



ACCELERATING
INNOVATION

J1562 701x xTLite

**Peak Gain Report Update for
Bluetooth Antenna PN: 1005910**

Rev. I.4 Jan 28, 2026
San Diego Design Center



Revision History

Antenna P/N	1005871	
Revision	Date	Description of changes
Rev. A	Dec 02, 2022	Baseline Chip antenna
Rev. A.2	Dec 14, 2022	LDS antenna design under the top housing
Rev. A.3	Dec 15, 2022	LDS antenna design under the top housing
Rev. B	Jan 11, 2023	Feasibility study of LDS RFID antenna
Rev. C	Jan 31, 2024	Stamping metal antenna designing for finding minimum height for getting similar performance with LDS antenna
Rev. C.2	Feb 02, 2024	Stamping metal antenna designing for finding minimum height for getting similar performance with LDS antenna
Rev. C.3	Feb 09, 2024	Stamping metal antenna designing in between RFID and PCBA+Battery
Rev. C.4	Feb 09, 2024	KAVX antenna type summary
Rev. C.6	Feb 15, 2024	Antenna Type Summary 2024_Top housing dimension and gap in between PCBA and top housing
Rev. C.7	Mar 01, 2024	Antenna Type Summary 2024_Top housing dimension and gap in between PCBA and top housing_adjust chart
Rev. D.1	Apr 19, 2024	Circular Polarization Antenna Assessment
Rev. D.2	Jan 09, 2025	Circular Polarization Antenna Assessment on the mockup PCBA_20mm diameter
Rev. G.1	July 07, 2025	performance for the optimized factory built stamping antenna on the final device

Revision History

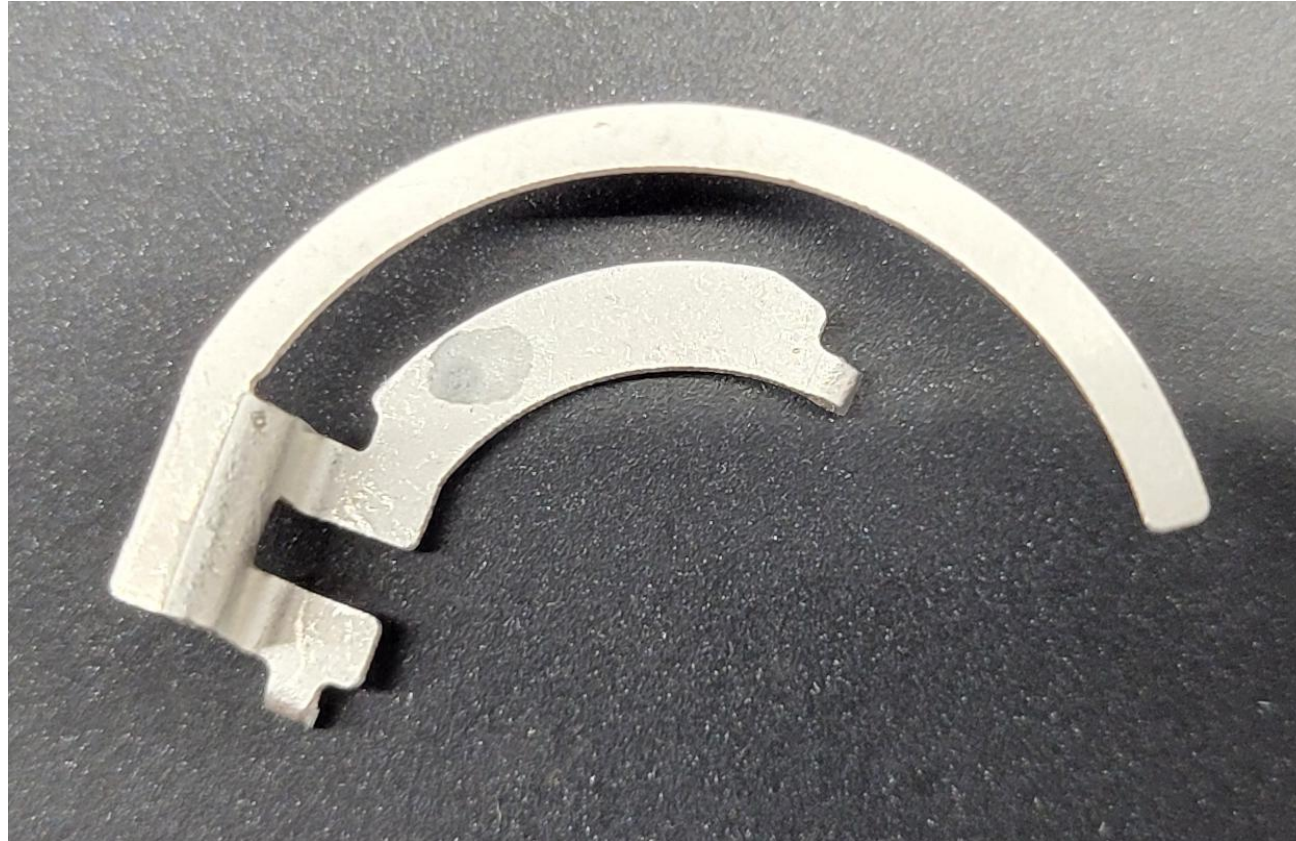
Antenna P/N	1005871	
Revision	Date	Description of changes
Rev. H.1	Sep 17, 2025	Passive performance for 1005910 in between RFID coil and Battery (Flipped-Antenna)
Rev. I.1	Nov 14, 2025	Passive performance for 1005910_X5 on the New PCBA
Rev. I.2	Jan 16, 2026	Peak gain for BT antenna 1005910
Rev. I.4	Jan 28, 2026	Peak gain report update for BT antenna 1005910 including antenna part number, actual value of maximum antenna gain, 3D antenna pattern, and address of the antenna manufacturer

