



i2616e-s ANT Datasheet

December 30, 2022

Version 1.0

Version History

Revision	Amendment	Date	Author
1.0	Initial version	2022-12-30	Kaiyue Wu
1.1	Add chapter on gain pattern	2025-04-17	Qun Gong

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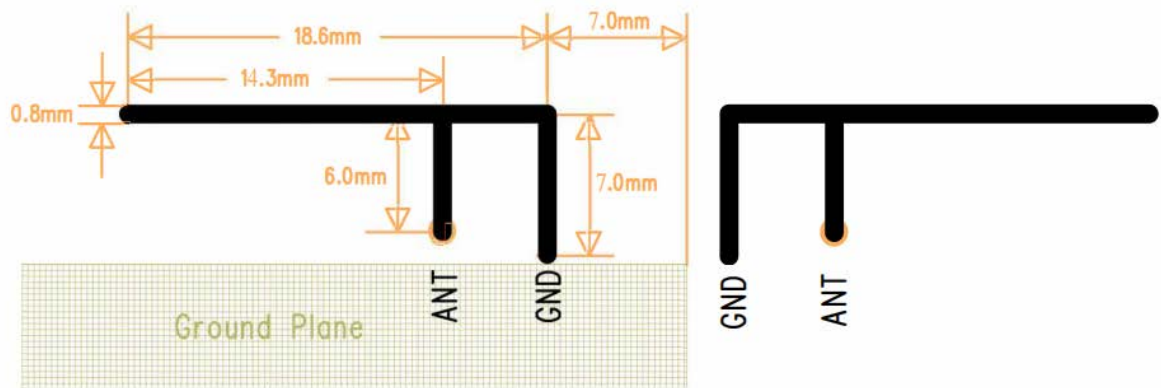
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1. Description

