



SPECIFICATION FOR APPROVAL

Customer Name	Edan	
Product Model NO. :	01.06.016848010	
Specification	AX9 WIFI-1	
MPN:	LBS-045C (RA version)	
Manufacturer	Shenzhen Bogesi Communication Technology Co., Ltd	
Approve Date	2022/11/23	
Supplier Sign and Seal		Customer Sign and Seal

Note: 1. After the electronic file or paper file that has been stamped by BGS and was provided to the customer,, the customer need to sign the paper or electronic file of the approval back to BGS before place the formal order to BGS. If there is no formal change or change notice, BGS acquiesce that the customer approve and accept this specification of product .

2. The relevant intellectual property rights of this product are owned by Shenzhen Bogesi Communication Technology Co., Ltd. Without the permission of our BGS, please do not apply for patent rights for this product in other names, and please do not disclose this product and related information to others or provide to third-party for viewing and use.



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shenzhen bogesi communication technology co.,ltd

Application:

Applied on the Edan's AX0 project

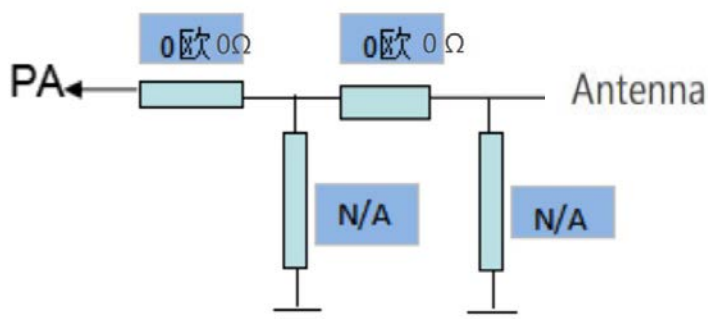
Electrical specifications:			
Frequency band	2.4G/5.8G	Antenna material	FPC
Impedance	50Ω	Antenna connect type	Connector
VSWR	≤3.0	Polarization	Linear polarization
Gain	2400-2500MHz:0.5dBi≤gain≤2.11dBi	Working Temperature	-40℃~+85℃
	5200-5800MHz:2.2dBi≤gain≤4.56dBi	Storage Temperature	+19℃~+23℃
TRP&TIS:			
Test instruments	Test Method		Test result
BLUETEST.se RTS60 Chamber CMW5000	1.Assemble the antenna inside device 2. OTA RF test in anechoic chamber 3. Measuring TRP and TIS		see the test data
Test conditions and instruments			
Test instruments	Test Method		Test result
7×4×3 anechoic chamber + Aglient E5071B Network analyzer	1.Assemble the antenna inside device 2. Put the device on the fixture in the chamber, and connect with the network analyzer 3. Test the passive test data using the test software		see the test data

Test data

Active test data:

Band	Channel	TRP	TIS
		11g/6M	11g/54M
2.4G	Low	5.37	-58.08
	Mid	7.56	-59.88
	High	6.7	-58.63
		11a/6M	11a/54M
5G	Low	7.4	-68.1
	Mid	5.8	-67.2
	High	7.4	-66.7

