

Project :Y202012071975

Date: 2021.02.25

REV: A0-0225

Antenna SPEC

Customer name: Guangzhou Shiyuan Electronics Co., Ltd

Customer project: YD.R11

Customer P/N: 004.032.0050099

B&T P/N: AG-041333-2166

Spec.: 2.4G internal antenna (FPC 31.2×12.9)-Gray 1.13

wire-terminal, L=110mm

Sealed by corporation:

compilation	verify	approval
Huangfeihui	Liulihua	Liulihua

Sealed by customer:

check	verify	approval

Contact information of B&T:

Contact person for sales: Xieqianchang	MB:18312509103	E-mail: xieqc@tech-now.com
Contact person for technical: Liulihua	MB:13590104459	E-mail: liulh@tech-now
Contact person for Quality: Leihao	MB:15681917991	E-mail: sc_qe2@tech-now.com

Document making / revising / abolishing resume

Edition	Date	Formulate/Revised content	Formulate	approval
A0	2021.01.12	First formulation	Huangfeihui	Tanghailin/Yilinyu
A0-0225	2021.02.25	Change cable length	Huangfeihui	Tanghailin/Yilinyu

Contents

1、 Cover	1
2、 Index of specification	3
3、 Product drawing	4
4、 Electrical Parameter	5
5、 Electrical test report	6-7
6、 Table of Materials and Hazardous Substances	8
7、 Certification of Restricted Substance	9
8、 Packing Specification	10
9、 Installation diagram of complete antenna	11

3、Product drawing

REV.	Revise	Date
A0	21-01-11	
A0-0225	21-02-25	Change cable length

Elevation view

The technical requirements

- 1: the antenna welding part is firm, and the cable size is accurate; (Cable maintenance force \geq 1Kgf).
- 2: the screen printing color is bright white, the font is clear and not easy to fall off;
- 3: "*" important dimensions;
- 4: Packaging and quality standards refer to BAT packaging specifications quality standards respectively;
- 5: Products must meet the requirements of ROHS;
- 6: The cup of terminal no orientation requirement .

Number	Part name	Material/technology	Note
①	Generation I RF terminal	Phosphor bronze (gold-plated)	
②	Coaxial line	Double tin / FFP/Gray	
③	FPC	One to one substrate, OSP treatment	

Designer	Tanghailin	Verify	Approval
		1 > X	
		1 ~ 9.99	
		10 ~ 19.99	
		20 ~ 39.99	
		40 ~	

Name	Project No.	Part No.
2.4G internal antenna (FPC 31.2X12.9) -Gray 1.13 wire-terminal, L=110mm	Y202012071975	AG-041333-2166

Weight	Quantity	Scale	Unit
	1	1:1	mm

Page 1 of 1

ZHONGSHAN B&T TECHNOLOGY HOLDINGS Co., Ltd

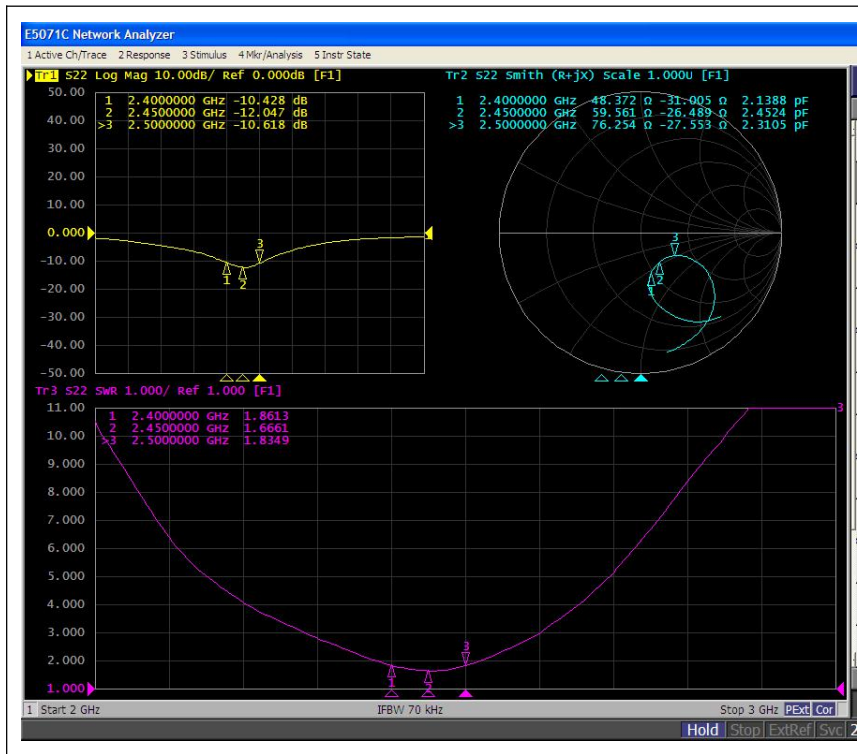
4、 Properties ¶meter

Electrical Parameter	
Freq Range	2400~2500MHz
Characteristic Impedance	50 Ω
VSWR	sample of reference project
The Max input power	<10w
Polarization mode	Polar linearization
Radiation mode	Omni directional
Connector style	terminal
Mechanics Properties	
Length	110±3mm
Maintain the force	≥1kgf
Coaxial cable	Gray 1.13 wire
Salt spray test	24H
Environment parameter	
Operating Temp	-30℃~65℃