Gain: 0dbi

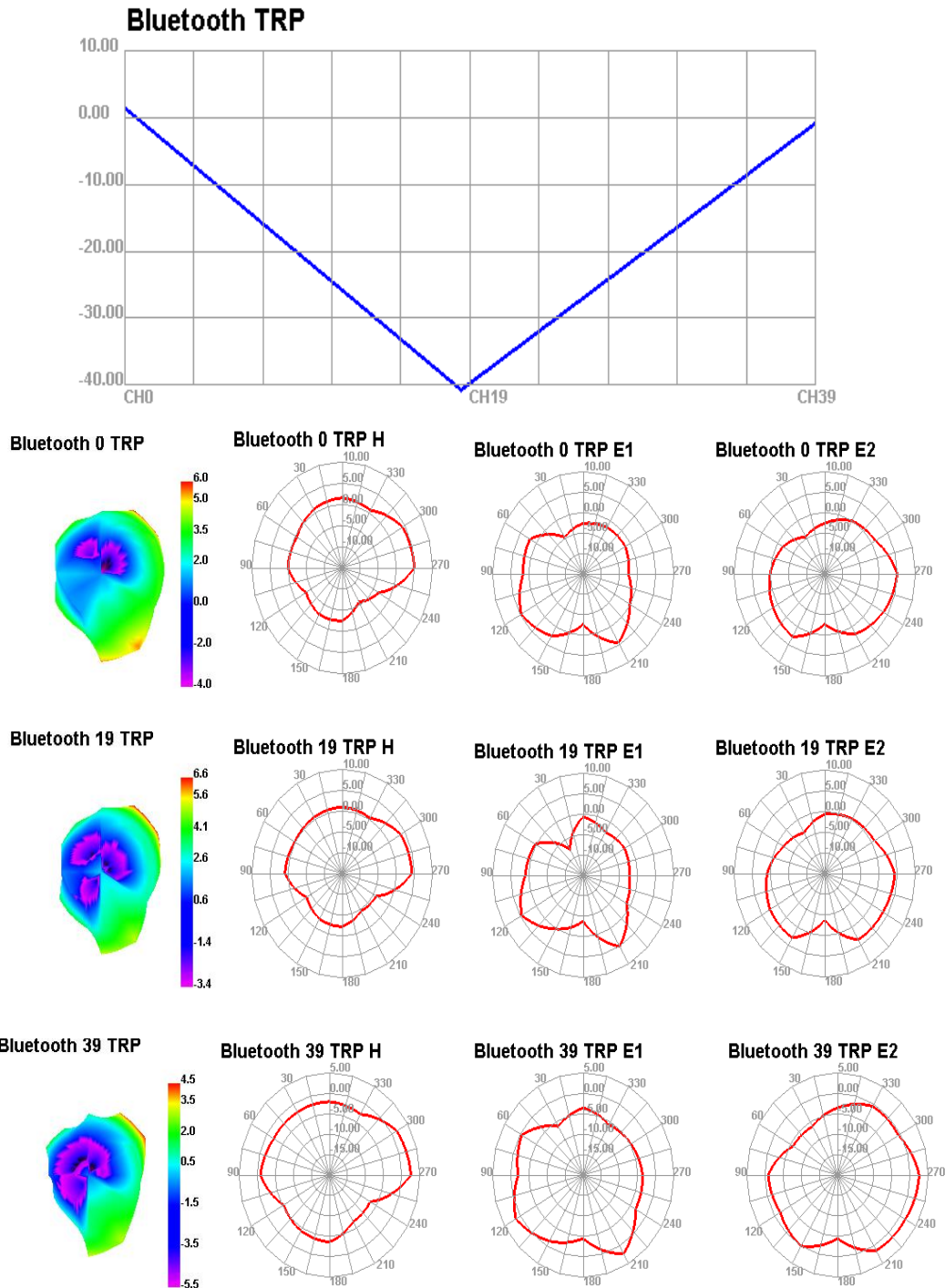
Type: PCB

2. Location



3. Bluetooth TRP

Test	Bluetooth TRP		
Result	0	2440	2480
Frequency (MHz)	2402	2421	2441
TRP(dBm)	1.46	1.36	-0.86
NHPRP(dBm) 45	0.27	0.09	-2.14
MAX(dBm)	6.02	6.58	4.46
EIRP peak	6.02	6.58	4.46
Min(dBm)	-11.77	-10.46	-11.33
