Product performance and specification acceptance

Material EL01J11

Sample blac

Sample FPC

Customer Model: [redacted]othe

Supplier: Shenzhen Maya Version:

fict	stru	Qual	Give	Sample
				2024.8.6

Customer:Shenzhen AONI Electronics Co., LTD.

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Stru				
ctur				

, confidentiality requirements: Shenzhen Maya Communication Equipment Co., Ltd. has the product proprietary technology, without Shenzhen Maya communication equipment

Limited company agrees in writing not to disclose to any company or individual.

, Special Note: Before signing this document, the parties must carefully read the "Special Terms" and the contents of the catalog. After signing by representatives of both parties, it is deemed that the contents of this document have been agreed upon and there is no objection, and both parties are willing to abide by it.

Special Terms

1. Confirmation of performance and structure

★ Please confirm the appearance and performance of the product before signing the confirmation letter.

★ Please be sure to provide the final mass production trial production machine to our company or take it back to our company for verification.

★ Since the product of this acknowledgement is a highly sensitive object, please be sure to keep the test gold machine for follow-up traceability.

★ Because this product is a custom object, the use of strong pertinence, customers in the material replacement or non-designated items, please be sure to change the material or non-designated items of the machine back to our company to verify the RF performance, otherwise, it may lead to the use of the state does not match the design state of serious hidden dangers, our company to seal and debug the prototype function confirmation. Ensure that our debugging sample function is completely normal, to prevent the antenna performance error caused by abnormal function.

2. About product storage

★ Due to the printing ink on the surface of this product, the back is coated with back glue, and there are electroplated objects, please be sure to confirm the temperature between 23 ° C and 27 ° C during storage or transportation, the relative humidity is below 60%, and the environment is stored or transported without strong acid, sulfur and oxygen.

★ Due to the stringent environmental requirements of this product, please be sure to assemble the product within the optimal service life after receiving the product to ensure the reliability of the product.

3. Agreement on product use

★ Due to the special structure of this product, when using this product, it is necessary to fully contact with the object to be pasted, and the object to be pasted must not remain chemical agents (release agent, etc.) or try not to use raw materials with release agent. In order to ensure the use of the product, please clean the surface of the object to be pasted before using this product. Make sure that there is no chemical residue on the surface of the pasted object.

4. Quality Statement about this product

★ This product is affected by the above factors, it is recommended that the optimal use period is 12 months, overdue will affect the product use effect, our company provides lifelong consultation and paid replacement service for the product.

★ This product is a special custom device, please be sure to inspect the appearance, quantity and performance of the product within 7 days after receiving the product by referring to the agreed standards of this "Product Performance and Specification Acknowledgement". If overdue, the product quality is deemed to meet the agreed standards of both parties.

★ Verification method: check the certificate engineering seal.

catalogue

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1. Customer antenna debugging design requirement frequency band

