



## Xadow NFC v2

SKU 113040010

The Xadow NFC v2 features the most popular NFC chip-set on the market - a highly integrated transceiver module PN532. This chip set is very powerful and can be seen in most of smartphones and NFC devices. It can be used to read and write to tags and cards, acting like NFC tags. Currently we've developed Arduino libraries to support reading and writing to MIFARE Class and MIFARE Ultralight Card.

The board also adopts the new 11 PIN Xadow connector to improve the flexibility of module connections.

### Near Field Communication (NFC)

Near Field Communication (NFC) is the set of protocols for the communication of electronic devices that are close proximity to each other (typically 10cm or less). Full NFC devices usually have three working mode:

- Card Emulation: typically used in entrance card, or in smartphones to let them acts like smart cards to perform payment process or ticketing
- Reader/Writer Mode: used to read the information stored in the NFC tags
- Peer-to-peer Mode : used for data exchanging between devices

**Features:**

- Open source and modular design
- Slim and small
- Built-in 11 PIN Xadow Connectors for full flexible connection with other Xadow Modules
- Stackable, chainable and sewable with other Xadow Modules

**Technical Details**

|                        |  |
|------------------------|--|
| Dimensions             | 25.43mm x 20.35mm x 3.50mm                   |
| Weight                 | G.W 4g                                       |
| Battery                | Exclude                                      |
| Microcontroller        | Kinetis KL02                                 |
| Core                   | ARM® 32-bit Cortex® -M0+CPU                  |
| Power Supply           | 3.3 – 6V (via breakout pins)                 |
| Flash                  | 32 KB  |
| SRAM                   | 4 KB   |
| Working Current        | 5mA at standby; 55mA when read/write         |
| Radio Frequency        | 13.56MHz                                     |
| Supported protocols    | ISO/IEC 14443 Type A and ISO/IEC 14443       |
| Max Operating Distance | ~28mm depending on the current antenna size. |

*Part List*

|                  |   |
|------------------|---|
| Xadow NFC v2     | 1 |
| FPC Cable 11 PIN | 2 |

*ECCN/HTS*

|        |            |
|--------|------------|
| ECCN   | 5A991.b    |
| HSCODE | 8517709000 |

