Shenzhen Yunshang Electronics Co., Ltd

VIU-500 Antenna commissioning report

Report version: 2024/12/30

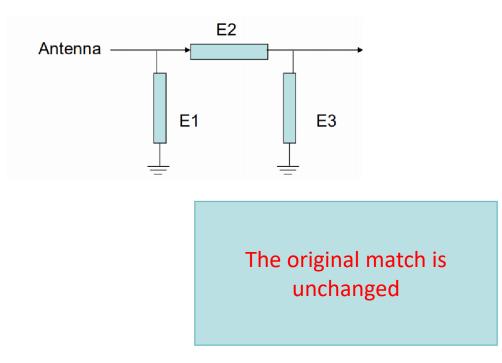
Project introduction

Model							
			Bands	Mater ial	Form	Area	Match
	Main antenna	2G	G850/1900				
Antenna		3G	2/5	FPC			
		4G	LTE2/4/5/7				
		5G	NA				
		WIFI	2.4G/5G	FPC			
	Other antenna	GPS					
		Diversity	NA				
Sample status	Dubuggir	ig sample	Environmental treatment				

Report Version Summary

Version	Date	Content
V1	2024-12-13	Antenna commisioning report
V2	2024-12-27	Antenna test of pilot production machine
V3	2024-12-30	Optimize the antenna of the pilot production machine

Main antenna match



Main antenna chamber data

	Channel	TRP(dBm)	TIS (dBm)	Channel	TRP(dBm)	TIS (dBm)	Channel	TRP(dBm)	TIS(dBm)
	20450	19.35							
FDD B2	20525	19.77							
	20600	19.48	-90.57						
	20000	19.44							
FDD B4	20175	18.53							
	20350	18.45	-94.59						
	20450	19.31							
FDD B5	20525	18.68							
	20600	19.21	-94.39						
	20800	19.39							
FDD B7	21100	19.15							
	21400	17.99	-95.49						
	9262	17.56							
W2	9400	18.43							
	9538	17.81	-106.98						
	4132	17.52							
W5	4183	17.81							
	4233	18.23	-107.64						
	128	26.96							
GSM 850	190	27.21							
	251	27.42	-107.83						
	512	24.29							
G 1900	661	25.06							
	810	24.51	-105.77						

WIFI test result

BAND		2.4GWIFI			5GWIFI	
CHANNEL	low	medium	high	low	medium	high
TRP (dBm)	14.1	14. 2	14.4	10.85	10.44	10.96
TIS (dBm)	-83.8	-83.7	-83.2	-73. 75	-73.26	-72.88

GPS test result

	(5 s	MARTN		:	
-	-			4		
	YGPS					
		60	RMATI NMEA LOG	GPS TEST	MPE STATUS	
	erage CNR		5 L:L1S I:IRNSS S:S 6/-/-/-/- E-/-/-/-/-/			
			0/-/-/-/- E-/-/-/-/-/-/-/-	Q:-/-/-/-/-/		Fill I
	SVID Fa	gie page CNR		Elevation	Azimuth	O
	16 L1	21.0		44.00	222.00	
	28 L1	40.6		45.00	22.00	
	29 L1	42.8		22.00	70.00	
	31 L1	39.6		48.00	339.00	
	68 L1	31.1		0.00	0.00	
	81 L1	26.8		0.00	0.00	
	3 L1	0.0		63.00	189.00	
	4 L1	0.0		31.00	112.00	
	5 L1	0.0		25.00	257.00	
	6 L1	35.3		53.00	345.00	
	16 L1	31.4		52.00		
	24, L1	37.0				Constant 1
	41 L1	0.0		46.00		