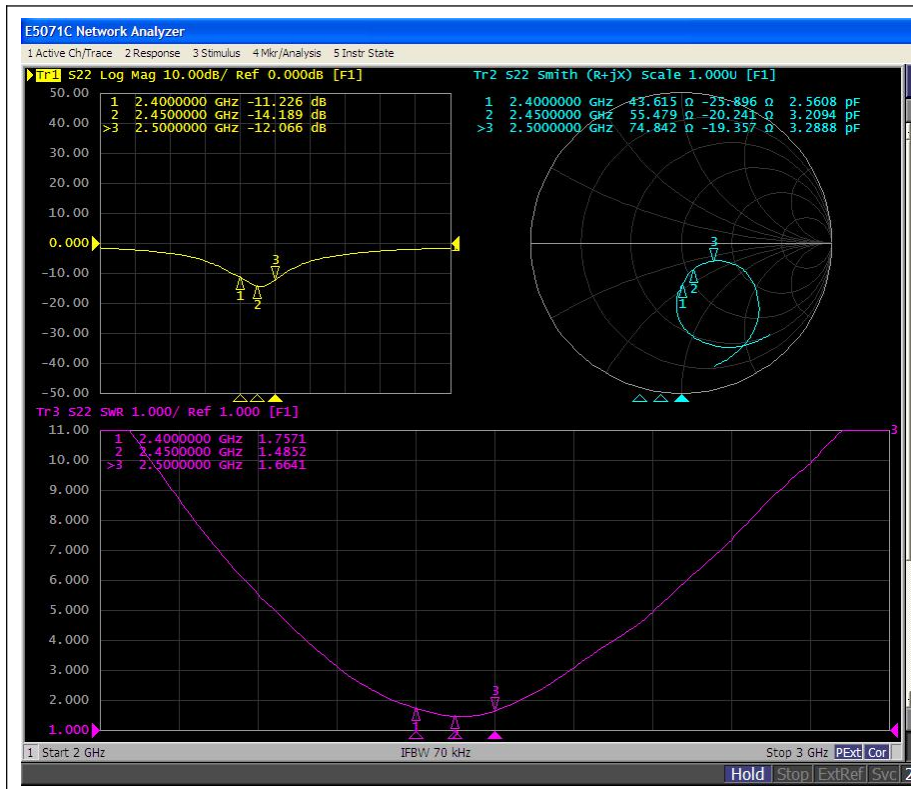
5、Electrical test report

S11 Parameter

Antenna 1



Antenna 2



Electrical Performance Test Parameter Table

Antenna 1

Freq/GHz	2.4	2.45	2.5
VSWR	1.86	1.66	1.83

Antenna 2

Freq/GHz	2.4	2.45	2.5
VSWR	1.75	1.48	1.66

Gain&Efficiency

Antenna 1

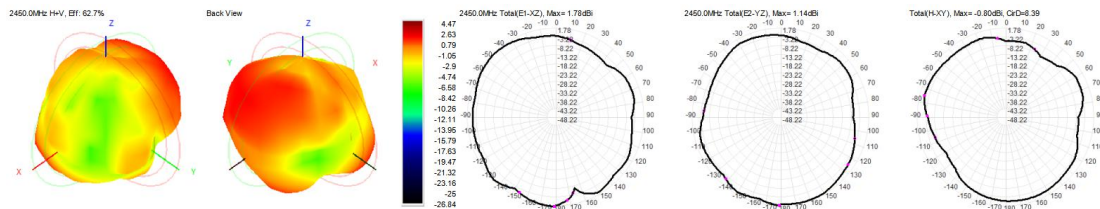
Frequency/MHz	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Gain/dBi	3.33	3.42	3.85	3.45	3.57	3.47	3.37	3.50	3.79	3.32	3.39
Efficiency/%	59.26	59.20	65.37	60.84	63.55	62.72	61.81	64.12	68.86	63.51	67.23

Antenna 2

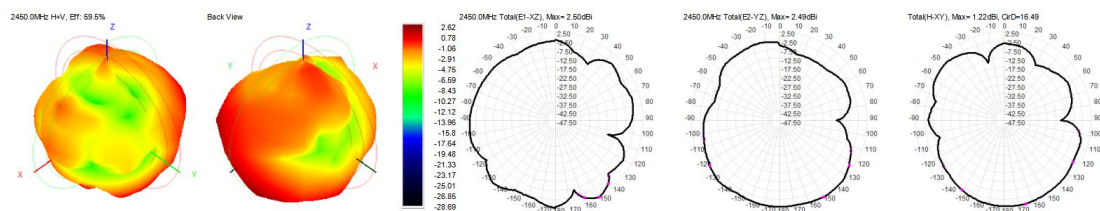
Frequency/MHz	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500
Gain/dBi	2.74	2.66	3.06	2.75	2.85	2.62	2.53	2.83	3.21	2.82	3.04
Efficiency/%	58.93	58.29	63.71	59.06	61.43	59.51	58.15	59.85	63.76	58.45	62.21