freq	Frequency
uenc	band

2. Sky chart

Drawing of

Principal chart

3. Electrical property

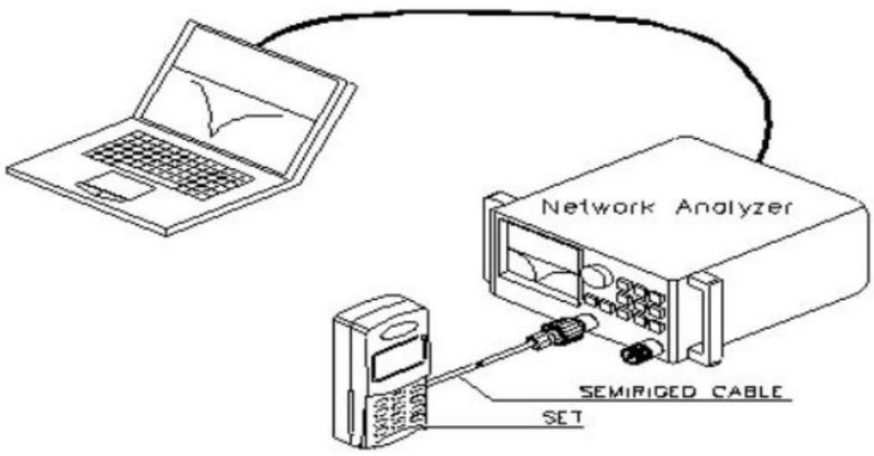
3.1 Test method description and data

Device	use
Vector Network Analyzer	S11/Impedance/ Passive Test
Agilent 8960 SP6010 R&S CMU200	Includes GSM, GPRS, EDGE, CDMA2000, 1xEV-DO, TD-SCDMA, WCDMA, HSDPA mobile phone mobile
R&S CMW500 MT8820C	Including TD-SCDMA, HSDPA, LTE, WIFI, GPS mobile phone mobile
Agilent E4438C	Testing
MVG Chamber	Passive Test / OTA active Test / Efficiency/Gain

3.2 Passive Test Report (Passive Test Report)

Test equipment: Network analyzer

Test method: A50ohmCABLEcable is exported from the test port of the instrument, and theSMAconnector of the hand mechanism is connected with the calibration part after calibration, and the data such as return loss or standing wave ratio corresponding to the relevant frequency points are recorded.



测试示意图

3.3 Active Test Report

TRP/TIS

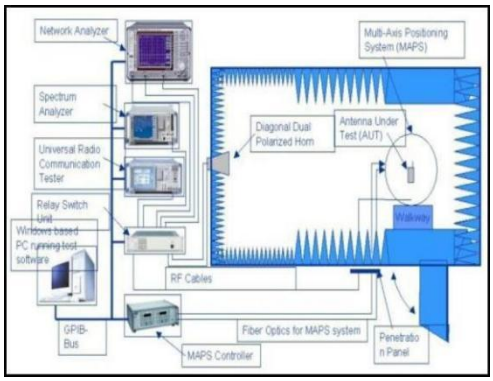
Test tools: Integrated measuring instrument, Network analyzer, all radio wave far fieldETS, FranceMVG SG24LT(Satmio) Near field3Dmicrowave darkroom, High precision positioning system and its controller and computer test environment with automatic test program:Temperature22℃ ±3℃, humidity 60%±15% Test method: The Test method of TRP by EST or Satimo 24LT system software is used and calculated. During TRP test, DUT(Device Under Test) is in the state of maximum transmitting power. Three channels of high, medium and low are selected for test. The effective radiated power (EIRP) of

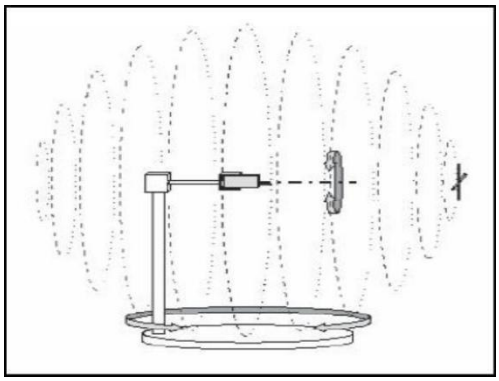
$$TRP \cong \frac{\pi}{2NM}\sum_{i=1}^{N-1}\sum_{j=0}^{M-1}\left[EiRP_{\theta}(\theta_i,\phi_j)+EiRP(\theta_i,\phi_j)\right]\sin(\theta_i)$$

