

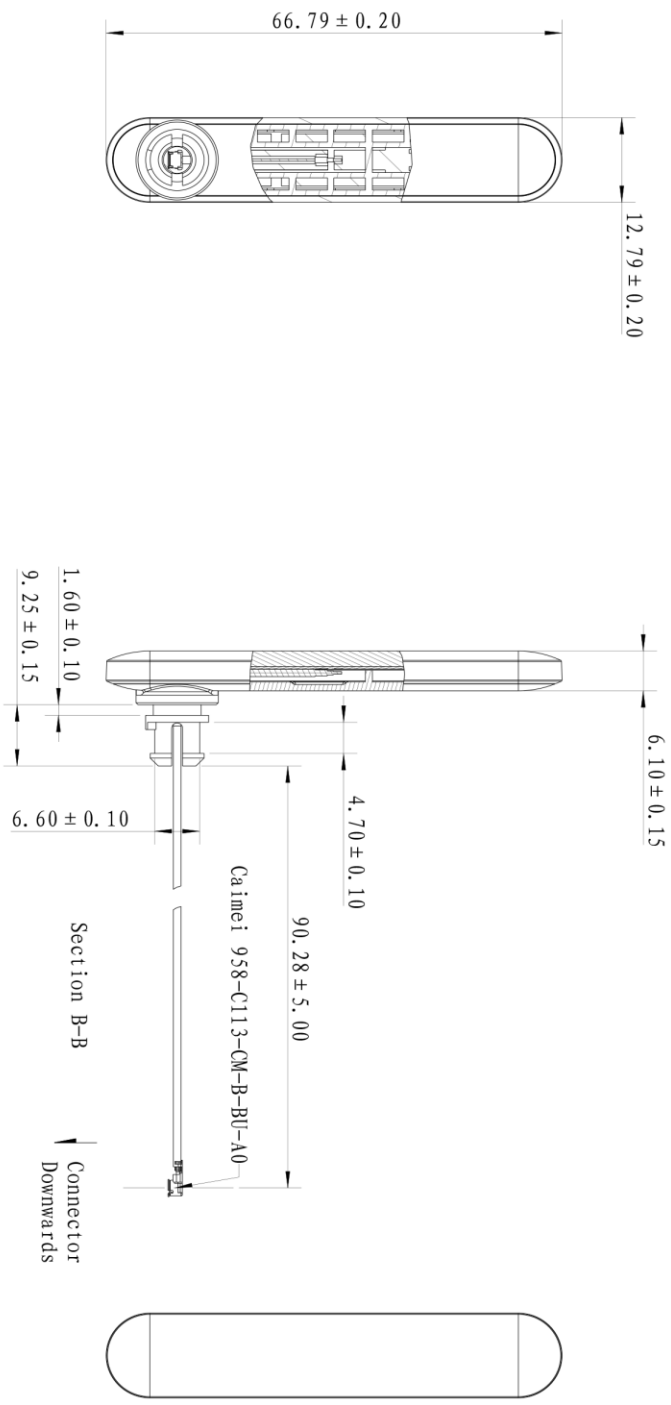
APPROVAL SHEET

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		▲Reliability Report	
	■ QC Flow Chart		■ RoHS Report	
	□ Material Verification Sheet		■ RoHS Questionnaire	
	▲Packing Content		□ Safety Report	
▲Symbol is neccessary to provide to chuangmi with attachement. ■Symbol is neccessary to provide to chuangmi by soft copy. □Symbol is provided by specific requirements.				
Vendor	Design		Check	
			Approval:	
Technology Check	Project Manager		Hardware	
	Product Manager		Testing	
	SQE		Mechanical	
Final Check	☐ Approved ☐ Reject		Quality Director (Only for special dispensation)	
	☐ Condition Approved Meet requirements: _____			
	☐ Temporary Approved _____Pcs is limited by purchasing			
	☐ Quality Planning Rohs Status			
☐ RoHS material ☐ Non-RoHSmater				
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

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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	AI
Spec.	Assembly	Customer P/N:	5022MA013597		
Drawn	Gravin Lai 2021-12-23	1st Projection	Scale	Unit	/ 1
E. E.		1:1	mm	Frame Size	A4
APPROVED					

Kunshan Yunshihong Electronics and Technology Co., Ltd.

