

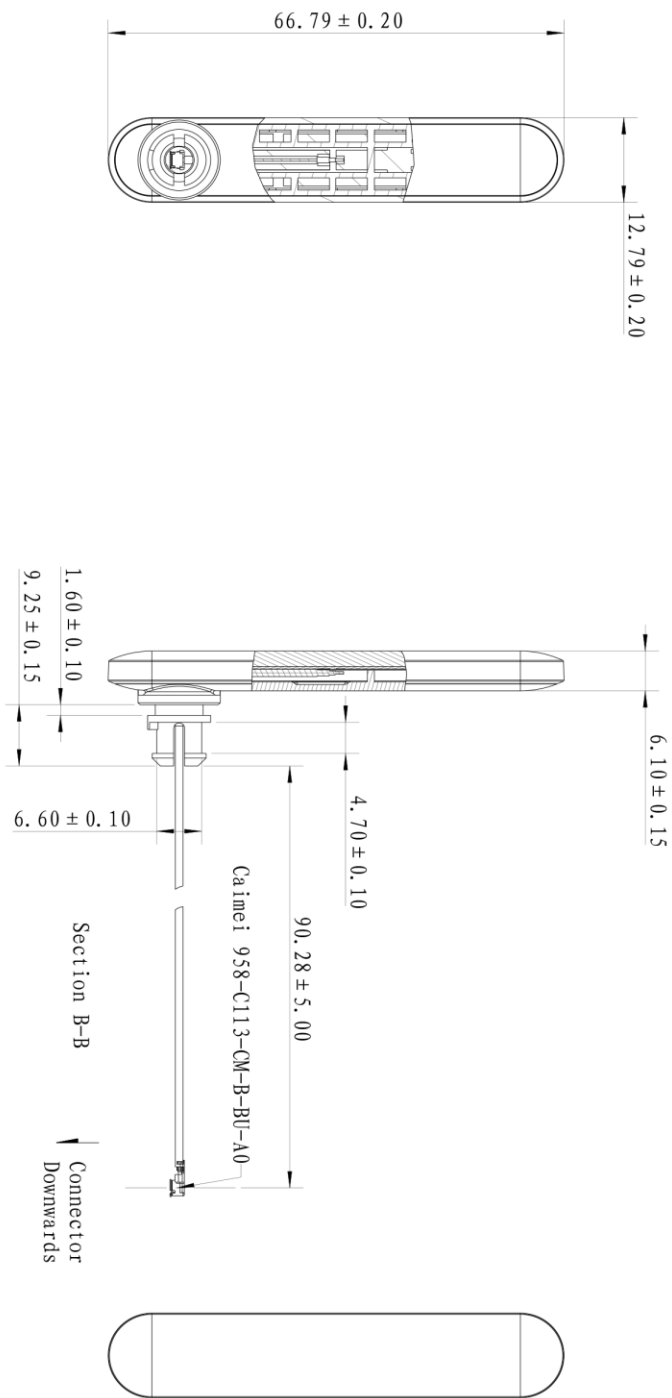
APPROVAL SHEET

Part Description	Vendor: Kunshan Yunzhihong		Description: CM0221-X03-00	
	Product Name: IMI_IPC040_A02-WIFI Antenna		Project: IMI_IPC040_A02	
	Part No. 5022AA013597			
Attachments	▲Spec		▲Drawing	
	▲Cpk Report		▲Sample	
	■FAI Report		■RoHS Report	
	▲Reliability Report		■RoHS Questionnaire	
	■ QC Flow Chart		▲Packing Content	
	□ Material Verification Sheet		□ Safety Report	
▲Symbol is neccessrary to provide to chuangmi with attachement. ■Symbol is neccessrary to provide to chuangmi by soft copy. □Symbol is provided by specific requirements.				
Vendor	Design		Approval:	
	Check			
Technology Check	Project Manager		Testing	
	Hardware			
	Product Manager		Mechanical	
	ID			
	SQE			
Final Check	□Approved		□Reject	
	□Condition Approved		Meet requirements: _____	
	□Temporary Approved		_____Pcs is limited by purchasing	
	□Quality Planning		□ RoHS material	
	Rohs Status		□ Non-RoHSmater	
Quality Director (Only for special dispensation)				
Notes: Four copies is needed. It is effective to be approved. Approved documnets will be filed by below departments except color box,instructions,pallets and label. ■ Vendor ■ OEM ■ SQE ■Quality planning Color box,instructions,pallets and label approve documents, should be reserved by: ■ Vendor ■ OEM ■ SQE ■Mechanic or Package engineering				