Attenuation Horizontal	41.17	42.08	41.17
Attenuation Vertical	41.16	42.07	41.16

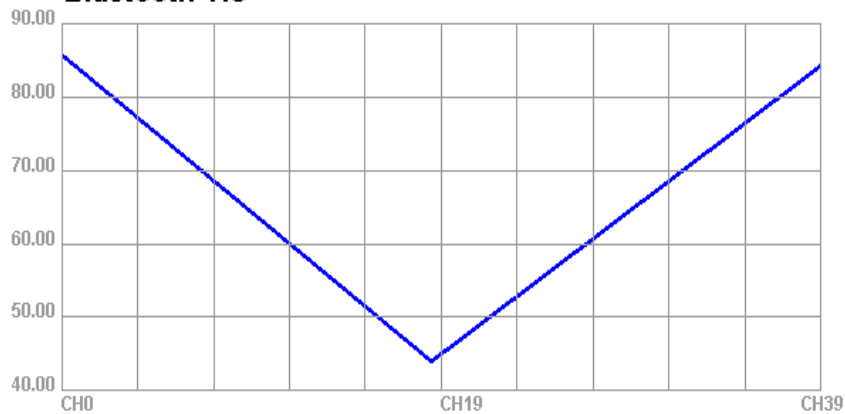


4. Bluetooth TIS

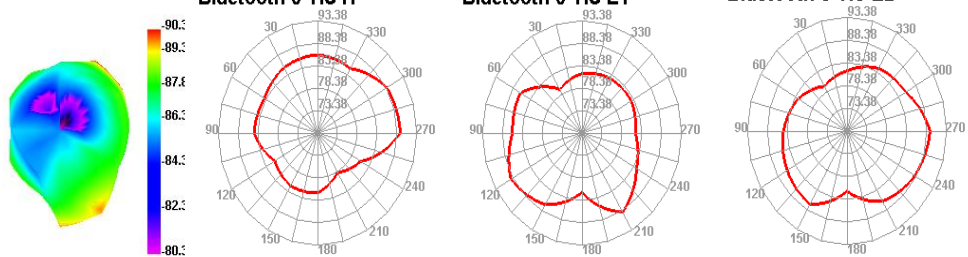
Test	Bluetooth TIS		
Result	0	19	39
Frequency (MHz)	2402	2421	2441
TIS(dBm)	-85.74	-86.14	-84.25
NHPIS(dBm) 45	-84.56	-84.86	-82.97
RSSI Ave	2.37	1.36	0.05