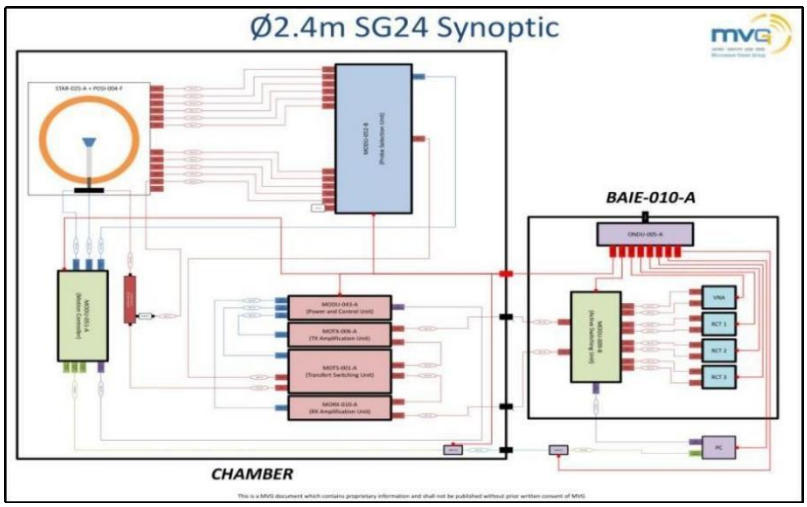
each point in the three-dimensional space is measured with 15 degrees as the step, and the average value on the sphere is calculated by integrating. The calculation formula is as follows:

During theTIStest,DUTis in the state of maximum transmit power, and three channels of high, medium and low are selected for test. By controlling the position ofDUT, Taking30degrees as step length, the receiving sensitivity of each point in the three-dimensional space is measured, and the average value on the sphere is calculated by integrating. The calculation formula is as follows:

$$TIS \cong \frac{2NM}{\pi\sum_{i=1}^{N-1}\sum_{j=0}^{M-1}\left[\frac{1}{EIS_{\theta}(\theta_i,\phi_j)}+\frac{1}{EIS_{\phi}(\theta_i,\phi_j)}\right]\sin(\theta_i)}$$


Network Analyzer
Multi-Axis Positioning System (MAPS)
Spectrum Analyzer
Diagonal Dual Polarized Horn
Antenna Under Test (AUT)
Universal Radio Communication Tester
Relay Switch Unit
Windows based PC running test software
Walkway
RF Cables
GPIB-Bus
Fiber Optics for MAPS system
Penetration Panel
MAPS Controller