Content

1	Cover
2	Content
3	Engineering Drawing
4	Full Dimensions Measurement
5	Inspection report
6	Process Flow Chart
7	QC Control Plan
8	Reliability Test
9	Antenna Performance
10	Antenna Pattern
11	Antenna Gain
12	BOM List
13	RoHS Restricted Substance Element Questionnaire
14	Material Certification
15	Package

REV	DESCRIPTION	DRAWN	DATE
A0	Initial Reversion for mockup	Gravin Lai	2021-12-10
A1	Release for Tool-making and trial run	Gravin Lai	2021-12-23



- Notes:
1. Refer to 3D solid for unspecified dimensions & tolerance.
 2. Color: white.
 3. No flash and flaw.
 4. 5 pcs FAL report for first batch parts.
 5. Not any change with material and process.
 6. Comply with RoHS requirements.

Part Name	IPC 040 WIFI Antenna	Drawing No. /Part No.	CM0221-X03-00	Drawing REV A1
Spec.	Assembly	Customer P/N:	5022MA013597	
Drawn	Gravin Lai 2021-12-23	1st Projection	Scale	Unit
E. E.		1:1	mm	/ 1
APPROVED				

Kunshan Yunshihong Electronics and Technology Co., Ltd.

Full Dimensions

[illegible]

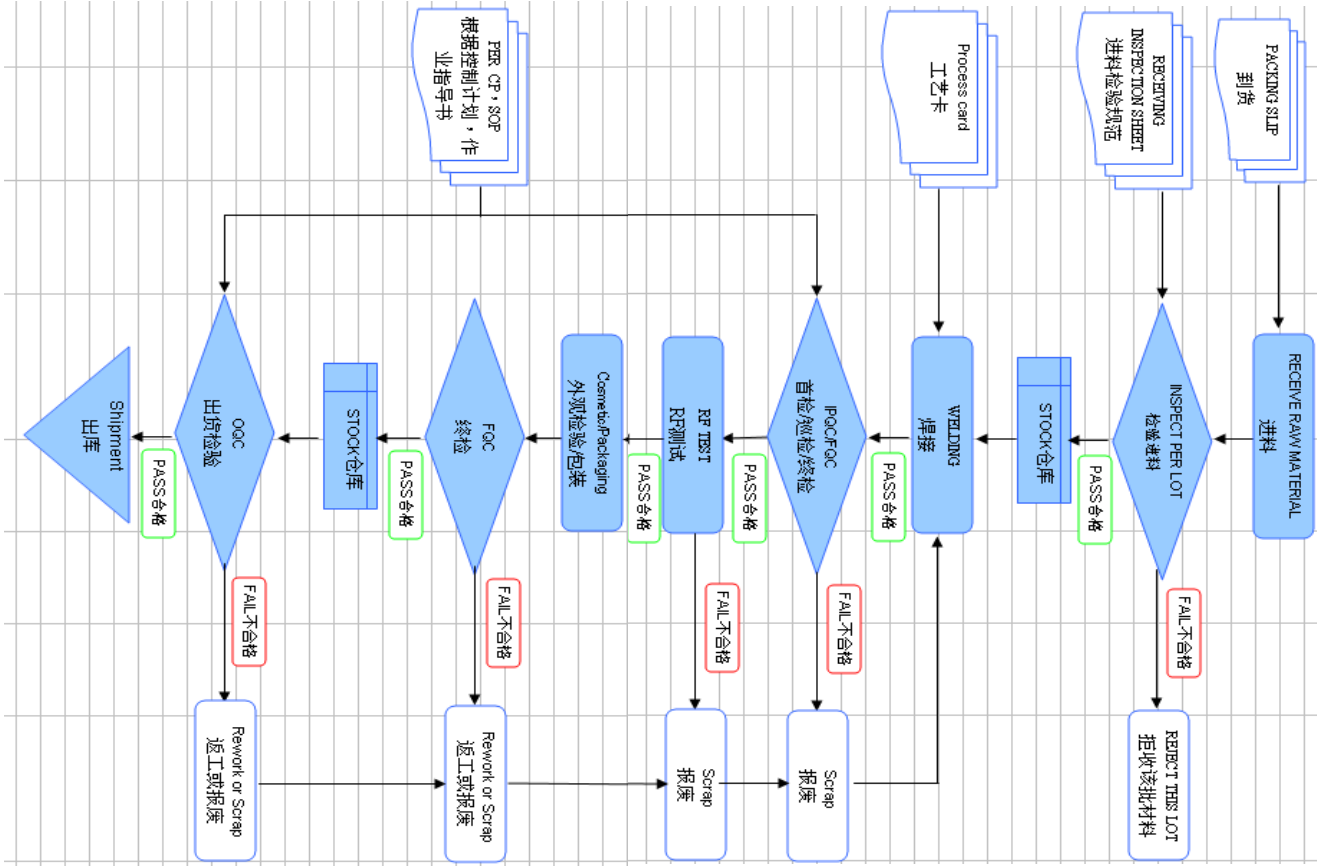
Inspection Report										
Customer	Chuangmi		Part Name	IMI_IPC040_A02-WIFI Antenna						
P/N	5022AA013597		Manu. Date	2022-3-25						Rev A
Standard	GB/T2828.1-2012					Sample Level	AQL=0.4			
Item	Test	Methold and comments		Standard		Samples no.	Acc rej.	Rej.	Judge OK/NG	
1	Appearance	Visual		Dirt			0	0	OK	
2	Color	Visual Color difference		No obvious color difference			0	0	OK	
3	Dimensions	actual dimensons							Judge OK/NG	
		1	2	3	4	5				
4	66.79±0.2	66.81	66.85	66.72	66.76	66.80				OK
5	12.79±0.2	12.84	12.81	12.76	12.72	12.80				OK
6	6.15±0.15	6.18	6.22	6.26	6.15	6.14				OK
7	90.28±5	91.00	91.00	90.00	91.00	89.00				OK
8										
9	RF consistence									OK
Conclusion (OK/NG)		OK								
					Edited	张驰	Approved	黄晴		

