

20 January 2025

Subject: Izon AFC V2 Antenna description

- Izon's antenna used in their AFCV2 product is based off of a reference design for the PN532 found on the NXP website. [NFC - NXP Community](#)
- It was designed to work as a reader for 13.56MHz NFC tags.
- The geometry of the antenna was designed around the required number of turns for impedance, and the geometry of the product. The circuit is composed of the antenna, matching circuit, and EMC filter. There is an additional attenuation and tuning for RX shown on the schematic.

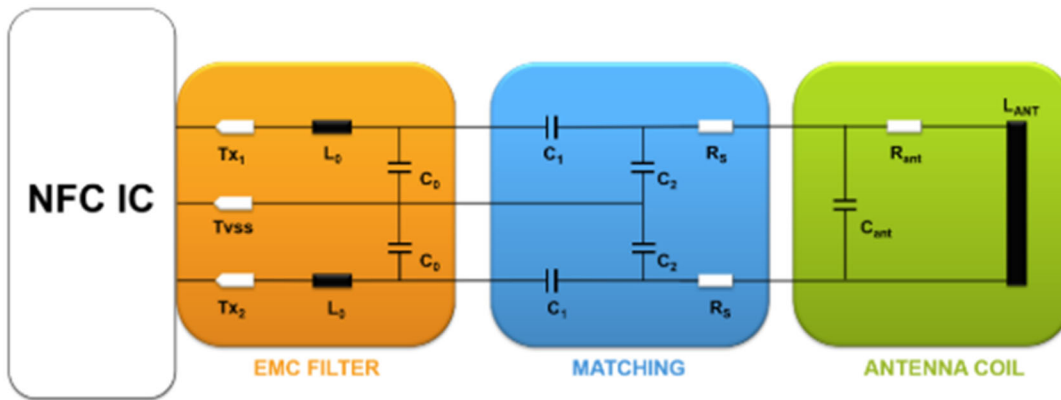
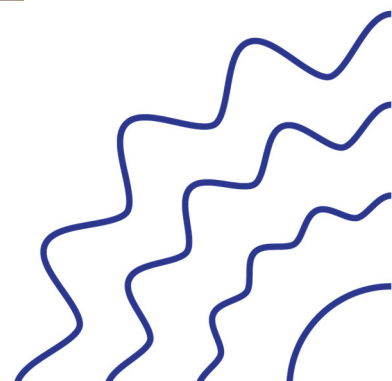


