ANTENNAS

SALTO Neo G1824 N1M

Version	Date	Changes	Author
1.0	03/10/2024	First edition	A.M.

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Table of contents

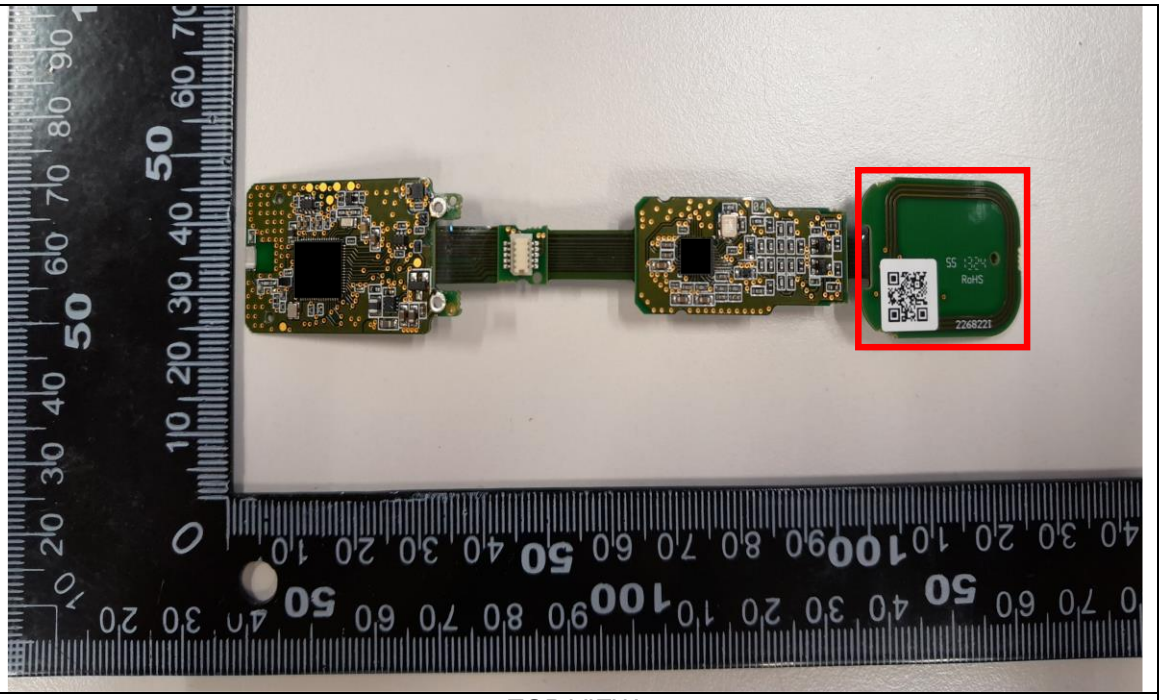
1 N1M

SALTO Neo		N1M Mifare (1) + Bluetooth LE (3)
Antennas	Number of antennas	2
	Manufacturer	1- SALTO Systems, S.L. 3- N/A
	Model number	1- N1M 3- STM32WB55RG (SoC) + WLA.01 (Antenna)
	Type	1- Integral, PCB 3- Integral, Chip
	Gain	1- N/A 3- 1 dBi
	Frequency of Operation	1- 13.553 - 13.567 MHz 3- 2400 - 2483.5 MHz
Channels	Number of channels	1- N/A 3- 40
	Spacing	1- N/A 3- 2 MHz
	Bandwith	1- N/A 3- 1 MHz
Type of Modulation		1- ASK 100%, OOK (subcarrier fc/16) & ASK 10% - 30%, OOK (subcarrier fc/32) 3- GFSK
Magnetic field values (10 m)		1- -21.65 dBuA/m 3- N/A
Declared Nominal Output Power (Max.)		1- N/A 3- 3.2 dBm
ITU Emission Designator		1- K1D 3- F1D
Equipment Configuration for frequency Stability: Data Rate		1- 106 Kbit/s 26.48 Kbit/s 3- 1 Mbit/s
Equipment Configuration for Field Strenght Measurement: Data Rate		1- 106 Kbit/s 26.48 Kbit/s 3- 1 Mbit/s

