

台灣生理科技股份有限公司  
**Taiwan Biotronic Technology Inc.**

Subject: UDCM01 manual/使用手冊

Marketing Name: Universal data communication module

Model No.: UDCM01

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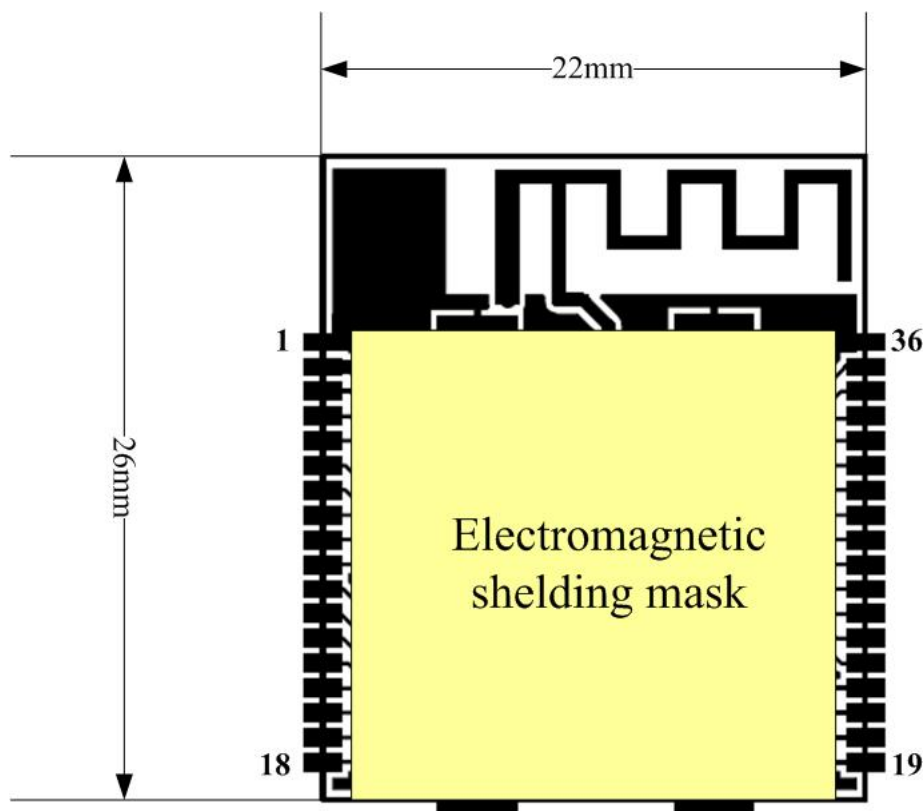
## 1 Introduction

1.1 UDCM01 based on Nordic Semiconductor nRF52832QFAA Bluetooth Low Energy Platform, and is a highly integrated module for fast implementation in various applications to enable electronic devices to communicate wirelessly with other Bluetooth™ or proprietary enabled devices.

## 2 Features

- Support Bluetooth Smart and 2.4GHz proprietary protocols
- ARM Cortex-M4 32-bit processor
- PCB antenna on board.
- Supply voltage 1.7~3 V
- 31 general purpose I/O available.

## 3 Dimension



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**4 Pin assignment**

Pin	Name	Type	Remark
1	GND	GND	
2	VCC	VCC	
3	P25	Digital I/O	
4	P26	Digital I/O	
5	P27	Digital I/O	
6	P28	Digital I/O analog input	
7	P29	Digital I/O analog input	
8	P30	Digital I/O analog input	
9	P31	Digital I/O analog input	
10	N.C	N.C	
11	DCC	DCC	
12	P00/XL1	Digital I/O analog input	
13	P01/XL2	Digital I/O analog input	
14	P02	Digital I/O analog input	
15	P03	Digital I/O analog input	
16	P04	Digital I/O analog input	
17	P05	Digital I/O analog input	
18	P06	Digital I/O	
19	P07	Digital I/O	
20	P08	Digital I/O	
21	P09	Digital I/O NFC input	
22	P10	Digital I/O NFC input	
23	P11	Digital I/O	
24	P12	Digital I/O	
25	P13	Digital I/O	
26	P14	Digital I/O	
27	P15	Digital I/O	
28	P16	Digital I/O	
29	P17	Digital I/O	
30	P18	Digital I/O	
31	P19	Digital I/O	
32	P20	Digital I/O	
33	P21	Digital I/O	
34	SWDCLK	Digital input	

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Pin	Name	Type	Remark
35	SWDIO	Digital I/O	
36	GND	GND	

**Federal Communication Commission Interference Statement**

This equipment has been tested and found to comply with the limits for a 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 instructions, may cause harmful interference to radio communications. 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 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.

**FCC Caution:** To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices).

**End Product Labeling**

This transmitter module is authorized only for use in devices where the antenna may be installed such that 0.5 cm may be maintained between the antenna and users. The final end product must be labeled in visible area with the following: "Contains FCC ID: 2AAQQUDCM01"

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**End Product Manual Information**

The user manual for end users must include the following information in a prominent location “IMPORTANT NOTE: To comply with FCC RF exposure compliance requirements, the antenna used for this transmitter must be installed to provide a separation distance of at least 0.5cm from all persons and must not be colocated or operating in conjunction with any other antenna or transmitter.” 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.

IMPORTANT NOTE: In the event that these conditions can not be met (for example certain laptop configurations or colocation with another transmitter), then the FCC authorization is no longer considered valid and the FCC ID can not be used on the final product. In these circumstances, the OEM integrator will be responsible for reevaluating the end product (including the transmitter) and obtaining a separate FCC authorization. This device is intended only for OEM integrators under the following conditions: The antenna must be installed such that 0.5 cm is maintained between the antenna and users. As long as a condition above is met, further transmitter test will not be required. However, the OEM integrator is still responsible for testing their end product for any additional compliance requirements required with this module installed (for example, digital device emissions, PC peripheral requirements, etc.).