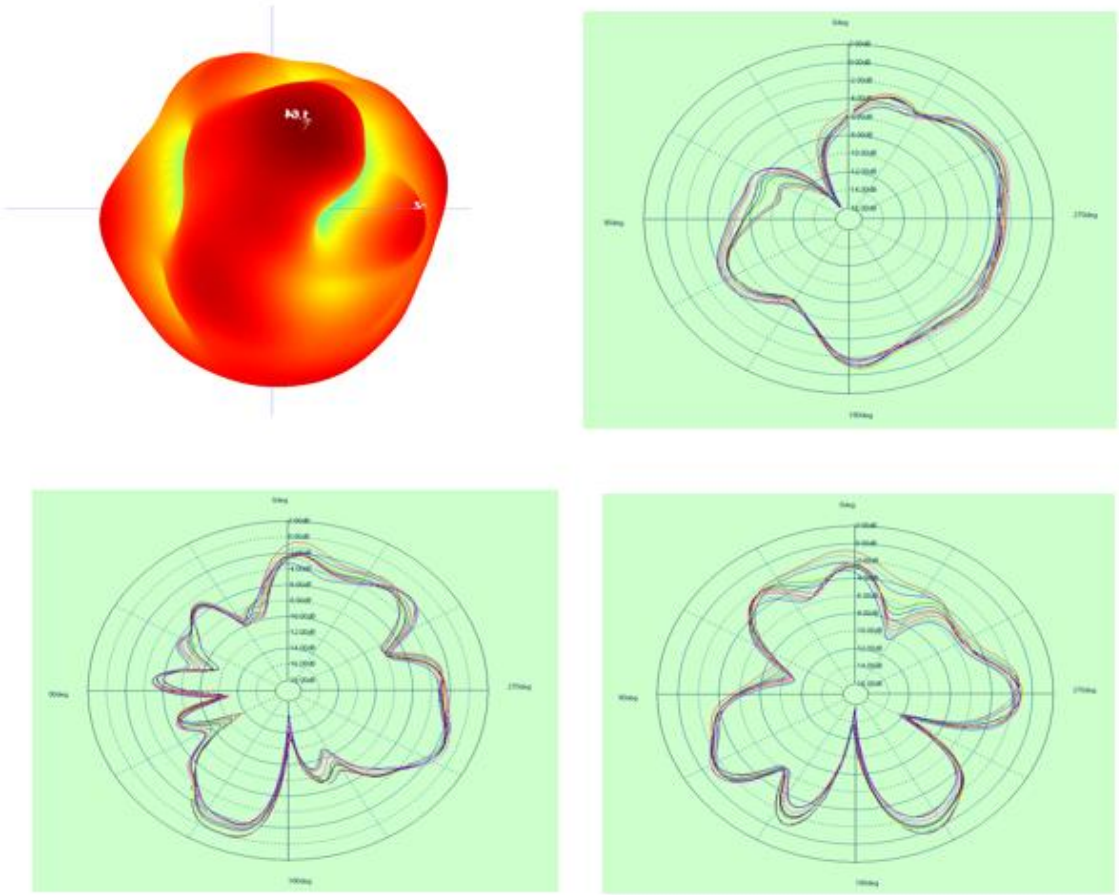

Ø2.4m SG24 Synoptic
BAIE-010-A
CHAMBER

3.4 Passive efficiency and gain

无源效率、增益

Frequency	Efficiency	Gain . dB
2400000000	55.87%	3.15
2410000000	54.96%	3.12
2420000000	54.52%	3.26
2430000000	55.87%	3.18
2440000000	55.65%	3.20
2450000000	55.14%	3.24
2460000000	56.84%	3.55
2470000000	57.41%	3.57
2480000000	55.85%	3.25
2490000000	54.81%	3.18
2500000000	55.62%	3.12

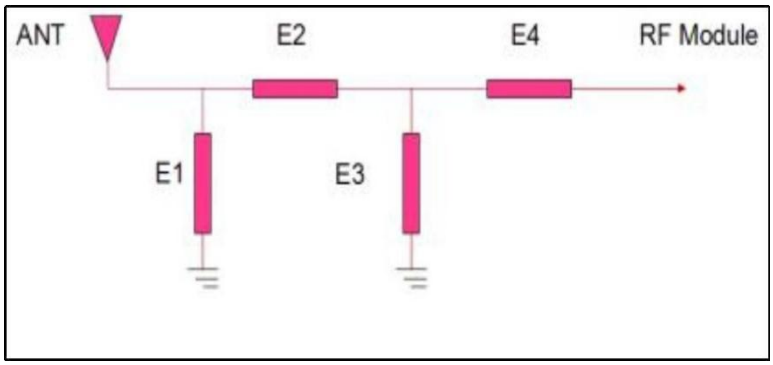
Measuring instrument：Agilent Technologies E5071B 300kHz-8.5GHz ENA Series Network Analyzer



3.5 Active OTA TRP/TIS data

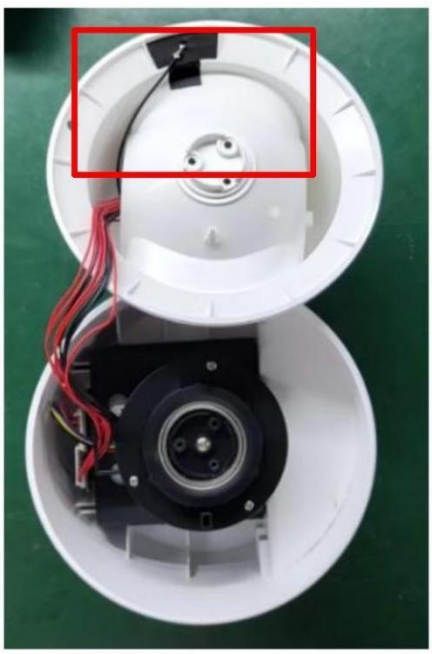
标准	BAND	B		
自由空间	CHANNAL	L	M	H
	TRP	15.03	15.15	15.09
	TIS			-81.38
	备注：3D数据			