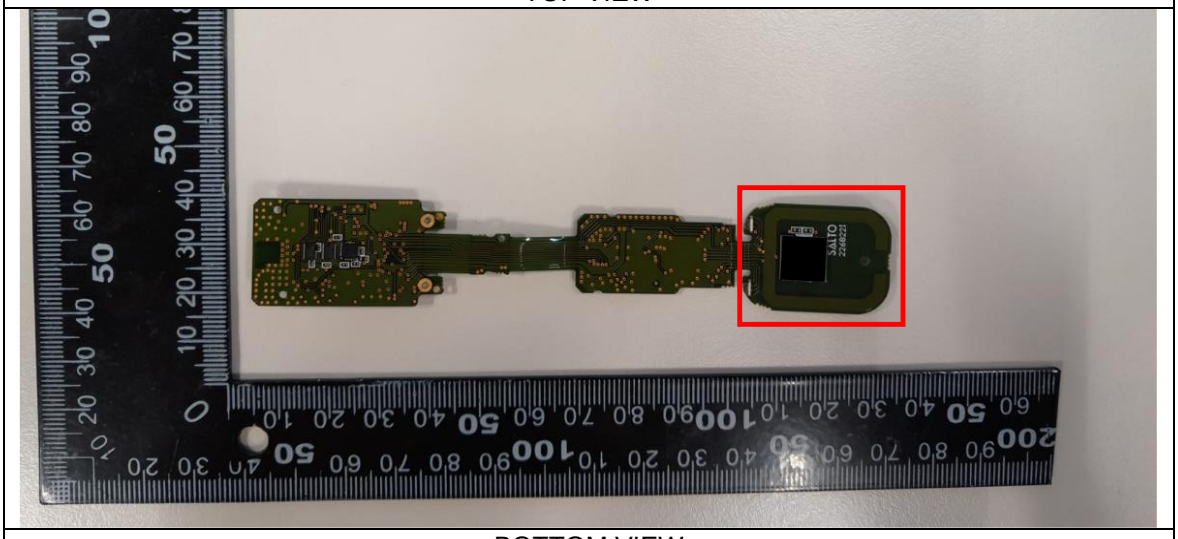
RFID Antenna

The RFID antenna was designed by Salto Systems, S.L. at Arkotz 9, Pol. Lanbarren 20180 Oiartzun (Gipuzkoa), Spain. The antenna model is N1M and it is located on the control circuit, 226822I. The dimensions of the circuit and the antenna are shown in the following images.

The dimensions of the circuit and the antenna are shown in the following picture(s).



