

NFC-VIO

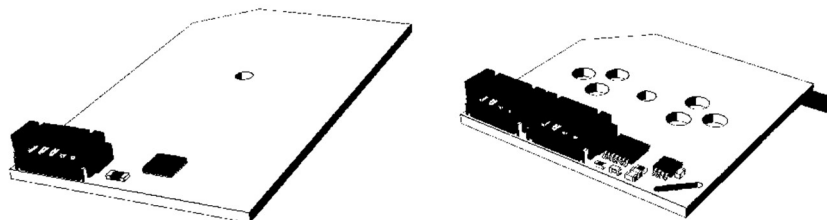


Figure 1. NFC devices Master (SX) and Slave (DX).

SYSTEM DESCRIPTION

The NFC module is a specific RF module used in VIO Series professional audio equipment of dBTechnologies brand.

Is not allowed and expected use of this module in a different application than the VIO Series final products.

The NFC data exchange system consists of a Master device (NFCMaster1) and a Slave device (NFCSlave1); they are able to communicate by exchanging data when they are physically located nearby (distance less than about 10cm).

The Master device is the only one able to initiate a communication; the Slave device is instead only passive.

Both devices are controlled by a host device that, in addition to supplying power, reads and writes data to a digital communication channel.

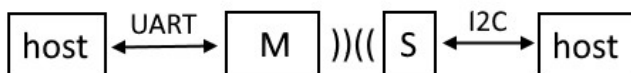


Figure 2. NFC system with Master and Slave device.

CARATTERISTICHE TECNICHE

| | |
|------------------------|----------------------------|
| Dimensions (WxLxH) | 72x42x15mm |
| Mounting | With screw |
| Host comuncation | UART, 8N1, 9600baud, 3.3V |
| Power supply | 3.3V DC \pm 10%, < 100mA |
| Max Radiated ERP power | -35dBm |
| Operating frequency | 13.56MHz |
| Operating temperature | -20 – +50°C |

NFC MASTER

The master NFC device is connected to the host device via a multipolar cable; power and communication lines (UART) transit on the same cable.

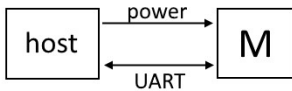
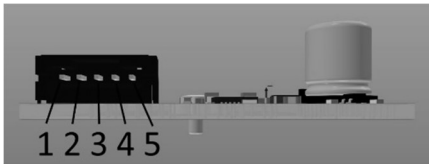


Figure 3. Connecting the NFC Master device to the host.

PINOUT



| | |
|-------------|---|
| 1 – Vcc | 3.3V power supply |
| 2 – host TX | UART host transmit pin |
| 3 – host RX | UART host receive pin |
| 4 – DISABLE | Disable module, collegare questo pin a Vec per disabilitare il modulo |
| 5 - GROUND | Ground power supply |

NFC SLAVE

The NFC Slave device has two identical connectors. In connector A, the host device is typically connected via a dedicated multipolar cable that simultaneously carries power and data (I2C). A further additional I2C module can be connected to the B connector in cascade.

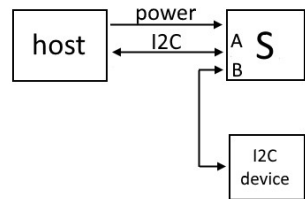
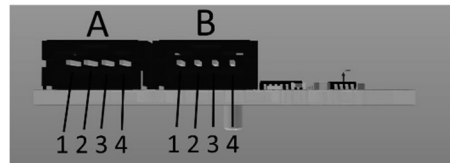


Figure 4. NFC Slave device connection



| | |
|------------|---------------------|
| 1 – Vcc | 3.3V power supply |
| 2 – SDA | I2C data |
| 3 – SCL | I2C clock |
| 4 – GROUND | Ground power supply |

Pinout Connettore A

Pinout Connettore B

| | |
|------------|---------------------|
| 1 – Vcc | 3.3V power supply |
| 2 – SDA | I2C data |
| 3 – SCL | I2C clock |
| 4 – GROUND | Ground power supply |



FCC/ISED approvals:

FCC ID: 2ADDV-NFCVIO

IC : 12207A-NFCVIO

5. Instruction to OEM

This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

This device is verified to comply with part 15 of the FCC Rules for use with cable television service.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause interference and
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Please note that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: 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 or more 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.
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This application and its antenna must not be co-located or operation in conjunction with any other antenna or transmitter.

Host labelling requirement: Contains transmitter module FCC ID: 2ADDV-NFCVIO



This device complies with Industry Canada's license-exempt RSSs. 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.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Host labelling requirement: Contains transmitter module IC ID: 12207A-NFCVIO.

6. Note:

The module is a limited single module without shielding case, CIIPC or new **filing shall be applied for any host equipment using this module, such as provide the shielding case for this module.**