Full Dimensions

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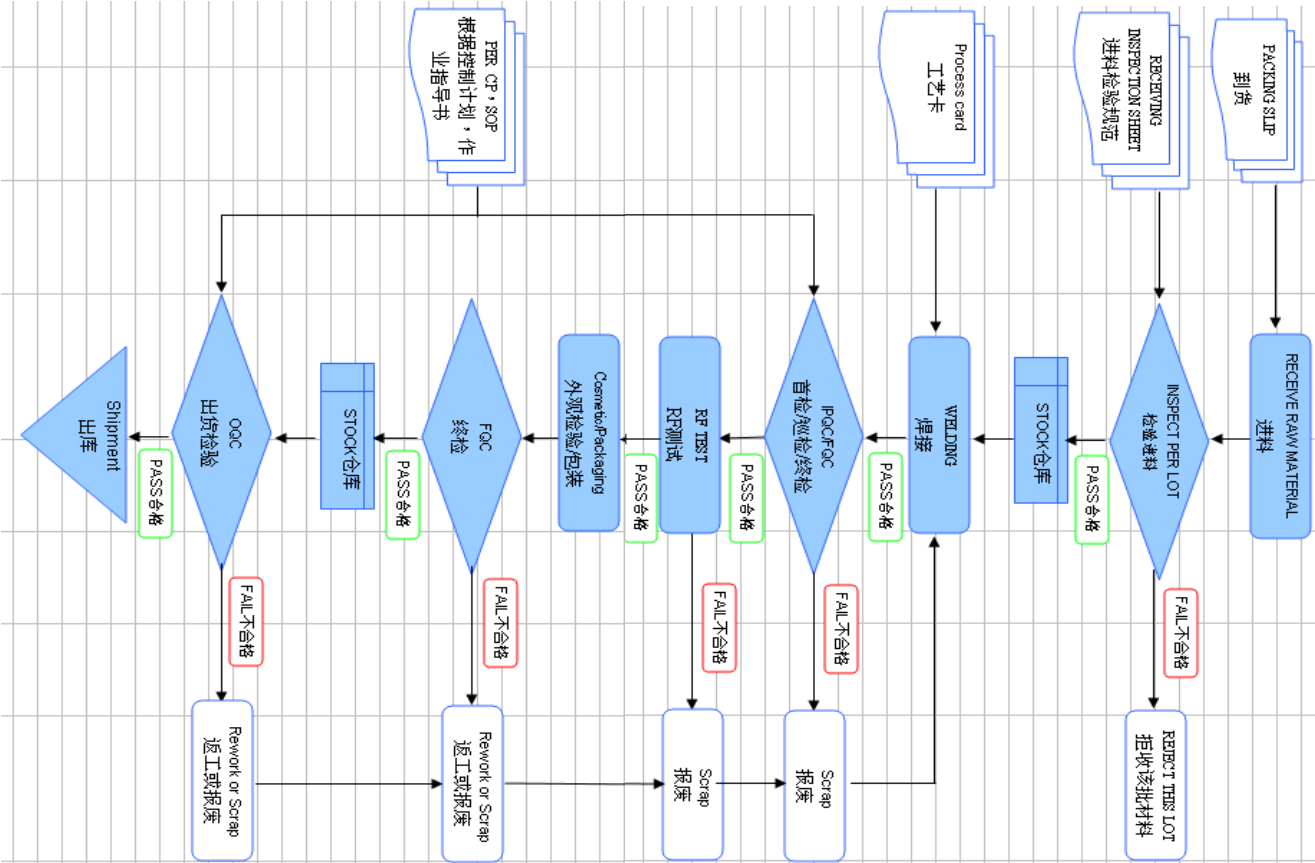
Inspection Report										
Customer	Chuangmi		Part Name	IMI_IPC040_A02-WIFI Antenna						
P/N	5022AA013597		Manu. Date	2022-3-25						Rev A
Standard	GB/T2828.1-2012					Sample Level	AQL=0.4			
Item	Test	Methold and comments		Standard		Samples no.	Acc rej.	Rej.	Judge OK/NG	
1	Appearance	Visual		Dirt			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	Sinfo Pan	Approved Date	2022-5-18

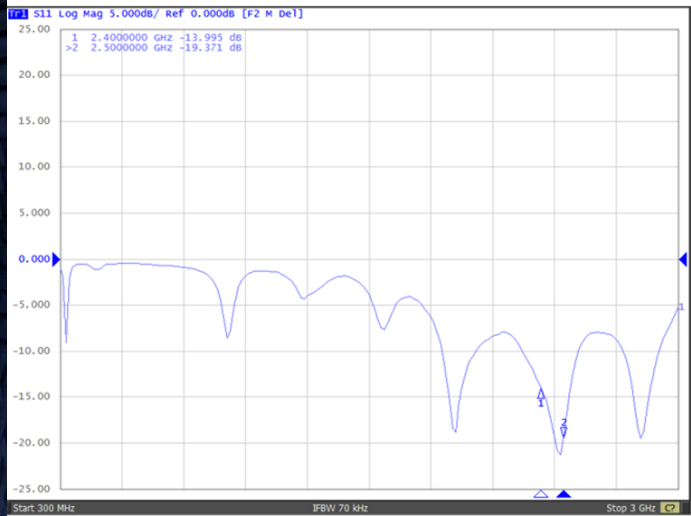


Reliability Test Report

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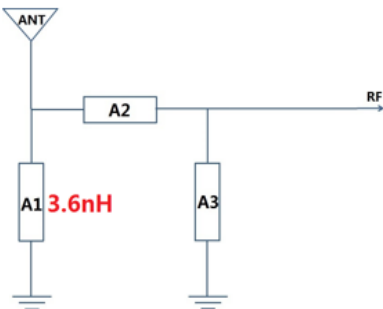
Antenna Performance