Content

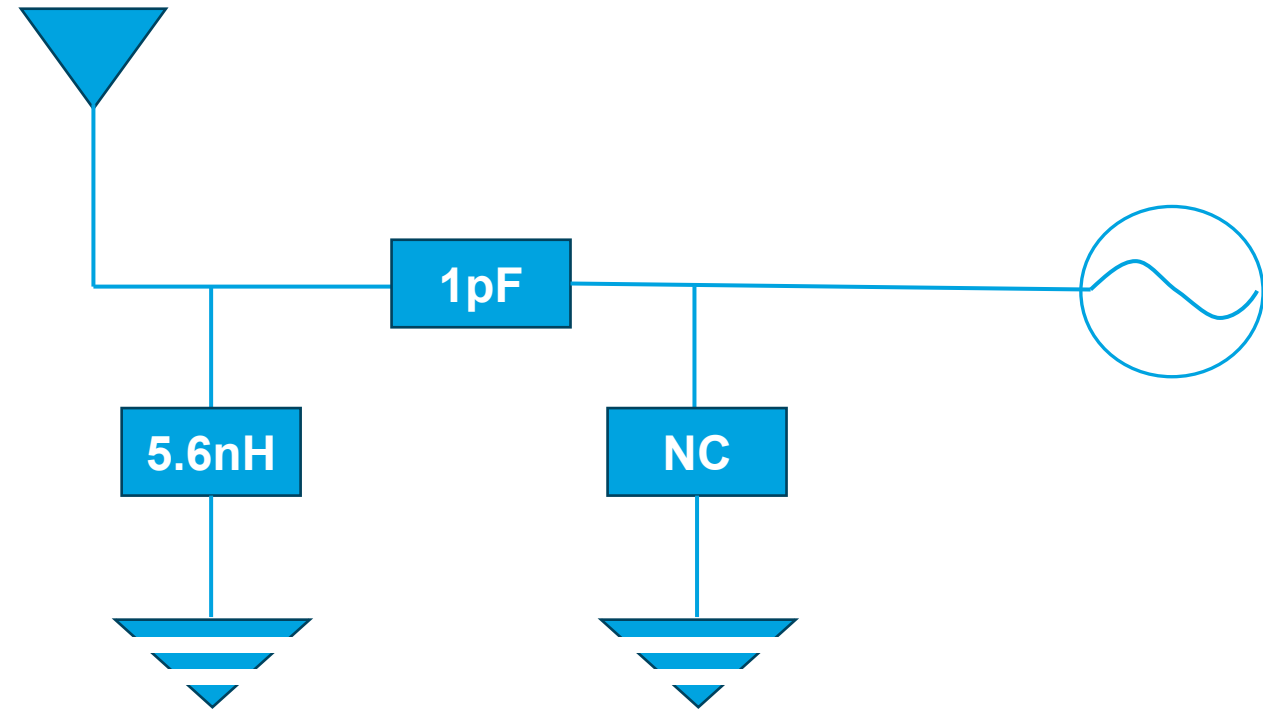
- 1. Antenna part number: Page 5**
- 2. Maximum gain of the antenna: Page 10**
- 3. Antenna 3D pattern: Page 11**
- 4. Name and address of the antenna manufacturer: Page 12**