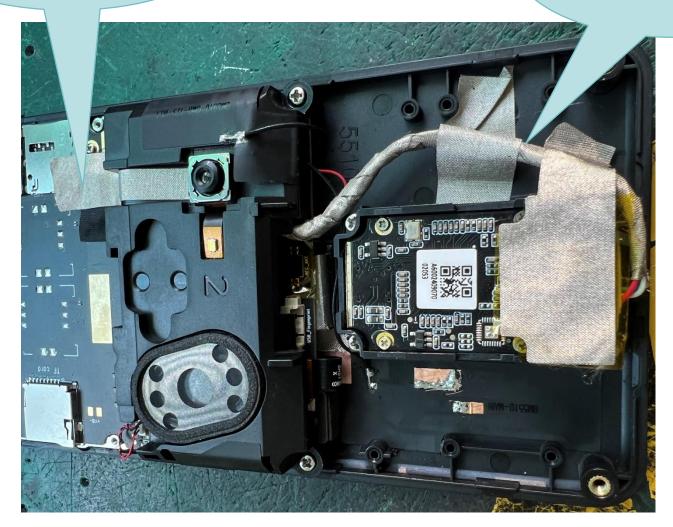
Three-in-one efficiency

测试数据报告			地址:深圳市龙华区人浪街道顾丰华创新产业园5栋2楼											
	软件版本: SN	IF V2.4.2		间: 2024,	S. (283)	1:07:02								
Frequency ID	1	2	Э	4	5	6	7	8	9	10	11	12	13	14
Frequency (MHz)	1570	1575	1580	2400	2450	2500	5100	5200	5300	5400	5500	5600	5700	5800
Gain (dRi)	2.89	3.20	3.43	2.53	3.39	3.15	-1.14	1.56	-5.87	-0.98	1.56	2.60	4.58	5.56
Efficiency (dB)	-3.04	-3.02	-3.00	-2.46	-2.52	-2.36	-5.07	-7.36	-8.12	-6.32	-5.13	-4.60	-3.16	-3.11
Efficiency (%)	49.62	49.93	50.11	56.70	55.99	58.11	24.71	13.35	15.41	23.35	30.66	34.68	48.26	48.8.
Plane: Phi=0	1570	1575	1580	2400	2450	2500	5100	5200	5300	5400	5500	5600	5700	5800
Plane: Phi=90	1570	1575	1580	2400	2450	2500	5100	5200	5300	5400	5500	5600	5700	5800
Plane: heta=90	15/0	15/5	1580	2400	2450	2500	5100	5200	5300	5400	5500	5600	5/00	5800

Environmental treatment

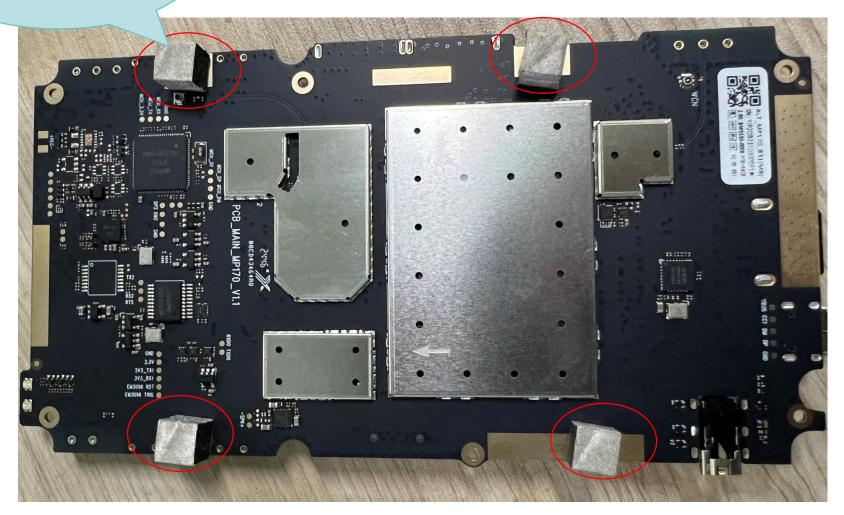
Camera sticker conductive cloth grounding

Put the USB cable here, not over there with the antenna



Environmental treatment

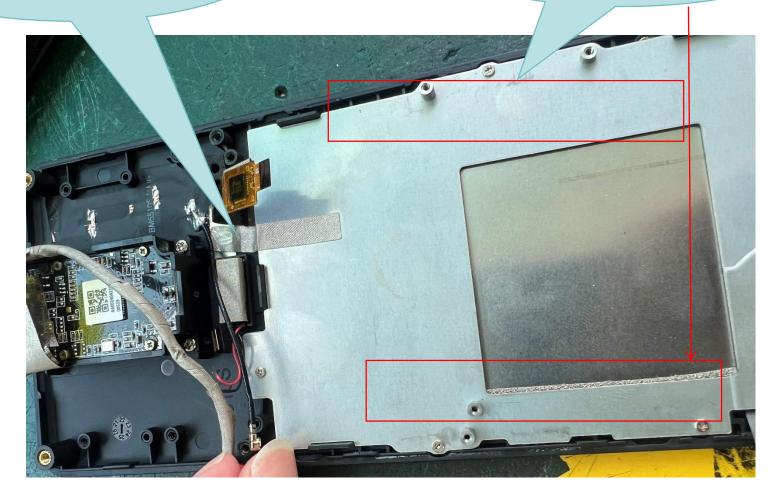
Replace this conductive foam with full contact



Environmental treatment

Paste conductive cloth on the steel sheet where the antenna leaks copper

Screen sticker conductive sponge grounding



Risk Tips for Debugging

Please carefully confirm whether the matching circuit mentioned in the report has been modified and whether the environmental treatment has been introduced, which will directly affect the antenna performance.

The parameters provided in this report are only the parameters of the sample given by the customer to our company for debugging, and do not represent the final mass production status of your company's final project.

If your company has the latest trial production or updated status (replacement of materials, update of software, change of environmental treatment, etc.), please submit it to our company for verification as soon as possible to confirm whether the antenna performance is affected.

If your company needs to send it to a third party for retesting or to a customer for testing, please be sure to send the machine to be tested to our company for testing and confirmation, because the consistency of the motherboard, the consistency of the assembly, and the difference in antenna assembly and other factors may lead to deviations in antenna parameters.

The End

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