Antenna circuit matching

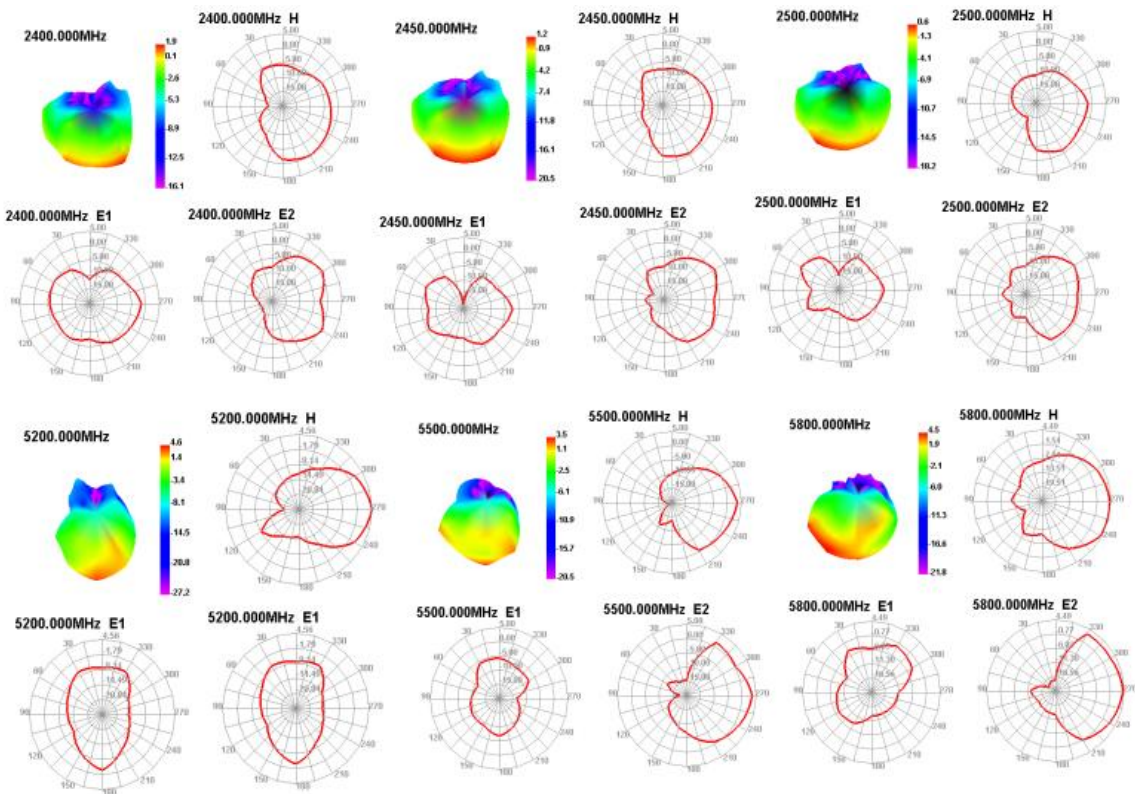


Passive test data

LBS-045C WIFI-1

Freq (MHz)	Effi (%)	Gain (dBi)	Freq (MHz)	Effi (%)	Gain (dBi)
2400	37.26	1.88	5200	40.34	4.56
2410	39.85	2.11	5220	36.53	4.14
2420	36.24	1.62	5240	35.55	3.95
2430	38.52	2.08	5260	34.54	3.84
2440	32.59	1.17	5280	36.46	3.95
2450	35.14	1.24	5300	36.26	3.67
2460	30.25	0.5	5320	37.88	3.52
2470	33.28	1.16	5340	39.5	3.29
2480	31.1	0.61	5360	39.33	3.17
2490	34.36	1.23	5380	39.01	2.72
2500	30.29	0.58	5400	36.41	2.3
			5420	36.72	2.29
			5440	37.33	2.53
			5460	36.5	2.58
			5480	37.84	2.8
			5500	42.14	3.53
			5520	39.51	3.26
			5540	36.91	2.81
			5560	36.86	2.71
			5580	36.58	2.6
			5600	35.88	2.3
			5620	37.15	2.32
			5640	37.41	2.2
			5660	38.81	2.38
			5680	41.79	3.07
			5700	42.9	3.42
			5720	45.28	3.89
			5740	47.12	4.19
			5760	48.21	4.38
			5780	44.69	4.21
			5800	47.83	4.49