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



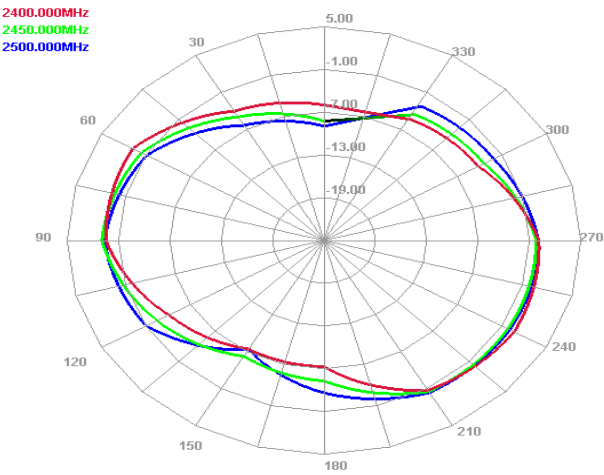
11b	Wifi 2G TRP			Wifi 2G TIS		
	1	7	13	1	7	13
	2412	2442	2472	2412	2442	2472
	15.1	14.7	15.0	-83.8	-84.8	-83.3

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

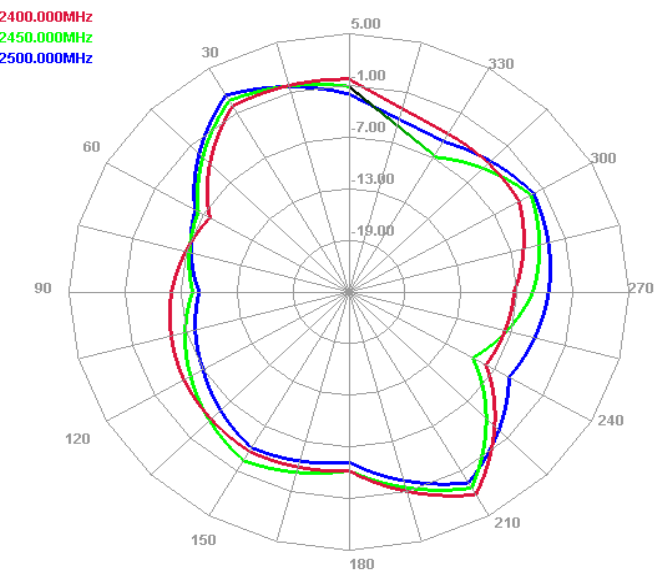
11n	Wifi 2G TRP			Wifi 2G TIS		
	1	7	13	1	7	13
	2412	2442	2472	2412	2442	2472
	11.9	12.0	12.9	-67.0	-68.5	-68.0

Antenna Pattern

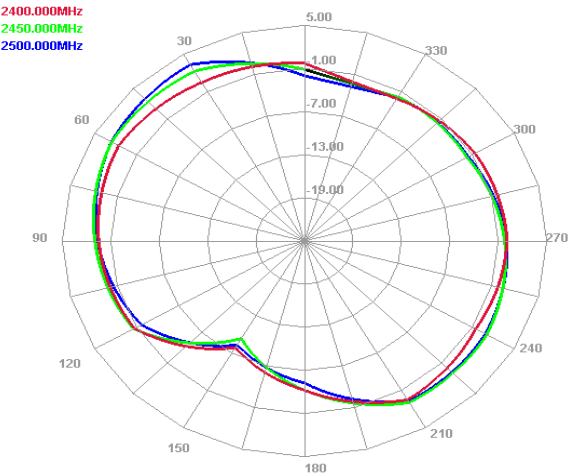
Horizontal



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 2002/95/EC RoHS 2002/95/EC
2	Cable		Shenyu	2021.6.16	SHAECC202579027	☐	☐	☐	☐	☐	☐	☐	☐	☐	RoHS 2002/95/EC RoHS 2002/95/EC
3	cable		shenyu	2021.7.18	SHAECC2100499407	☐	☐	☐	☐	☐	☐	☐	☐	☐	RoHS 2002/95/EC RoHS 2002/95/EC
						☐	☐	☐	☐	☐	☐	☐	☐	☐	
						☐	☐	☐	☐	☐	☐	☐	☐	☐	
						☐	☐	☐	☐	☐	☐	☐	☐	☐	
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

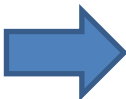


Fig 2 10 pcs packed



Fig 3 50 pcs enveloped and Labled

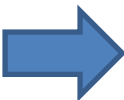


Fig 4: 30 bags per cartoon(total 1500 pcs)



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