KAVX Stamping metal antenna

PN: 1005910

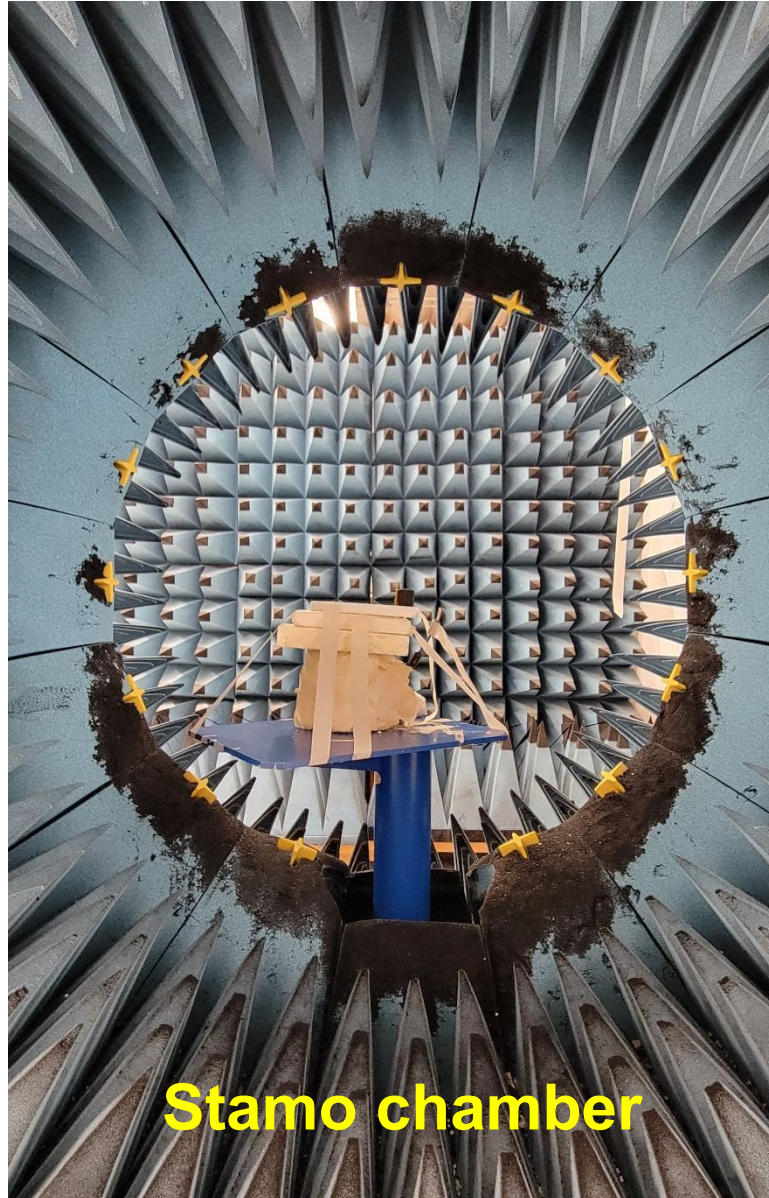


Matching circuit and values_ For the New PCBA