4. Matching circuit specification



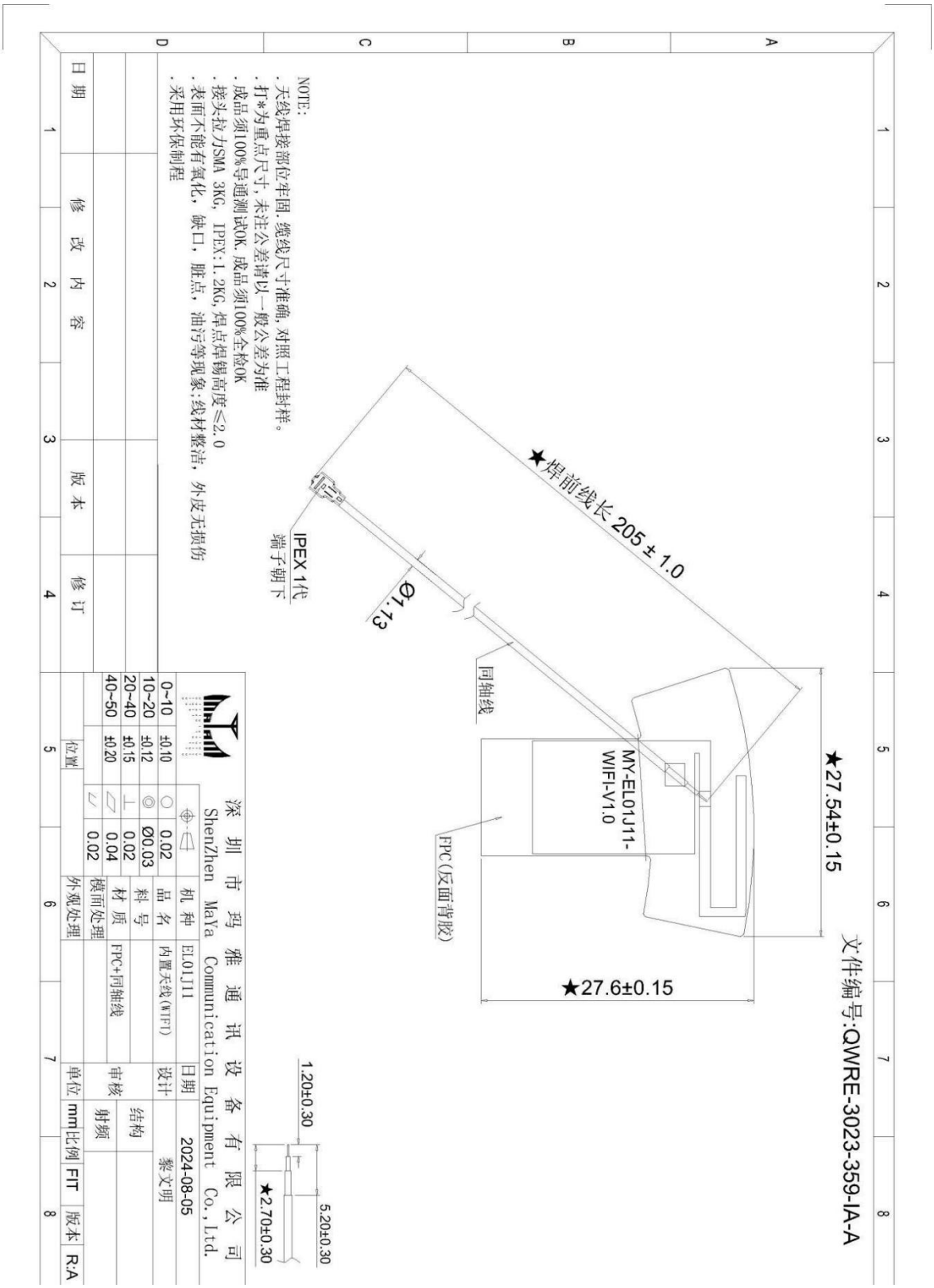
Note: Our company did not debug the antenna matching circuit.