Direction diagram












Antenna 1



Antenna 2



6、Table of Materials and Hazardous Substances

原材料清单																				
供应商名称: 中山市博安通通信技术有限公司				供应商授权代表: 袁进军				联系电话: 18998784314				日期: 2021.1.12								
Material Name (物料名称)	Raw Material Name (原材料 名称)	Raw Material description (原材料 描述)	Raw Material Supplier (原材料 供应商)	Banned Substance Content/ppm (禁止物质内容/ppm)										Test Lab 检测机构	Test Report 检测报告	Test Report Number (检测报 告号)	Test Date (测试日期)	Exempt from Clarifi cation (豁免 说明)	Remark (备注)	
				Pb (铅)	Cd (镉)	Hg (汞)	Cr+6 (六价 铬)	PBBs (聚溴化 苯)	PBDEs (聚溴化 苯醚)	邻苯二甲 酸二(2- 乙基己 酯)	邻苯二甲 酸二丁 酯 (DBP)	邻苯二甲 酸二异 丁酯 (BBP)	邻苯二甲 酸二丁 酯 (DIBP)							
2.4G内置 天线 (FPC 31.2×12.9 1.13线-端 子, L=200mm	1.13线	镀锡铜线	微波通	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	SGS		CANEC201 2516101	2020.07.30	N		
		FEP	微波通	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	SGS		NGBML20 00312801	2020.01.22	N		
		灰色FEP	微波通	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	EMTE K		ED2007060 41C008	2020.07.11	N		
	端子	磷青铜	彩美	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	SGS		CANEC200 2981803	2020.03.21	N		
		PBT	彩美	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	CTI		A22000614 93101002E	2020.03.23	N		
		镀金	彩美	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	CTI		CANEC201 7345601	2020.10.14	N		
	FPC	PI	博永凯	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	SGS		SHAEC200 1939103	2020.03.02	N		
		3M9471	博永凯	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	SGS		SHAEC192 9095501	2020.06.06	N		
		黑油墨	博永凯	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	SGS		CE_2020_9 3185	2020.09.28	N		
		白油墨	博永凯	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	SGS		ETR20B00 512M01	2020.11.10	N		
		OSP	博永凯	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	SGS		CANEC200 1828503	2020.03.04	N		
	以下空白																			

说明: 所填材料必须是均质材料, 即具有一致组成的材料, 或者多种材料组成的不能通过旋开、切割、破碎、研磨、摩擦等机械手段拆分成不同材料的材料
 声明: 上述所提供视源电子科技有限公司的材料环保信息真实、可靠, 我司愿意承担所有因违约而导致贵司遭受的经济损失和法律责任。

7、 Certification of Restricted Substance

禁用物质保证(Certification of Restricted Substance)

我方保证所提供的物料，完全遵守签核的广州视源电子科技股份有限公司/或其子公司的质量和环保协议中的各项条款，物料中禁用物含量，符合最新版《有害物质管理规范》中的各项标准。

We hereby certify that all the Material fully conform to the requirements of the ShiRuan/or its affiliated companies Declaration of Conformity that had been signed, and the maximum concentration value of restricted substance in Materials comply with the latest 《Regulations on the management of hazardous substances.》



PACKING CRITERION

P/N: AG-041333-2166

Spec.: 2.4G internal antenna (FPC 31.2×12.9) -Gray 1.13 wire-terminal, L=110mm

一、contents of label(according to the customer's name, refer to the corresponding finished product label production requirements. If there is no requirement, it will follow the ordinary label requirements.)

Label for PE bag/ carton, L:10cm;W:6cm

buyer	*****		
vender	ZHONGSHAN B&T TECHNOLOGY Co., Ltd		
Purchase No	*****		
Material No.	*****		
Part name	*****	QC	**
Q'ty/Unit	*****	Manufacture date	**** ** *
Trace code	*****	Running water number	*****

Label for PE bag/ carton, L:10cm;W:6cm

buyer	*****		
vender	ZHONGSHAN B&T TECHNOLOGY Co., Ltd		
Purchase No	*****		
Material No.	*****		
Part name	*****	QC	**
Q'ty/Unit	*****	Manufacture date	**** ** *
Trace code	*****	Running water number	*****

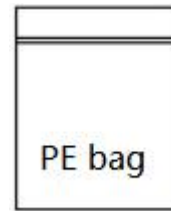
二、Packing requirement

Operating description:

1. inner packing:

 50 PCS/ small bag,

 200 PCS/ big bag



2. outer packing:

Quantity according to actual packing PCS/carton



Carton



Notice:

9、Installation diagram of complete antenna