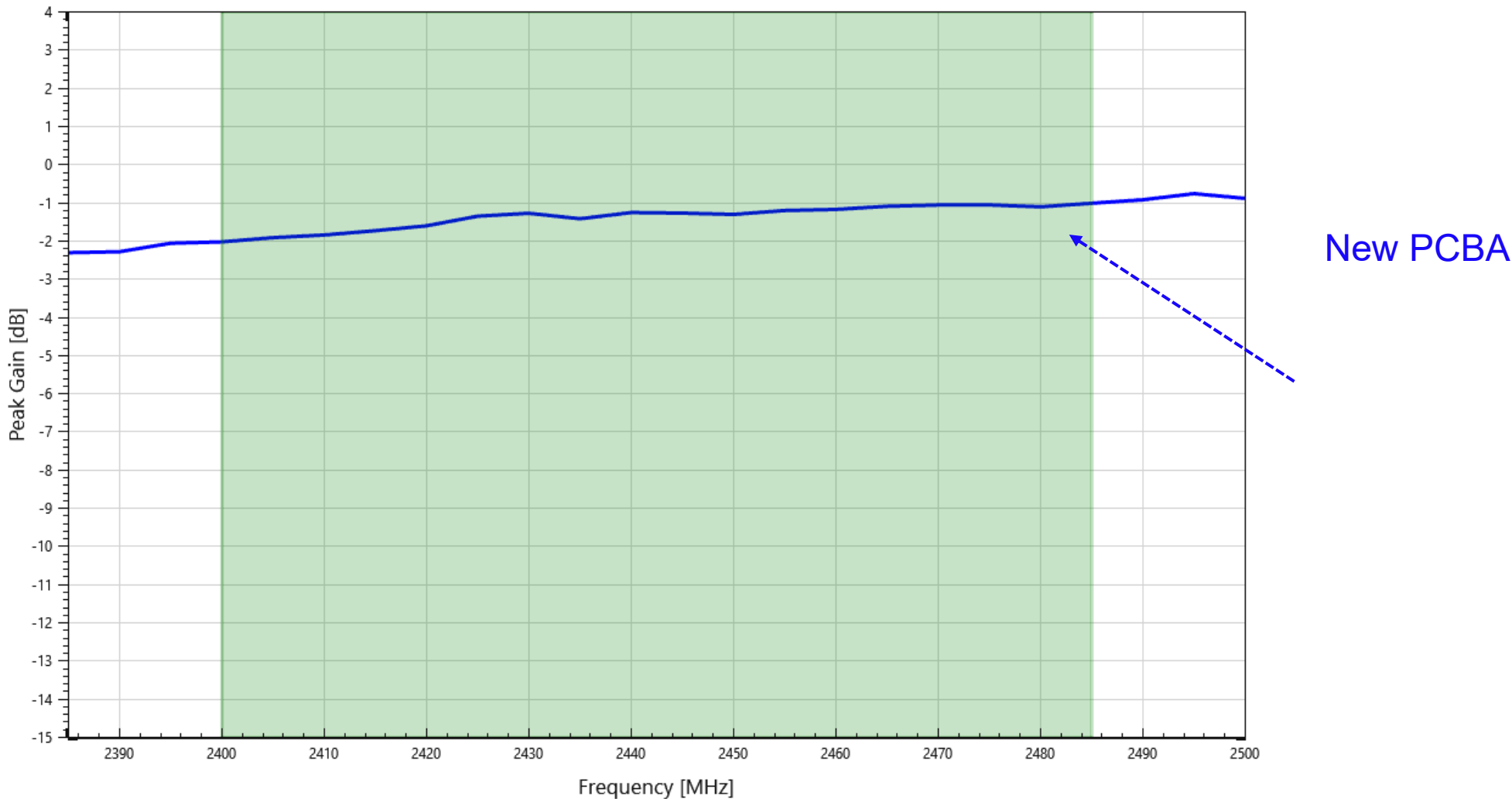
Matching Value	Manufacture Part Number
5.6nH	L04025R6BHN
1pF	04021J1R0PBS

