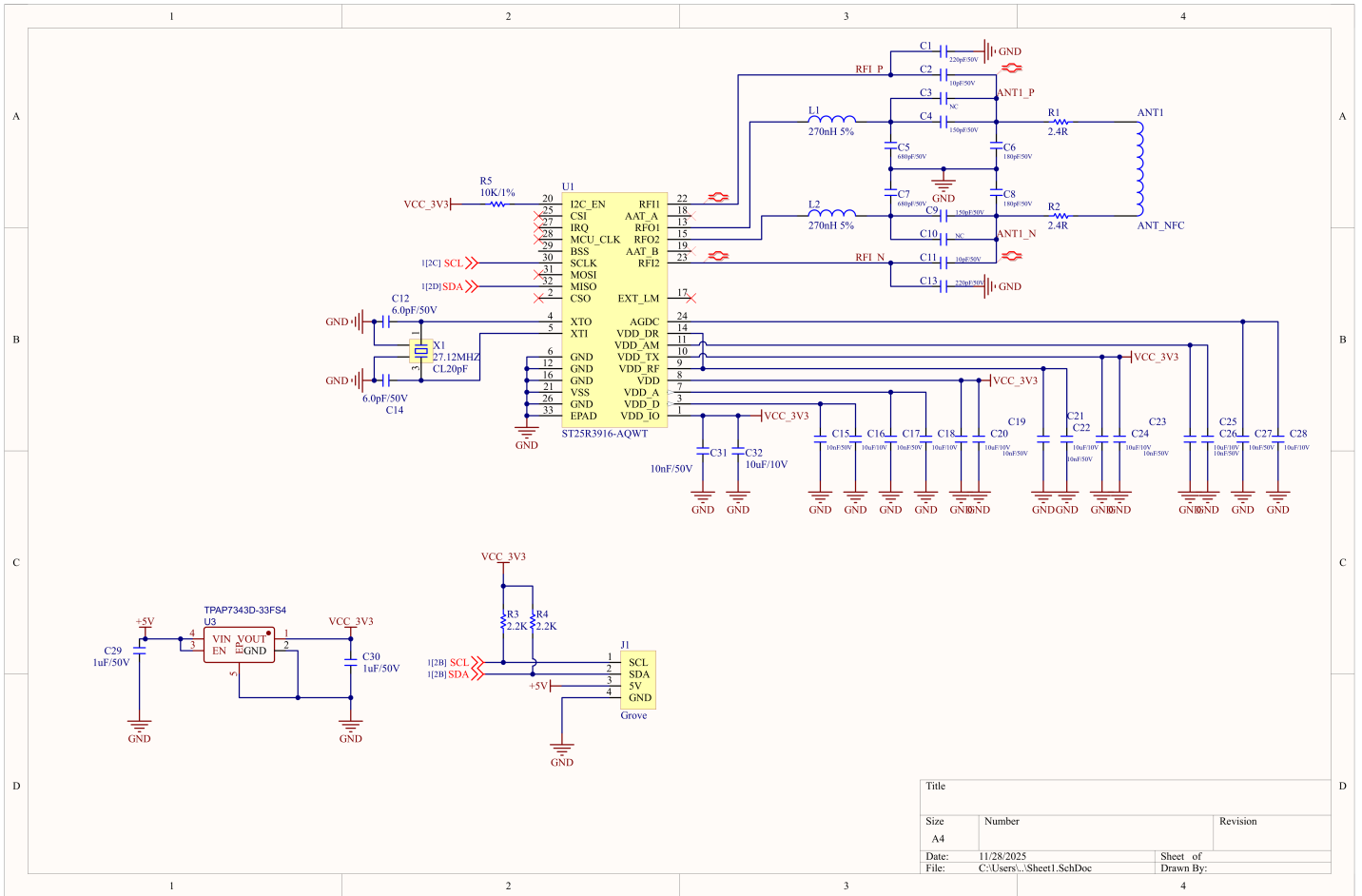
Specification	Parameter
IC Type	ST25R3916-AQWT
Operating Frequency	13.56 MHz
Communication Interface	I2C @0x50 (100K / 400K)
Supported Protocols	<b>Reader/Writer Mode:</b> NFC-A/B (ISO 14443A/B compatible), NFC-F (FeliCa™), NFC-V (ISO 15693) <b>Card Emulation Mode:</b> NFC-A / NFC-F
Read/Write Range	≤ 40mm
Power Consumption	Sleep: 5V @ 19.33uA Power-on (unconfigured): 5V @ 19.79uA Continuous reading: 5V @ 67.65mA Intermittent reading: 5V @ 66.48mA
Product Size	48.0 x 24.0 x 8.0mm
Product Weight	5.9g
Package Size	138.0 x 93.0 x 9.0mm
Gross Weight	11.5g

