Integrated PCB NFC Antenna

Rev 1.0

The Loops PCB Near Field Communication (NFC) antenna is embedded into the Loops game PCB board. It's designed to read NTAG 215 NFC tags at a distance of about 10 mm, and manufactured according to NXP "Class 6 NTAG antenna recommended spec (ref. AN11276 NTAG Antenna Design Guide Rev. 1.8).

Electrical Specifications

Frequency	13.56Mhz
Impedance [Ω]	50
Inductance [µH]	2.13
Resistance [Ω]	2.05
Q-Factor	88.52

Mechanical Specifications

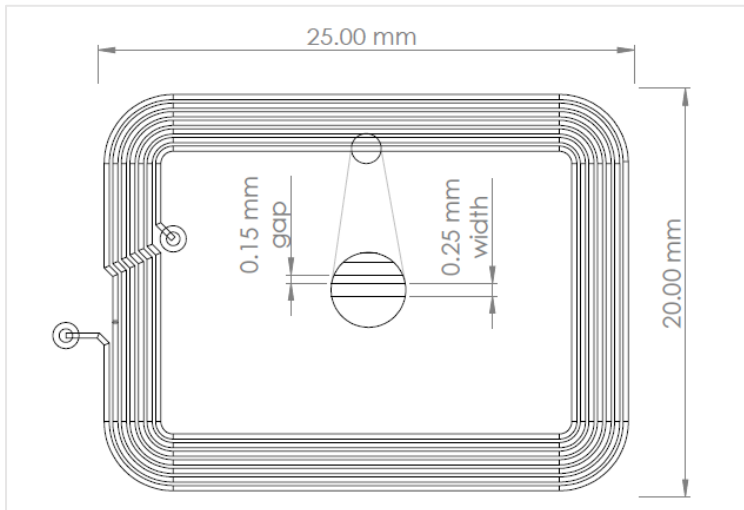|	
Size [mm]	20 x 25
Coil Laps	7
Coil Gap [mm]	0.15
Wire Width [mm]	0.254
Operational Temperature [c]	-40 to 80
Connector Type	N/A (integrated)
Antenna Type	Loop Antenna

FIGURE 1 – LOOPS PBC ANTENNA

Drawing:

FIGURE 2 - LOOPS ANTENNA DRAWING