5. Environmental treatment

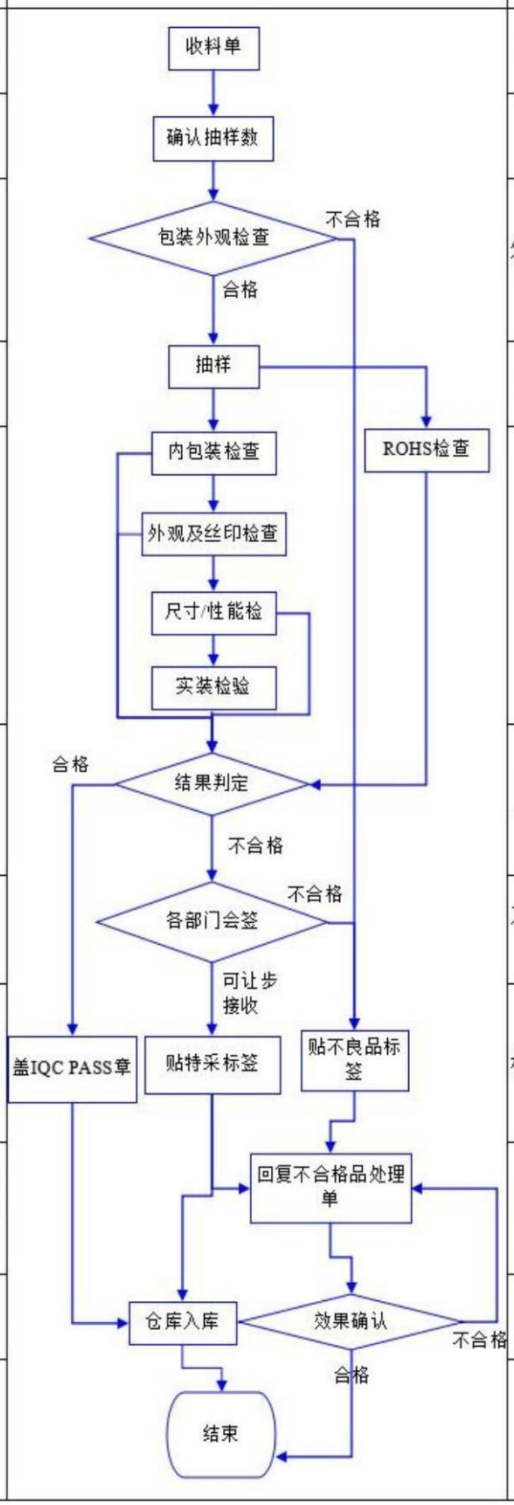


1.天线装配位置。

6. Structural drawing



7. Quality control flow chart

输入	相关单位	流程	输出	相关单位	备注说明
收料单	仓库		待检物料	IQC	
数量/抽样标准	IQC		样本量	IQC	根据收料单确认抽样数量
原物料	IQC		外包装检验结果记录	IQC	1.确认外包装是否破损，受潮，是否统一； 2.确认是否有包装贴纸， 3.供应商名称，物料编码；物料编码等是否清晰可辨；
数量/抽样标准	IQC		样本物料	IQC	1.抽样数量按照抽样标准； 2.抽样方式为对角线型或者S型；
物料规格书/检验工具/检验记录表	IQC		检验记录	IQC	1.在检验记录表的检验依据中必须注明物料所在的产品名称或编码或BOM编码； 2.所有物料包括样品都要有检验记录； 3.所有的物料必须依据规格书或书面文档为依据； 4.所有物料的检验数据必须及时记录；
检验记录/检验标准	IQC		检验记录/不合品处理单	IQC	1.对于轻微缺陷依据AQL接受标准自行判定； 2.对于性能不良，或外观严重不良的项目开不合品处理单，给品质主管进行确认，并给其他相关部门会签；
不合格品处理单	IQC		不合品处理单	品质/技术开发/采购	各个部门负责人依据实际情况进行裁决，最终由品质经理判定；
IQA判定标签	IQC		检验后物料	IQC	1.检验合格物料必须盖QC Pass章到物料外箱及最小包装标签上;特采的贴黄色标签;判退的贴红色标签并要求仓库隔离存放; 2.对于有不良现象的物料开不良品合格处理单