## Certifications

- CE/FCC/RoHS/WEEE/MIC

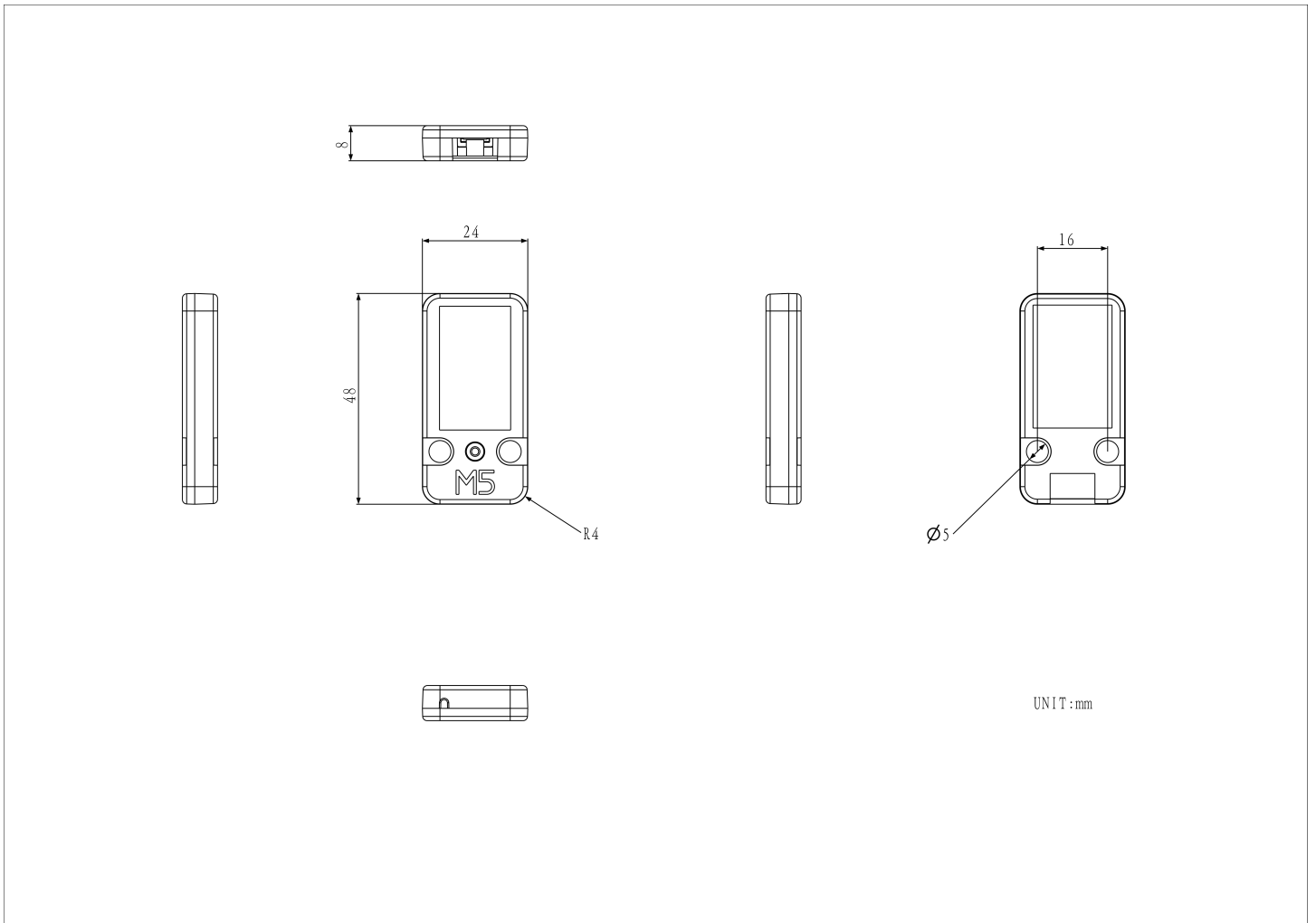
# Schematics

o [Unit NFC Schematics PDF](#)



# Model Size

o [Unit NFC Model Size PDF](#)



## PinMap

### Unit NFC

HY2.0-4P	Black	Red	Yellow	White
PORT.A	GND	5V	SDA	SCL

## Softwares

### Arduino

- [Unit NFC Arduino Library](#)
- [Unit NFC Arduino Quick Start](#)

## Datasheets

- [ST25R3916](#)

# | Video

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- Unit NFC Product Introduction and Functional Demonstration

[U216-Unit-NFC-video-EN.mp4](#)