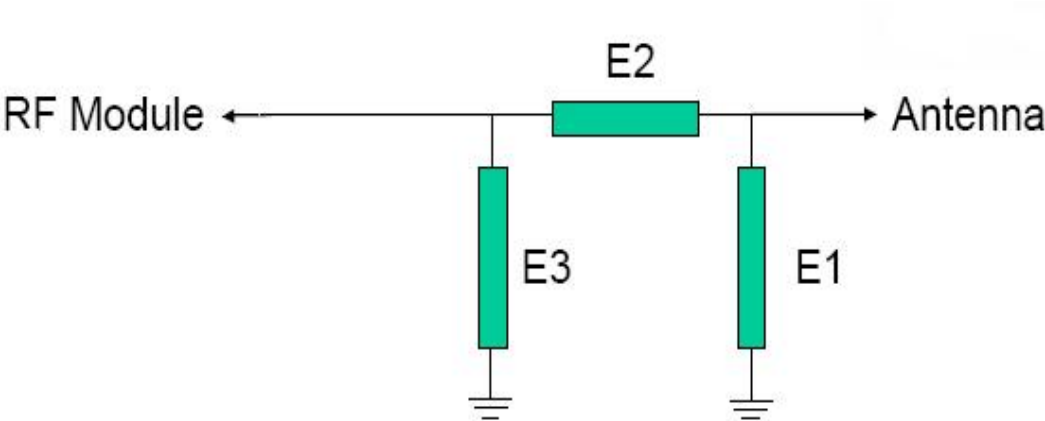


date: 2024-11-05

A3DA-4G-F36 a main boardAntenna Test Report

project	RF Manager	Structure Manager	Frequency band
A3DA-4G	Lin tu chao	cen	GSM:850/900/1800/1900 WCDMA:850/900/1700/1900 /2100 LTE:B1/B2/3/B4/B5/B7/8/20/ B12/B17/28/B38/B40/B41B6 6 WIFI/GPS/BT
remarks:			

2. Matching circuit design



Element	Value
E1(0402)	/
E2(0402)	/
E3(0402)	/

3. 1 2G Test report

	EGSM900			Remarks	DCS1800			Remarks
Channel	1	62	120		512	698	885	
MaxPower (dBm)	27.5	26.8	26.1		26.2	26.8	28.3	
TRP(dBm)	24.8	24	23.1		22.2	22.8	23.8	
MaxSensitivity(dBm)			-101.1				-105.1	
TIS(dBm)			-98.1				-102.1	
	EGSM850			Remarks	PCS1900			Remarks
Channel	128	190	250		512	661	810	
MaxPower (dBm)	28.1	28.2	28.5		27.2	27.5	27.7	
TRP(dBm)	25.1	25.3	25.5		23.1	23.3	23.5	
MaxSensitivity(dBm)			-104.5				-104.5	
TIS(dBm)			-100.5				-100.5	

3. 2 3G Test report

	WCDMA2100			Remarks	WCDMA900			Remarks
Channel	10562	10700	10838		2938	3013	3087	
MaxPower (dBm)	19.8	20.2	20.1		18.8	16.8	16.5	
TRP(dBm)	16.3	16.5	17.2		14.8	14.1	13.8	
MaxSensitivity(dBm)			-103.1				-100.1	
TIS(dBm)			-100.5				-97.5	
	WCDMA850			Remarks	WCDMA1900			Remarks
Channel	4357	4408	4458		9662	9800	9938	
MaxPower (dBm)	18.5	18.8	19.1		20.8	20.8	20.5	
TRP(dBm)	16.5	16.5	17.1		16.9	16.7	16.1	
MaxSensitivity(dBm)			-103.8				-105.2	
TIS(dBm)			-100.2				-101.3	

3. 3 3G Test report

	WCDMA1700			Remarks
Channel	1548	1638	1738	
MaxPower (dBm)	19.5	20.1	21.2	
TRP(dBm)	14.8	15.2	15.1	
MaxSensiti vity(dBm)			-105.2	
TIS(dBm)			-101.4	