Process Flow Chart

Customer	Chuangmi	Written By	Wenfeng	Orig. Date	22022-3-18
Part Number	5022AA013597	Revised By	Lan xuaehua	Revised Date	2022-3-18
Description	IMI_IPC040_A02-WIFI Antenna	Approved By	Sinfo Pan	Approved Date	2022-3-18
	Raw material				
	↓				
				RF Test	
	IQC Insp.			↓	
	↓				
				Inspection	
	↓				
	FAI			↓	
	↓				
				QC insp.	
	↓				
	Molding			↓	
	↓				
				Final Inspection	
	Assembly			↓	
	↓				
	SonicWelding				
				Package and Storage	

QC Flow chart

Customer	Chaungmi	Written By	Wheifeng	Orig. Date	2022-5-18
Part Number	5022AA013597	Revised By	Lan Xueghua	Revised Date	2022-5-18
Description	IM1_IPC040_A02-WIFI Antenna	Approved By	Sirifo Pan	Approved Date	2022-5-18

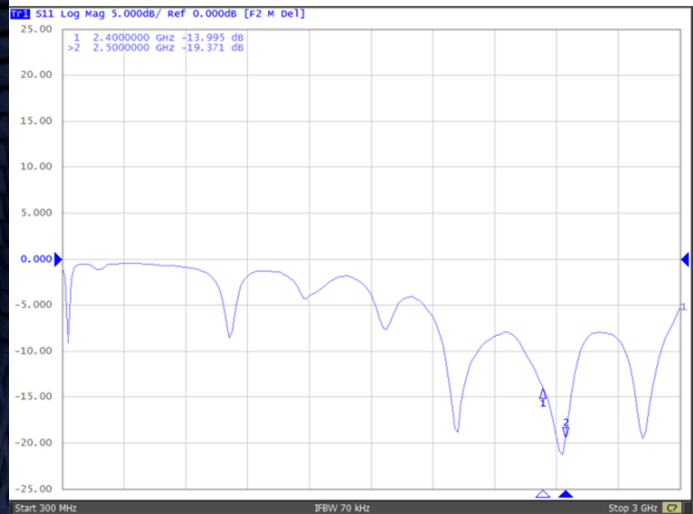


Reliability Test Report

[illegible]

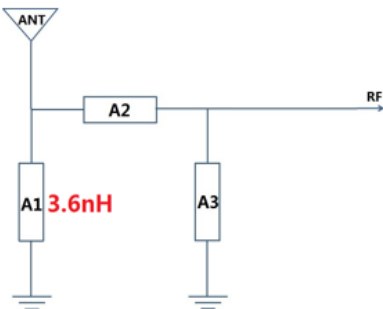
Antenna Performance

Customer	Chuangmi	Written By	Xiaowei	Orig. Date	2022-3-18
Part Number	5022AA013597	Revised By	Lai Weijian	Revised Date	2022-3-18
Description	IMI_IPC040_A02-WIFI Antenna	Approved By	Huangfei	Approved Date	2022-3-18