不合格品处理单	IQC/供应商		厂商回复	IQC/QE确认	1.给厂商的不合品处理单要求供应商及时回复，一般限时24小时； 2.供应商回复太牵强的应判退，重新回复。
检验后的物料	仓库		入库单	仓库	

8. Packing method

深圳市玛雅通讯设备有限公司

产品出厂包装要求

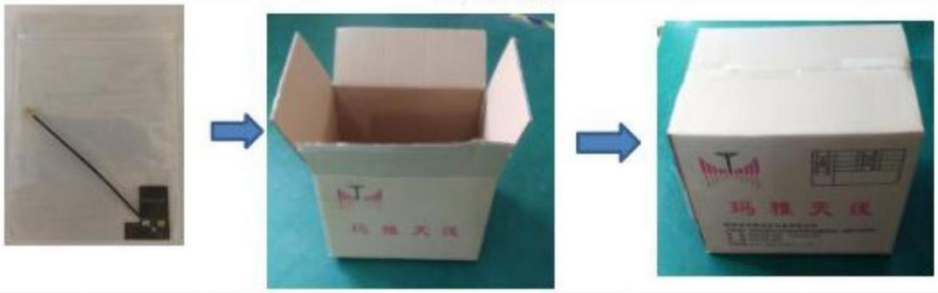
客户	奥尼	零件名称	FPC天线	项目名	EL01J11

使用材料

序号	名称	规格
1	封口胶袋	
2	纸箱	

每个封口胶袋内以实际标签数量装产品，外用纸箱包装。

包装示意图



审核：	黎文明		制表：	罗鹏辉

9. Certification test status(Fill in instructions: If there is a relevant test certification, please tick in brackets and indicate the corresponding recognition Certificate or report number)

() UL Certification or Report number:

() VDE certification or report number:

() CE certification or report number:

() FCC certification or report number:

(√)**ROHS**Certification or report number: SHAEC23001049106

(√)**REACH**Certification or report number:SHAEC23001049108

() EMC Certification or report number:

