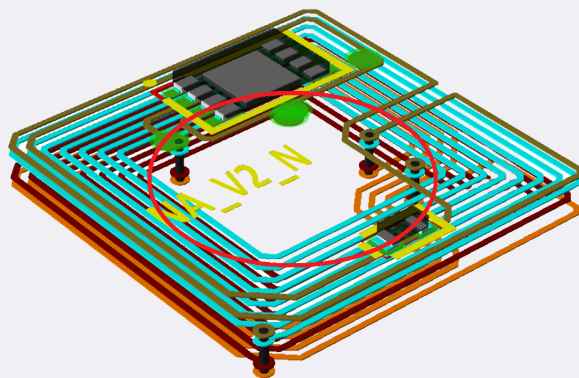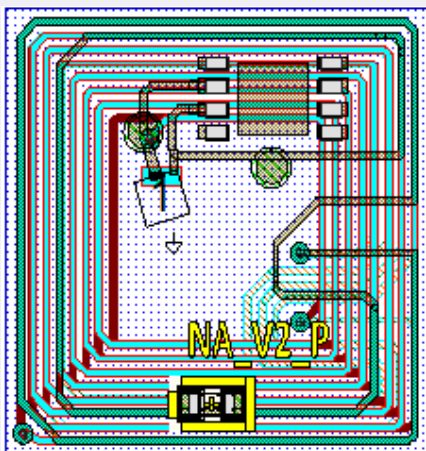# BEECHAT VAULT NA_V2_P

PRODUCT DESCRIPTION

Beechat Vault NA_V2_P NFC Tag 01 – is an ultra small size NFC tag – 9.7×9.7×1.6mm using the ST chip M24SR64-Y with 8-Kbyte (64-kbit) EEPROM memory and uses the NFC ISO/IEC 14443 Type A interface. Working distance – up to 20mm.

01 KEY FEATURES

1. Compatible with Android and iOS as well as NFC ISO/IEC 14443 compatible readers.
2. High storage capacity, capable of storing large amounts of information via NFC compared to other tags on the market.
3. AES-128-bit password protection available on-tag.
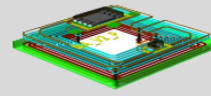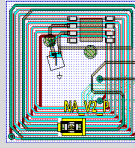4. 200 years data retention, and all weather enclosure.

02 PRODUCT IMAGE

Beechat Vault NA_V2_P NFC Tag 01

TECHNICAL SPECIFICATIONS

Layout

Contactless interface

- NFC Forum Type 4 Tag
- ISO/IEC 14443 Type A
- 106 Kbps data rate

Memory

- 8-Kbyte (64-kbit) EEPROM
- Support of NDEF data structure
- Data retention: 200 years
- Write cycle endurance:
- – 1 million Write cycles at 25 °C
- – 600k Write cycles at 85 °C
- – 500k Write cycles at 105 °C
- Read up to 246 bytes in a single command
- Write up to 246 bytes in a single command
- 7 bytes unique identifier (UID)
- 128 bits passwords protection
   Forum Type 4 Tag
- ISO/IEC 14443 Type A
- 106 Kbps data rate

Working distance
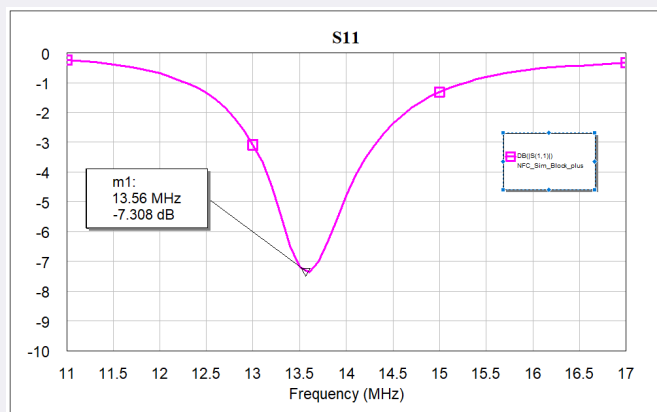
up to 20 mm

Size

9.7×9.7×1.6mm

Weight

2g

Working Frequency

13.56 Mhz

Matching (S11) on 13.56MHz

< -7dB

S11 Graph

PCB PRODUCTION AND STACKUP INFORMATION

04

- Layers: 4
- PCB Thickness: 0.8
- Impedance: no JLC7628
- Outer Copper Weight: 1
- Inner Copper Weight: 0.5
- Material Type: FR4-Stand
- ard Tg 130-140C
- Appearance Quality: IPC Class 2 Standard

a) JLC7628 Stackup:

Layer	Material type	Thickness (mm)	
Top Layer 1	Copper	0.035	
Prepreg	7628*1	0.2	
Inner Layer 2	Copper	0.0175	0.3 mm (with copper core)
Core	Core	0.265	
Inner Layer 3	Copper	0.0175	
Prepreg	7628*1	0.2	
Bottom Layer 4	Copper	0.035	

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