Antenna Type: External Antenna

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	52.0	-2.8	2.2
2410	50.1	-3.0	1.9
2420	54.6	-2.6	2.1
2430	50.1	-3.0	1.9
2440	55.3	-2.6	2.5
2450	55.1	-2.6	2.6
2460	54.8	-2.6	2.5
2470	56.8	-2.5	2.8
2480	54.0	-2.7	2.6
2490	61.4	-2.1	3.4
2500	59.6	-2.3	3.3
AVE	54.9	-2.6	2.5



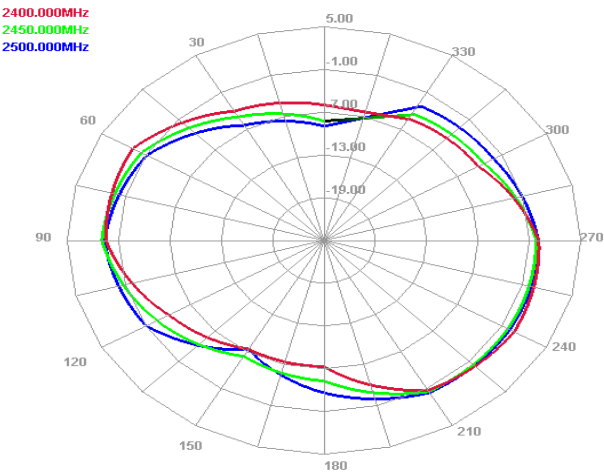
11b	Wifi 2G TRP			Wifi 2G TIS		
	1	7	13	1	7	13
	2412	2442	2472	2412	2442	2472
	15.1	14.7	15.0	-83.8	-84.8	-83.3

11g	Wifi 2G TRP			Wifi 2G TIS		
	1	7	13	1	7	13
	2412	2442	2472	2412	2442	2472
	12.7	12.6	13.1	-70.5	-71.2	-70.7

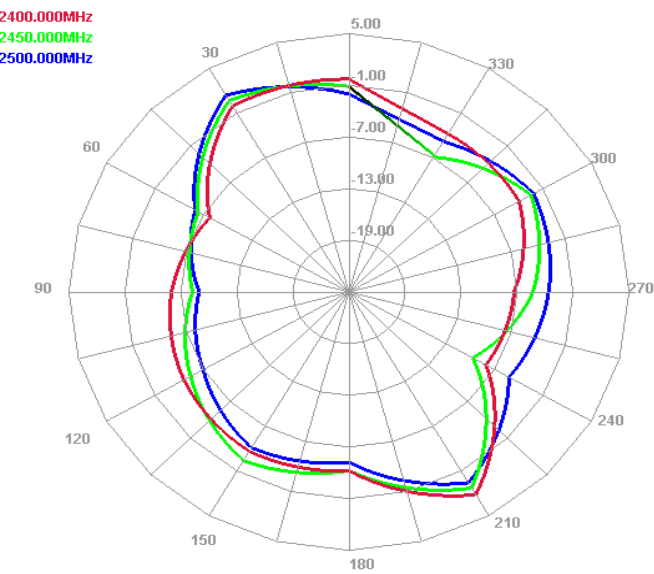
11n	Wifi 2G TRP			Wifi 2G TIS		
	1	7	13	1	7	13
	2412	2442	2472	2412	2442	2472
	11.9	12.0	12.9	-67.0	-68.5	-68.0

Antenna Pattern

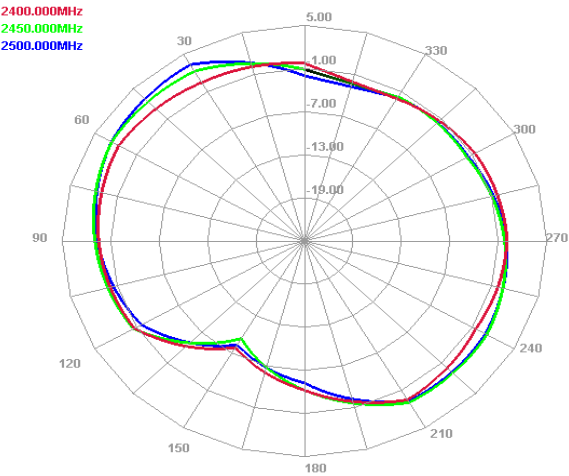
Horizontal



E1 Face



E2 Face



Antenna Gain

Freq (MHz)	Effi (%)	Effi (dB)	Gain (dBi)
2400	52.0	-2.8	2.2
2410	50.1	-3.0	1.9
2420	54.6	-2.6	2.1
2430	50.1	-3.0	1.9
2440	55.3	-2.6	2.5
2450	55.1	-2.6	2.6
2460	54.8	-2.6	2.5
2470	56.8	-2.5	2.8
2480	54.0	-2.7	2.6
2490	61.4	-2.1	3.4
2500	59.6	-2.3	3.3
AVE	54.90	-2.60	2.5

BOM List

[illegible]

QR-QA20-08

RoHS Restricted Substance Element Questionnaire

Supplier: Kunshan Yunzhihong Electronic and technology Co., Ltd.