MaxPosRSSI	5.7	4.81	2.88
MaxPosSens	-89.08	-89.58	-87.08
MAX(dBm)	6.93	6.58	5.37
EIS peak	6.93	6.58	5.37
Min(dBm)	-10.86	-10.46	-10.42
Attenuation Horizontal	42.08	42.08	42.08
Attenuation Vertical	42.07	42.07	42.07

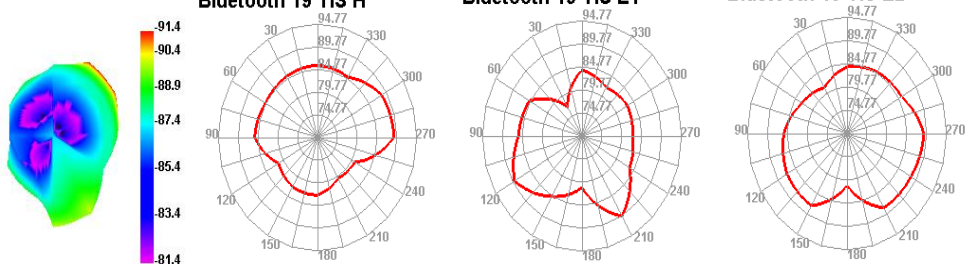
Bluetooth TIS



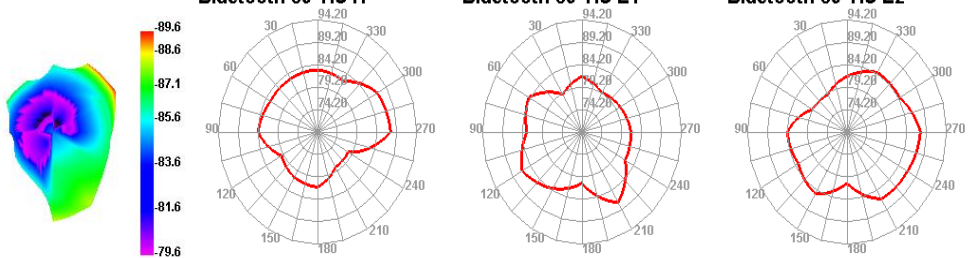
Bluetooth 0 TIS



Bluetooth 19 TIS



Bluetooth 39 TIS

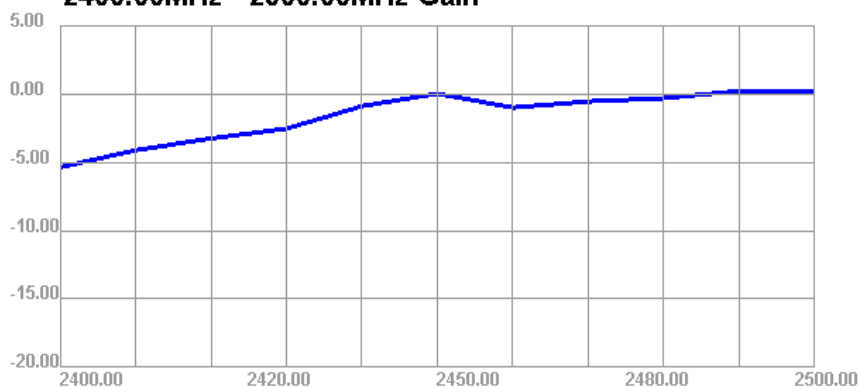


5. Gain pattern

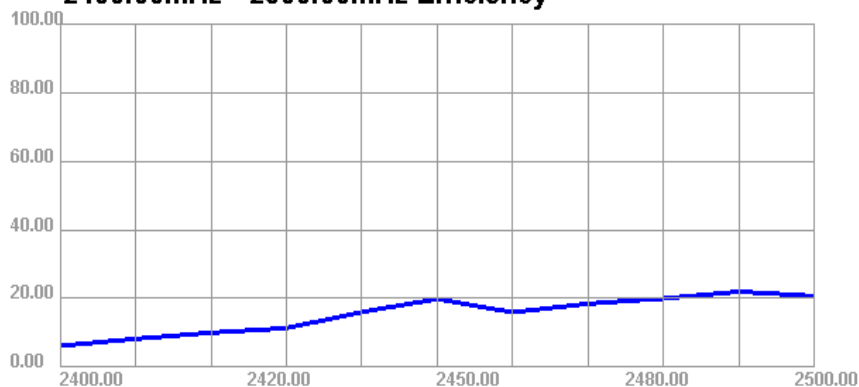
Application Information	
04Version	5.256.357
TotalTime	10m 16s 738ms
AdditionalInfor	NULL

Passive Test For bluetooth2.4G												
Freq	Effi	Effi	Gain	Gain	UHS	6 / 8	Max	Min	Direc	Bea	AttH	AttV
(MHz)	(%)	(dB)	(dBi)	(dBd)	(%)	(%)	(dB)	(dB)	tivity	mwidth	(dB)	(dB)
									y	(3dB)		
2400	6.24	-12	-5.36	-7.51	2.458	3.781	-5.36	-28	6.69	0	44.87	44.87
2410	8.26	-11	-4.12	-6.27	3.161	5.097	-4.12	-22.3	6.71	0	44.78	44.81
2420	10.1	-10	-3.25	-5.4	3.728	6.338	-3.25	-21.2	6.72	0	44.82	44.88
2430	11.4	-9.4	-2.54	-4.69	4.036	7.332	-2.54	-20.5	6.9	0	45	45.02
2440	16.1	-7.9	-0.89	-3.04	5.541	10.56	-0.89	-20.8	7.04	0	45.74	45.74
2450	19.9	-7	-0.03	-2.18	6.7	13.17	-0.03	-21.7	7.05	0	46.23	46.21
2460	16	-8	-1	-3.15	5.367	10.62	-1	-23	6.97	0	46.06	46.12
2470	18.5	-7.3	-0.54	-2.69	6.254	12.26	-0.54	-21.1	6.78	0	45.93	46
2480	20	-7	-0.31	-2.46	6.76	13.26	-0.31	-20.6	6.68	0	45.64	45.69
2490	22	-6.6	-0.22	-2.37	7.456	14.55	-0.22	-17.5	6.79	0	45.83	45.87
2500	20.7	-6.8	-0.17	-2.32	6.939	13.8	-0.17	-17.1	7	0	45.61	45.67