Chamber Test Setup



Stamo chamber

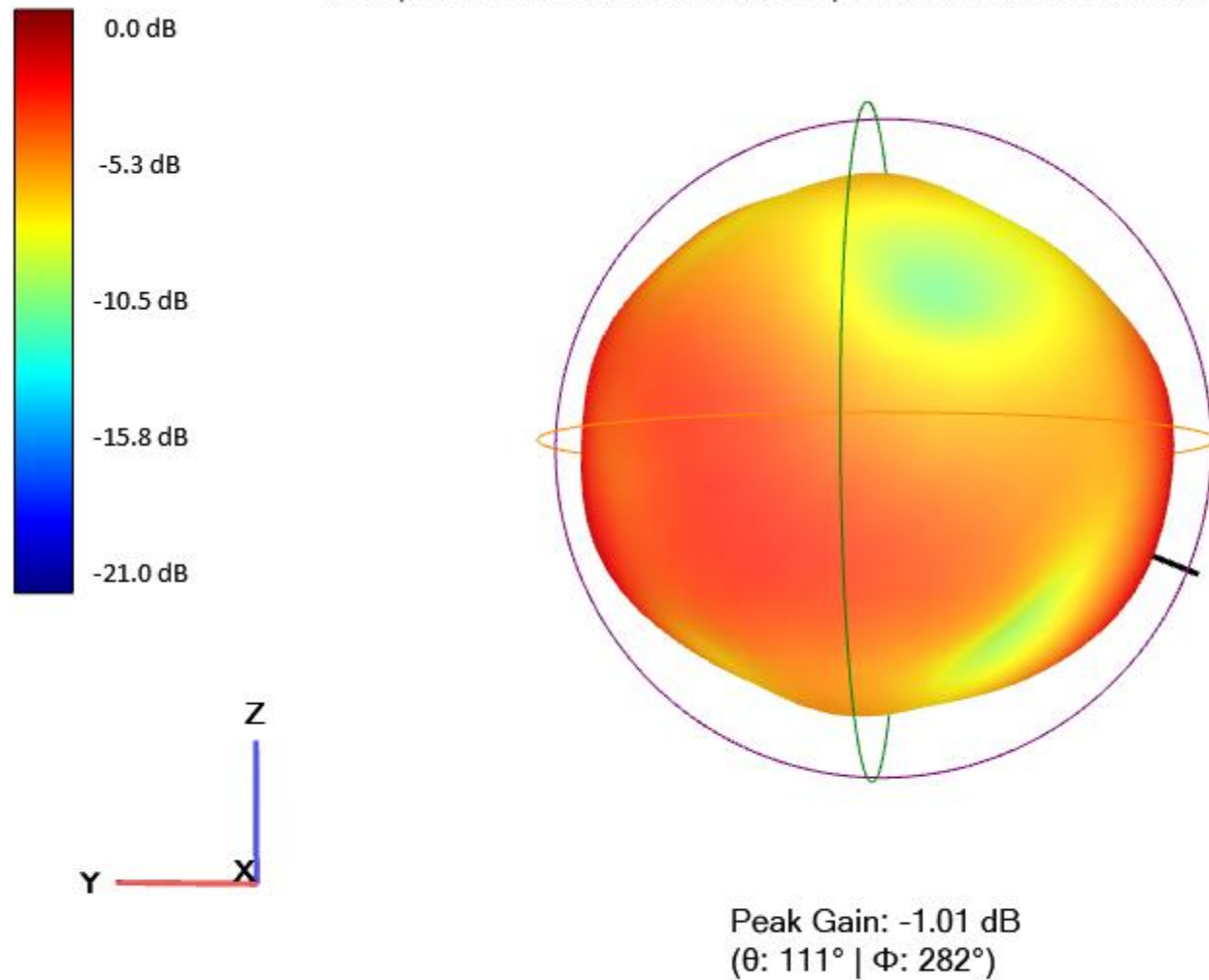
Peak gain (dBi) _Antenna in between RFID and Battery



Frequency(MHz)	2400	2405	2410	2415	2420	2425	2430	2435	2440	2445	2450	2455	2460	2465	2470	2475	2480	2485
Gain (dBi)	-2.022	-1.912	-1.842	-1.729	-1.602	-1.349	-1.273	-1.417	-1.255	-1.27	-1.303	-1.201	-1.172	-1.09	-1.056	-1.054	-1.104	-1.011

3D Radiation Pattern

New pcba_1005910_X5_sh 5-6n_se 1p_in between RFID and Batt - 2485.000 MHz



THANK YOU.



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