Part information															
Yunzhihong P/N			CM0221-X03-00			Manufacturer			Kunshan Yunzhihong Electronic and technology Co., Ltd.						
Part structure information															
No	Part name	Part type	Vendor	3rd part report			PPM								Attachement
				date	code	Pb	Cd	Hg	Cr ⁶⁺	PBB	PBDE	DEHP	BBP	DBP	
1	Connector		Caimei	2021.9.12	HKTEC2001879017	☐	☐	☐	☐	☐	☐	☐	☐	☐	RoHS 942023702 2022.12.10.pdf
2	Cable		Shenyu	2021.6.16	SHAECC202579027	☐	☐	☐	☐	☐	☐	☐	☐	☐	RoHS 942023702 2022.12.10.pdf
3	cable		shenyu	2021.7.18	SHAECC2100499407	☐	☐	☐	☐	☐	☐	☐	☐	☐	RoHS 942023702 2022.12.10.pdf
						☐	☐	☐	☐	☐	☐	☐	☐	☐	
						☐	☐	☐	☐	☐	☐	☐	☐	☐	
Notes															

Editor: huangqing

Department: QC

Material Certification

Customer	Chuangmi	Written By	Liushiqiang	Orig. Date	2022-3-18
Part Number	5022AA013597	Revised By	huangfei	Revised Date	2022-3-18
Description	IMI_IPC040_A02-WIFI Antenna	Approved By	Laiweijian	Approved Date	2022-3-18

Safety Data Sheet

MSDS C5111、C5102、C5191、C5210、C5240

Safety data sheet No: MCL001	Date of revision: 01-08-2018
Version: 7	Previous revision: 01-01-2018

Supplier/Manufacturer Information:

Product Name:	PHOSPHOR BRONZE ALLOYS
Material code:	JIS C5111,C5102,C5191,C5210,C5240
Chemical name:	Cu, Sn Alloy
Classification:	Copper Alloy
Supplier Name:	FUJIAN ZIJIN COPPER CO.,LTD
Address	Nangang Industrial Development Zone, Shanghang, Fujian, China 364200
TEL:	TEL:0597-3960633 FAX : 0597-3833128
Vendor URL:	www.fjzjty.com
Information in case of emergency:	0597-3960600



2、Semi-finished products out of copper tin alloys:

CAS NO:	Chemical	C5111	C5102	C5191	C5210	C5240
7440-50-8	Cu	≥94.5	≥93.65	≥92.15	≥90	≥90
7440-31-5	Sn	3.5-4.5	4.5-5.5	5.5-7	7.0-9.0	9.0-11.0
7723-14-0	P	0.03-0.35	0.03-0.35	0.03-0.35	0.03-0.35	0.03-0.35
7440-66-6	Zn	≤0.2	≤0.2	≤0.2	≤0.2	≤0.2
7439-92-1	Pb	≤0.02	≤0.02	≤0.02	≤0.02	≤0.02
7439-89-6	Fe	≤0.1	≤0.1	≤0.1	≤0.1	≤0.1
7440-02-0	Ni	≤0.06	≤0.06	≤0.06	≤0.06	≤0.06
7429-90-5	铝 (Al)	≤0.002	≤0.002	≤0.002	≤0.002	≤0.002

Package

Pakcing Requirement:

- 1.Custoename ,part name and part No.
- 2.Show the package methold.
- 3.Marked the pakcing qty.



Fig 1 Antenna part

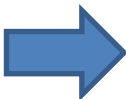


Fig 2 10 pcs packed



Fig 3 50 pcs enveloped and Labled

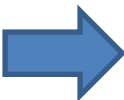


Fig 4: 30 bags per cartoon(total 1500 pcs)



Fig: Enveloped the cartoon and label the part information

Part No.	5022AA013597	
Part Name	IMI_IPC040_A02-WIFI Antenna	
Rev	A1	
Package	Cartoon	
inner	PE bags	30 bags
Outer	Total	1500pcs