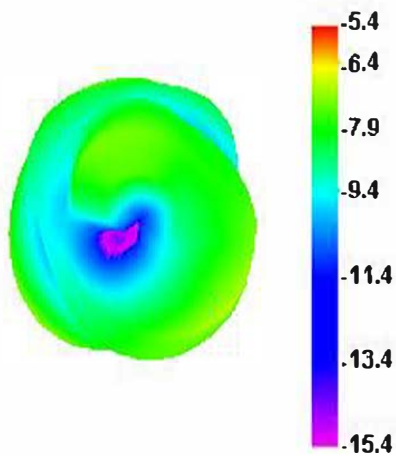
2400.00MHz - 2500.00MHz Gain



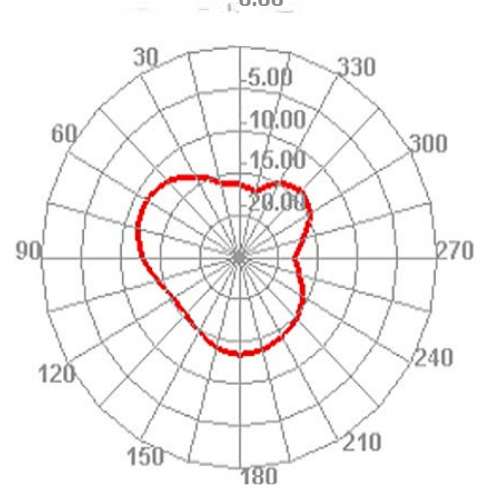
2400.00MHz - 2500.00MHz Efficiency



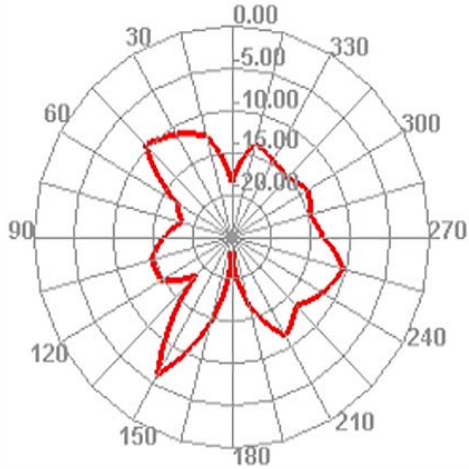
2400.000MHz



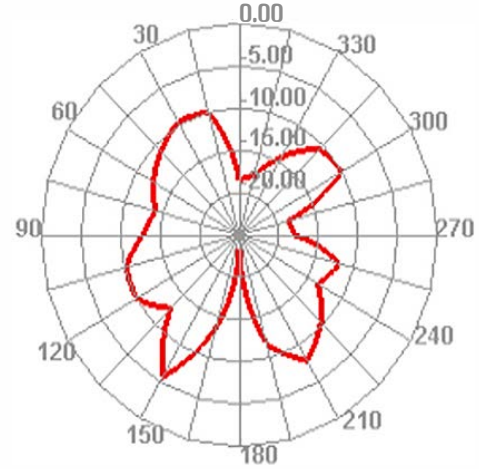
2400.000MHz H



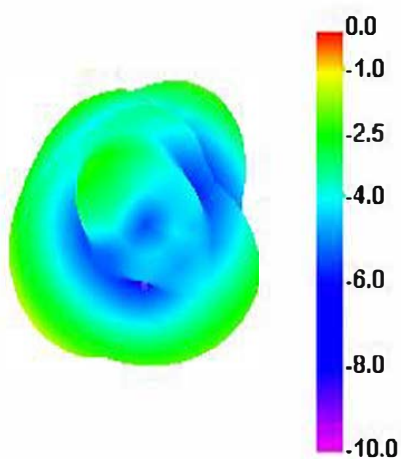
2400.000MHz E1



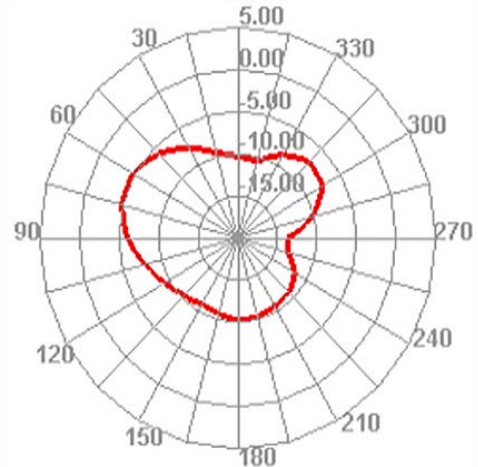
2400.000MHz E2



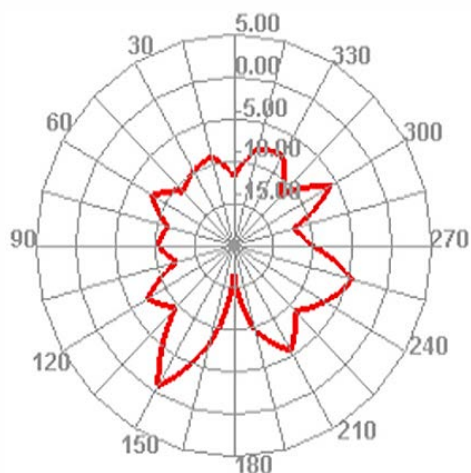
2450.000MHz



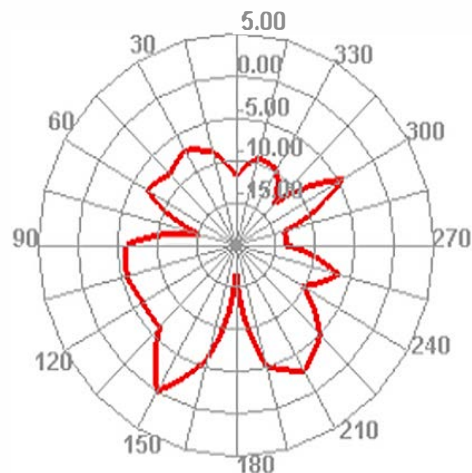
2450.000MHz H



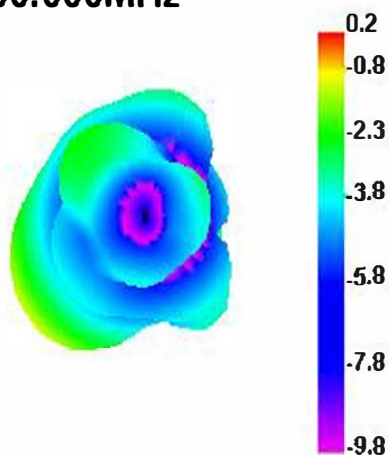
2450.000MHz E1



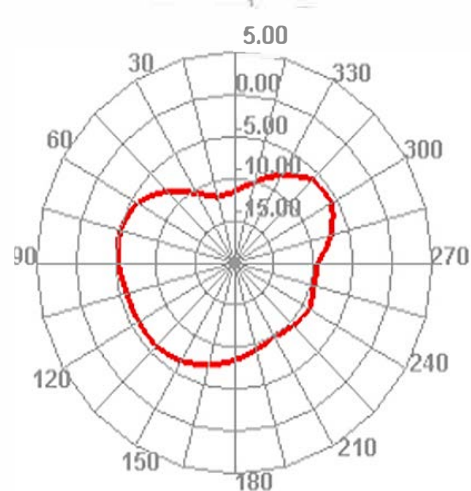
2450.000MHz E2



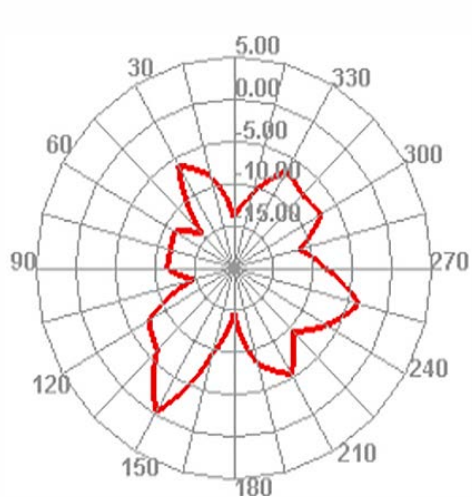
2500.000MHz



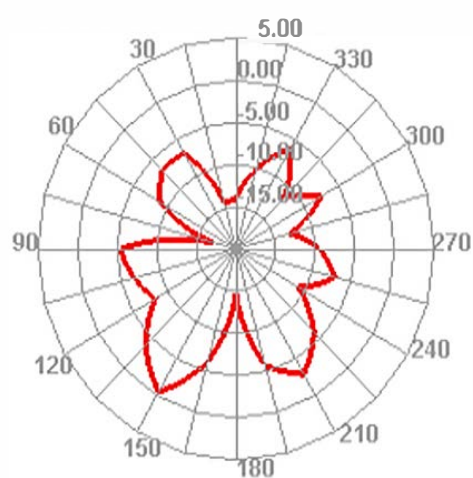
2500.000MHz H



2500.000MHz E1



2500.000MHz E2



5. Company Profile

Barrot Technology – Barrot is a world leading one-stop chipset level solution provider who offers wireless connectivity and audio intelligent hardware solutions featuring with own IPs. The company is an associated member of The Bluetooth SIG, and it is the only one who contributes to Bluetooth specification definition in Greater China. Barrot owns three high-tech IPs: Bluetooth RF, Bluetooth stack and Acoustic algorithms, so Barrot offers most integrated, robust, reliable, and easy-to-use wireless turn-key solutions for IOT, Automotive and Wireless audio applications.

Barrot devotes itself to being the most reliable short distance wireless technologies' solution provider in the world.

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