



Waltz PN532 NFC reader characteristics



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2 TABLE OF CHANGES

Item	Page	Description
All	All	Initial version

3 PURPOSE OF THE DOCUMENT

This document details the characteristics of the NFC reader embedded in the Waltz G1_V5 wall unit.

4 WALTZ NFC READER USER MANUAL

4.1 WALTZ NFC READER OVERVIEW

The 2 following pictures present the exterior appearance of the Waltz NFC reader.

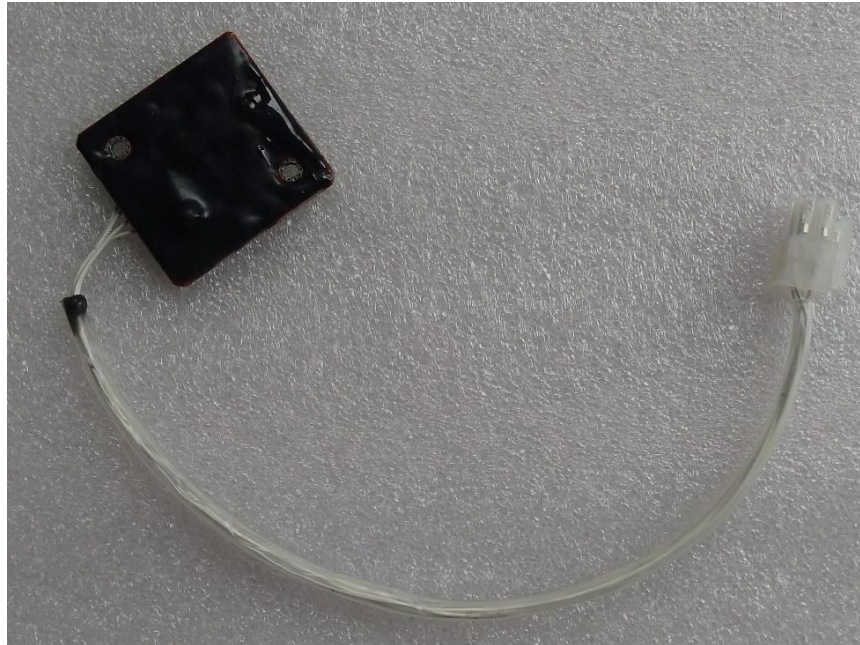


Figure 1: Waltz NFC reader – front

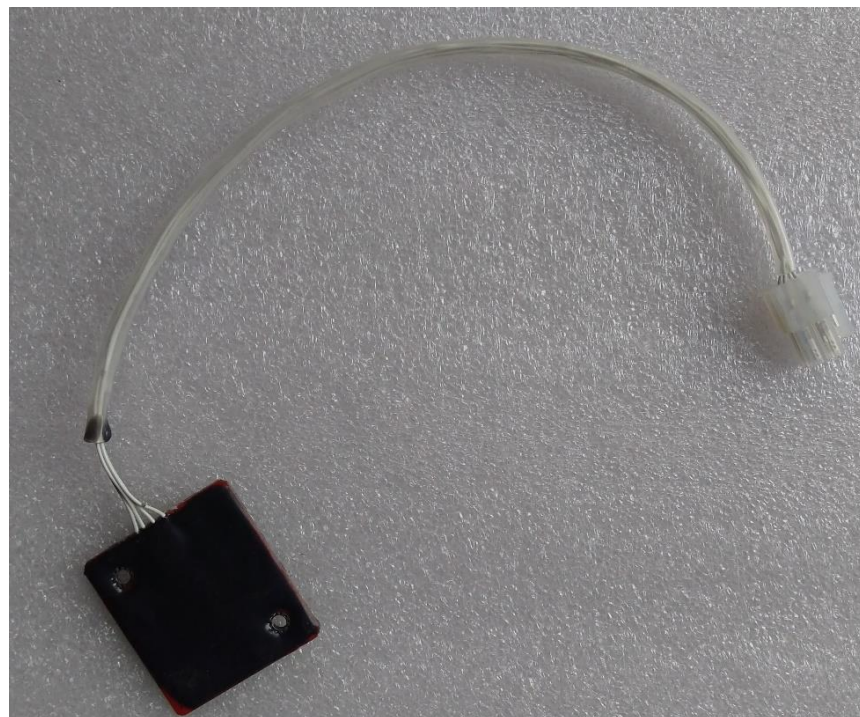


Figure 2: Waltz NFC reader - back

4.2 DESCRIPTION OF THE SYSTEM

The Waltz NFC reader is mostly based on the PN532 board manufactured by Elechouse, epoxy-potted and connected to an industry standard rectangular housing connector with 4 white wires, the cable protection being ensured by a transparent sheath.