Figure 1 Antenna Topography



Figure 2 Antenna macro shot



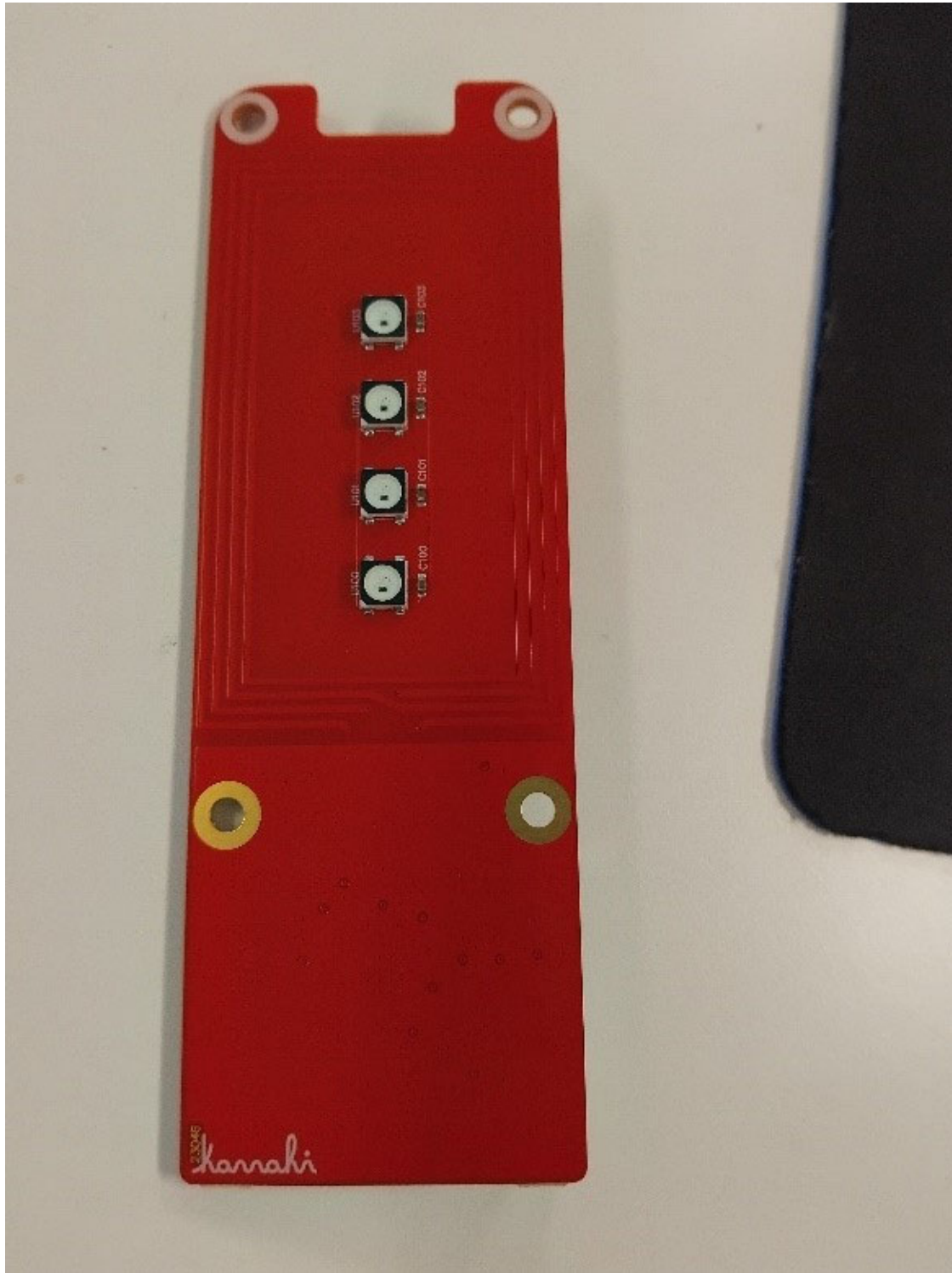


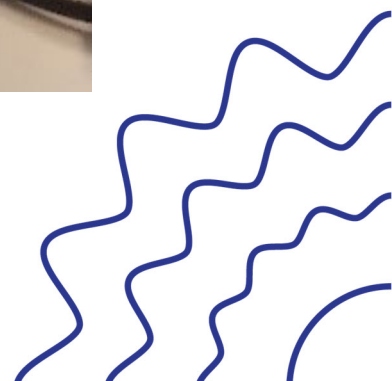
Figure 3 Antenna back side

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Figure 4 Antenna installed

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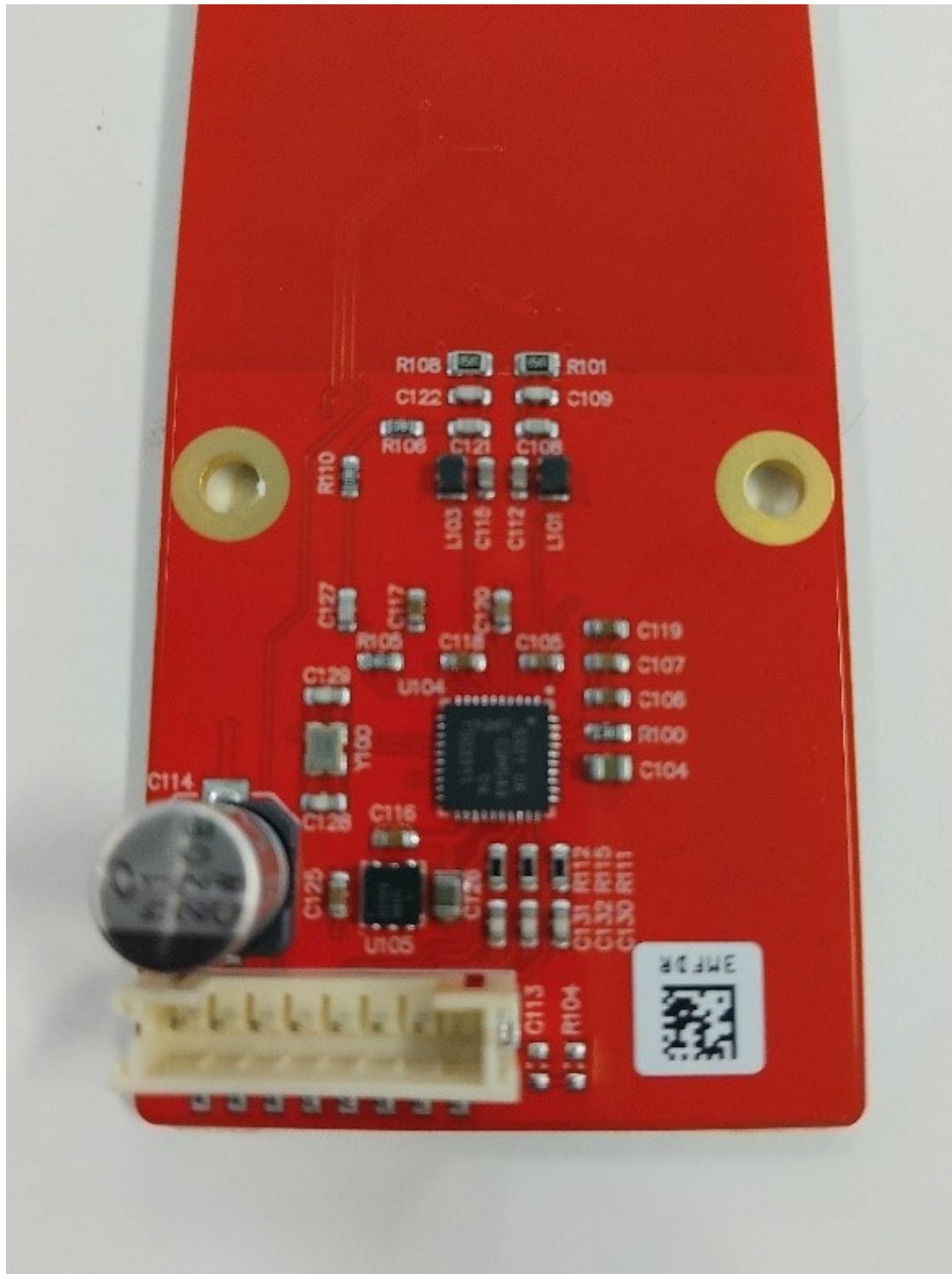


Figure 5 Antenna electronics close up



Figure 6 Antenna

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