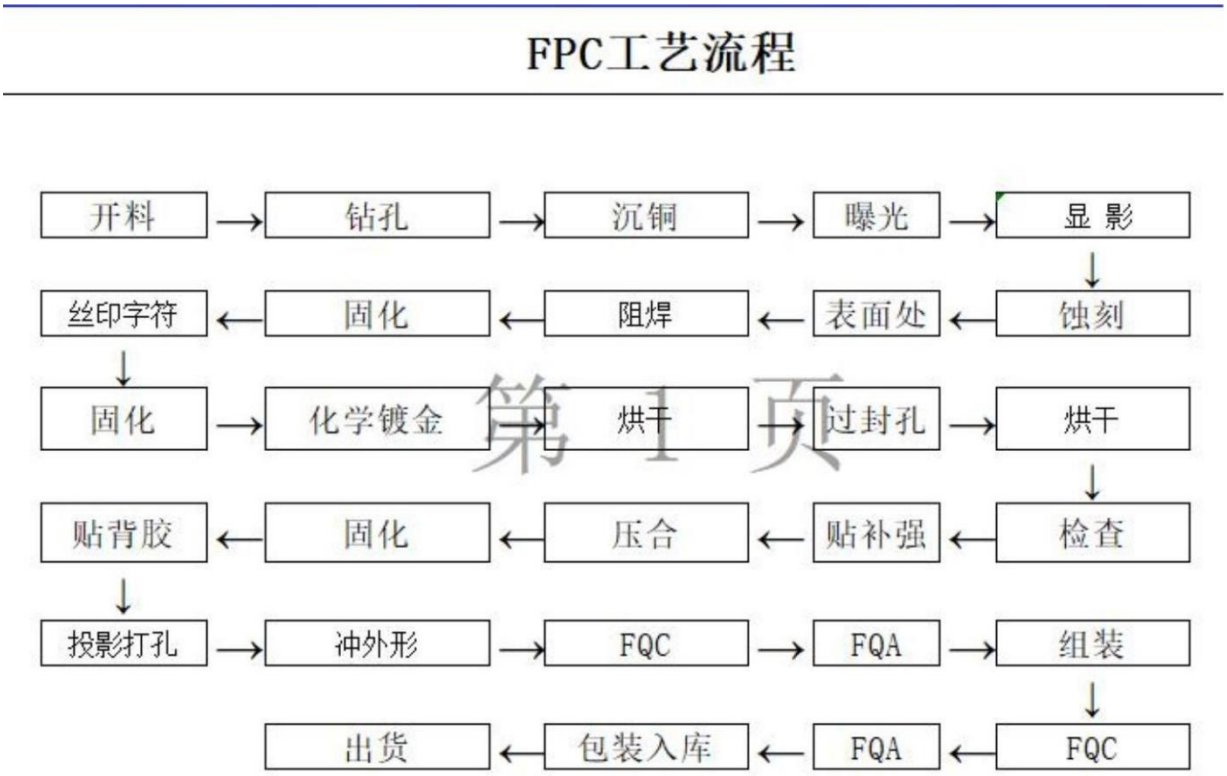
() CCC Certification or report number:

() SRRC certification or report number:

() Other certification or report number:

() No product certification

10. Process flow chart



11. Warm reminder

1. Confirmation of performance and structure

★ Please confirm the appearance and performance of the product before signing the confirmation letter.

★ Please be sure to provide the final mass production trial production machine to our company or take it back to our company for verification.

★ Since the product of this acknowledgement is a highly sensitive object, please be sure to keep the test gold machine for follow-up traceability.

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2. About product storage

★ Due to the printing ink on the surface of this product, the back is coated with back glue, and there are electroplated objects, please be sure to confirm the temperature between 23 ° C and 27 ° C during storage or transportation, the relative humidity is below 60%, and the environment is stored or transported without strong acid, sulfur and oxygen.

★ Due to the stringent environmental requirements of this product, customers must be assembled within the quality assurance period after receiving the product to ensure the reliability of the product.

3. Tips on product use

★ Due to the special structure of this product, when using this product, it is necessary to fully contact with the object to be pasted, and the object to be pasted must not remain chemical agents (release agent, etc.) or try not to use raw materials with release agent. In order to ensure the use of the product, please clean the surface of the object to be pasted before using this product. Make sure that there is no chemical residue on the surface of the pasted object.

4. Quality Assurance Statement about this product

★ The product quality guarantee period is 12 months, if your use and storage environment to meet the above requirements, in the effective guarantee period of any quality problems, and judged as our products abnormal, our company can provide free replacement service, after 12 months, our products to provide lifelong consultation and paid replacement service.

★ This product is a special custom device, please receive the product must be confirmed within 3 working days.

★ Acceptance method: Please accept the goods within 3 working days, otherwise it is regarded as the default acceptance.

★ Verification method: check the certificate engineering seal.

Vendor Name:
Shenzhen Maya Communication Equipment Company

Supplier Address:
B205, Building 1, Ai Digital Valley, Dagang Street, Longhua District, Shenzhen City