Ferrites are added to each output line of the board, and decoupling capacitor placed between its power supply voltage rail and ground. The goal of this is to reduce the EMI emissions to an acceptable level.

The following figure presents the different elements that make up the Waltz NFC reader.

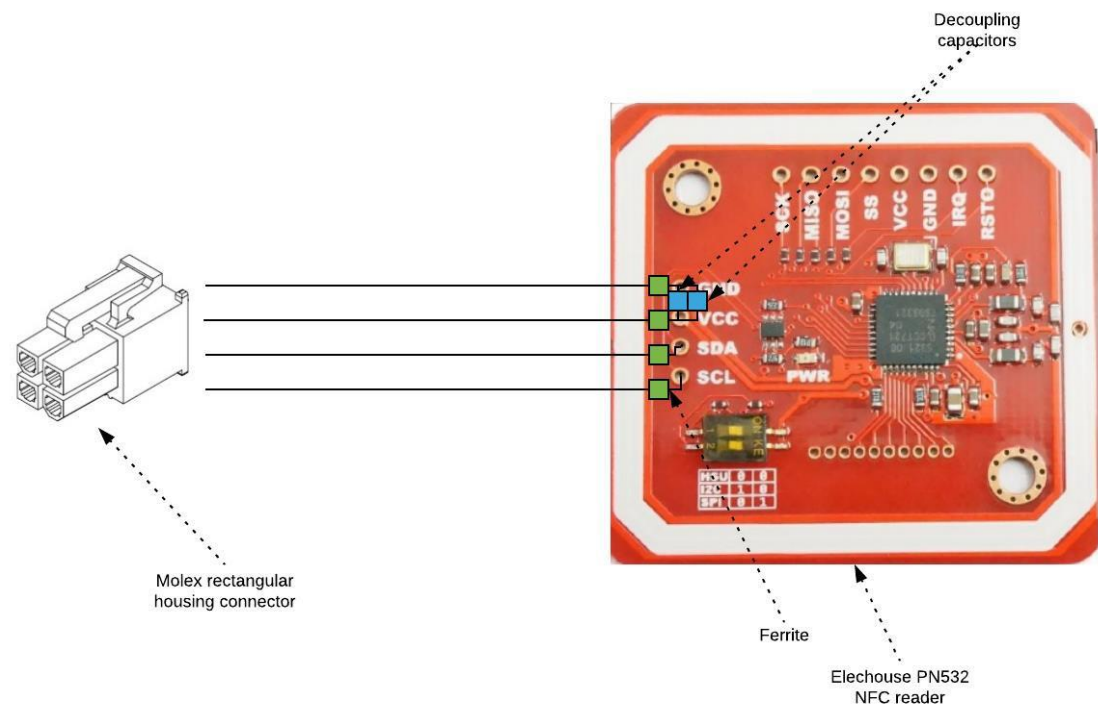


Figure 3: Waltz NFC reader – Elements diagram

The list of the components included in the product is as follows:

- Elechouse PN532 board (click on the link hereinafter): [Elechouse PN532 User manual](#)
- Murata BLM21BD152SN1 ferrites, generic 10nF and 10uF capacitors soldered onto the Elechouse PN532 board, close to the wire connection.
- White cable
- Transparent sheath
- Molex rectangular housing connector (0039012040) and its associated crimps

5 BILL OF MATERIALS

The bill of material of the product is the following:

Description	Manufacturer	Manufacturer part number	Quantity
NFC board	Elechouse	PN532	1
Ferrite	Murata	BLM21BD152SN1	4
10nF decoupling capacitor	Murata	GRM155R71H103KA88D	1
10uF decoupling capacitor	Samsung Electro-Mechanics	CL21A106KQFNNNE	1
Cabling	Alpha wire	A1851W-100	4
Transparent sheath	Alpha wire	P1058 CL005	1
Housing connector	Molex	0039012040	4

RF Guidelines

License ID:

FCC ID: 2ADZBID-2

Contains:

FCC ID: 2AO3T-NFCPN532

FCC statements:

“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.”

“Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.”