TOP VIEW

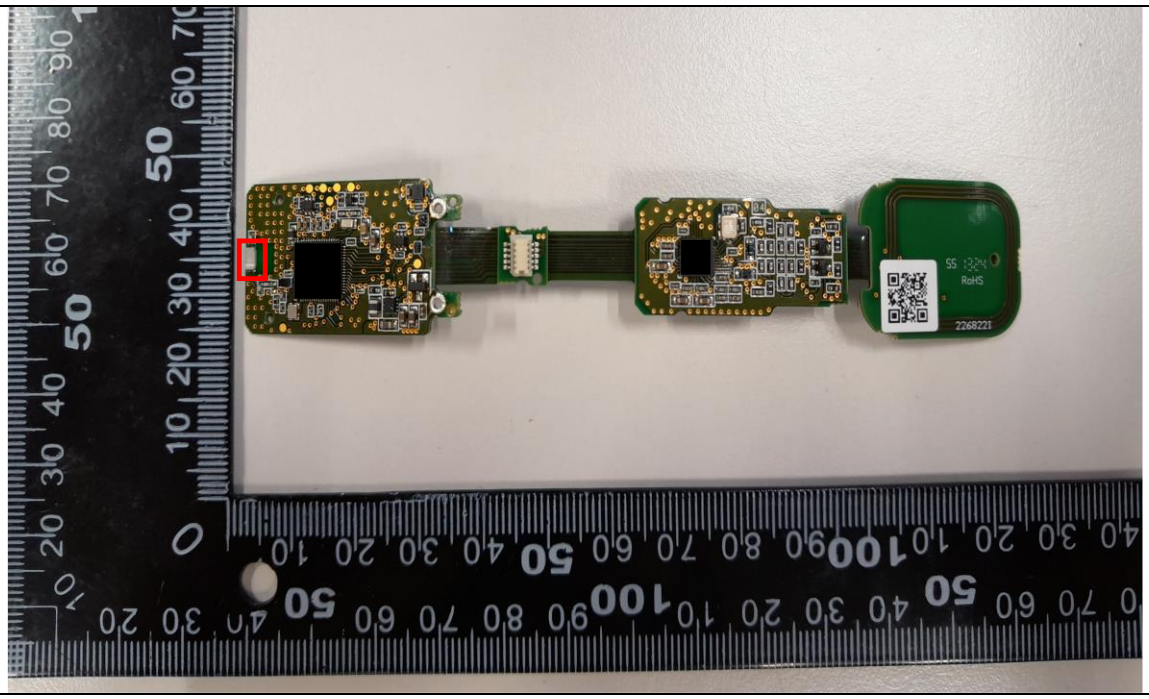


BOTTOM VIEW

Bluetooth LE Antenna

The Bluetooth LE antenna is the 2450AT18B100 model from Johanson Technology. The antenna is located on the top left side of the control circuit, 226822I. The following image shows the location of the antenna on the control circuit.

The dimensions of the circuit and the antenna are shown in the following picture(s).



TOP VIEW

The remaining technical information of the antenna is described in the data sheet attached in Annex I.

Annex I

TAOGLAS

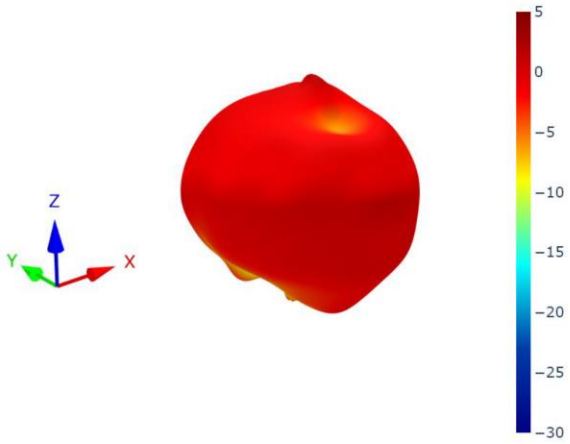
2. Specification

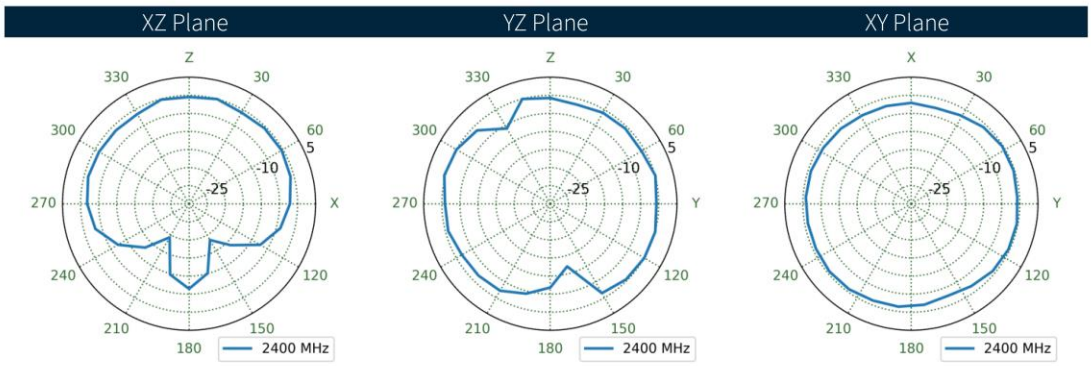
Wi-Fi Electrical								
Band	Frequency (MHz)	Efficiency (%)	Average Gain (dB)	Peak Gain (dBi)	Impedance	VSWR	Radiation Pattern	Max. input power
Wi-Fi 2.4GHz	2400-2500	67.8	-1.69	1.0	50 Ω	2Max	Omni	5W
Testing was conducted with the WLAD.01 Evaluation Board, which is available through our distribution channels.								

Mechanical	
Dimensions	3.2*1.6*0.5mm
Material	Ceramic

Environmental	
Operating Temperature	-40°C~+85°C
Storage Temperature	-40°C~+105°C
Temperature Coefficient（τf）	0 ± 20 ppm @-20ºC to +80ºC
Recommended Reel Storage Condition	5°C to 40°C Relative Humidity 20% to 70%
Moisture Sensitivity Level (MSL)	3 (168 Hours)

8.2 Patterns at 2400 MHz





8.3 Patterns at 2450 MHz