Radiation pattern

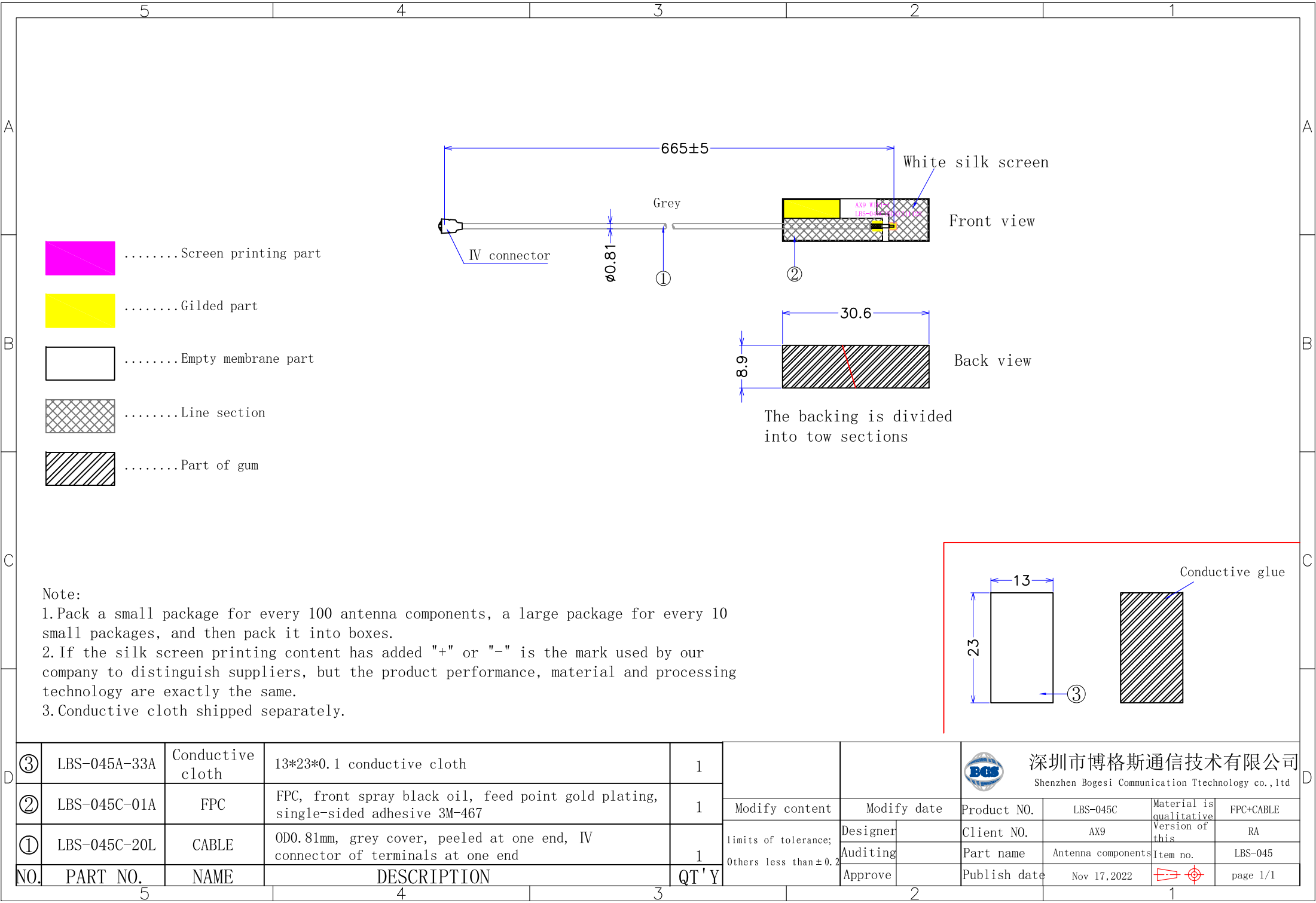




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Sample picture:





③	LBS-045A-33A	Conductive cloth	13*23*0.1 conductive cloth	1			 深圳市博格斯通信技术有限公司 Shenzhen Bogesi Communication Ttechnology co.,ltd			
②	LBS-045C-01A	FPC	FPC, front spray black oil, feed point gold plating, single-sided adhesive 3M-467	1	Modify content	Modify date	Product NO.	LBS-045C	Material is qualitative Version of this	FPC+CABLE
①	LBS-045C-20L	CABLE	OD0.81mm, grey cover, peeled at one end, IV connector of terminals at one end	1	limits of tolerance;	Designer	Client NO.	AX9	Version of this	RA
					Others less than ±0.2	Auditing	Part name	Antenna components	Item no.	LBS-045
NO.	PART NO.	NAME	DESCRIPTION	QT'Y	Approve		Publish date	Nov 17, 2022		page 1/1



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Antenna Package

一、Outer package: carton box

Front view:



Side view:



二、Inner package (100pcs antennas in 1 small PE bag, 10pcs small PE bags in one big PE bag, the PE bag size is depend on the antenna size, the conductive fabric in the whole package)





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Product Materials Ingredient Declaration Form

Product Name		AX9 WIFI-1	Model NO.		LBS-045C			Declaration Date		2022/11/24	
Company Name		Shenzhen Bogesi Communication Technology Co., Ltd		Contact person		Xuebing Zhou			Phone NO.		0755-86083452
NO.	Part name	Homogeneous Material Name	The homogeneous material contains the value of RoHS restricted substance (ppm)						Certification number	Test date	
			Cd	Pb	Hg	Cr+6	PBB	PBDE			
1	Antenna radiation unit	Flexible Copper Clad Laminate	ND	ND	ND	ND	ND	ND	SHAEC2202460504	2022/2/21	
2		Printing inks	ND	ND	ND	ND	ND	ND	ETR22705905	2022/8/5	
3		3M	ND	ND	ND	ND	ND	ND	CHNEC2200386501	2022/1/12	
4	wire	Silver coated Copper	ND	ND	ND	ND	ND	ND	SHAEC2127051115	2021/12/16	
5		Tinned copper	ND	ND	ND	ND	ND	ND	A2220186128101ER1	2022/5/17	
6		Insulation	ND	ND	ND	ND	ND	ND	NGBML2200124301	2022/1/27	
7	Connector	Gold plating	ND	ND	ND	ND	ND	ND	A2220404860101001C	2022/9/17	
8		PBT	ND	ND	ND	ND	ND	ND	NGBEC22001678607	2022/6/7	
9		Copper plate	ND	5	ND	ND	ND	ND	CANEC2201952007	2022/2/18	
Made by: JINGHUA LIANG			Reviewed by		DELIU LIANG						

Description:

Material analysis expansion table is similar to our company's machine type BOM, which describes the composition of each material provided by the supplier, and then conducts RoHS control on each component (or the supplier shall conduct RoHS compliance management on his supplier, and provide tripartite inspection certificate).

A complete material analysis expansion table that includes:

1. Material expansion table: component composition decomposition
2. Third-party verification report of each component