3. 4 4G Test report

	LTE-B1			Remarks	LTE-B2			Remarks
Channel	18100	18300	18500		18650	18900	19150	
MaxPower (dBm)	21.5	21.8	21.8		22.1	21.5	21.5	
TRP(dBm)	16.8	17.5	17.1		16.7	17.5	17.6	
MaxSensitivity(dBm)			-89.5				-90.5	
TIS(dBm)			-86.5				-87.4	
	LTE-B3			Remarks	LTE-B4			Remarks
Channel	19250	19575	19900		20000	20175	20350	
MaxPower (dBm)	19.7	20.5	20.8		19.5	20.8	20.3	
TRP(dBm)	15.3	15.5	16.1		15.8	16.5	15.5	
MaxSensitivity(dBm)			-95.2				-91.2	
TIS(dBm)			-91.5				-88.1	

3. 5 4G Test report

	LTE-B5			Remarks	LTE-B7			Remarks
Channel	20450	20525	20600		20850	21100	21350	
MaxPower (dBm)	20.5	20.9	19.8		20.2	20.5	21.5	
TRP(dBm)	17.3	16.8	16.8		15.2	16.1	16.7	
MaxSensitivity(dBm)			-89.7				-93.4	
TIS(dBm)			-86.8				-88.5	
	LTE-B8			Remarks	LTE-B12			Remarks
Channel	21500	21625	21750		23060	23095	23130	
MaxPower (dBm)	18.8	16.8	16.5		14.1	15.1	15.3	
TRP(dBm)	15.1	14.8	14		12.3	13.2	13.1	
MaxSensitivity(dBm)			-88.7				-90.2	
TIS(dBm)			-85.7				-86.5	

3. 6 4G Test report

	LTE-B17			Remarks	LTE-B20			Remarks
Channel	23780	23790	23800		24200	24300	24400	
MaxPower (dBm)	14.8	15.8	15.7		20.2	19.8	19.1	
TRP(dBm)	12.8	13.1	13.6		16.8	16.2	16.1	
MaxSensitivity(dBm)			-90.5				-90.5	
TIS(dBm)			-86.5				-86.8	
	LTE-B28			Remarks	LTE-B38			Remarks
Channel	27260	27435	27610		37850	38000	38150	
MaxPower (dBm)	15.1	15.8	16.1		20.1	20.2	21.2	
TRP(dBm)	13.1	13.8	14.1		15.5	15.8	16.5	
MaxSensitivity(dBm)			-90.5				-94.1	
TIS(dBm)			-86.9				-88.7	

3. 7 4G Test report

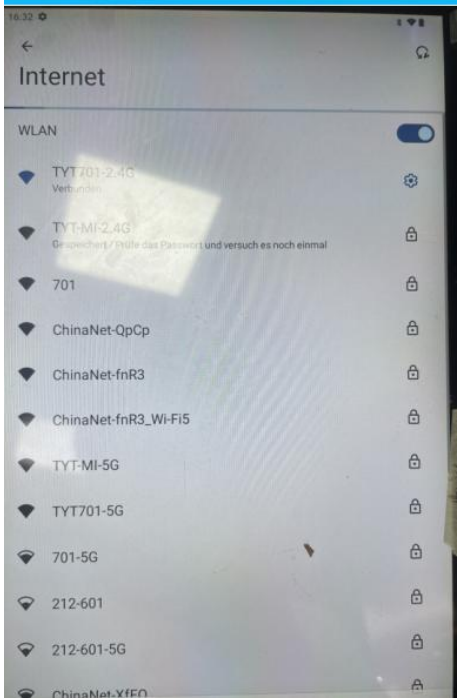
	LTE-B40			Remarks	LTE-B41			Remarks
Channel	38750	39150	39550		40240	40620	40625	
MaxPower (dBm)	20.8	20.5	20.1		20.4	20.2	20.1	
TRP(dBm)	16.3	15.2	15.1		15.8	15.3	15.1	
MaxSensitivity(dBm)			-92.8				-90.5	
TIS(dBm)			-87.8				-86.5	
	LTE-B66			Remarks				
Channel	132022	132333	132622					
MaxPower (dBm)	19.5	20.7	20.5					
TRP(dBm)	15.1	16.3	16.5					
MaxSensitivity(dBm)			-91.1					
TIS(dBm)			-87.5					

3. 8 Antenna gain

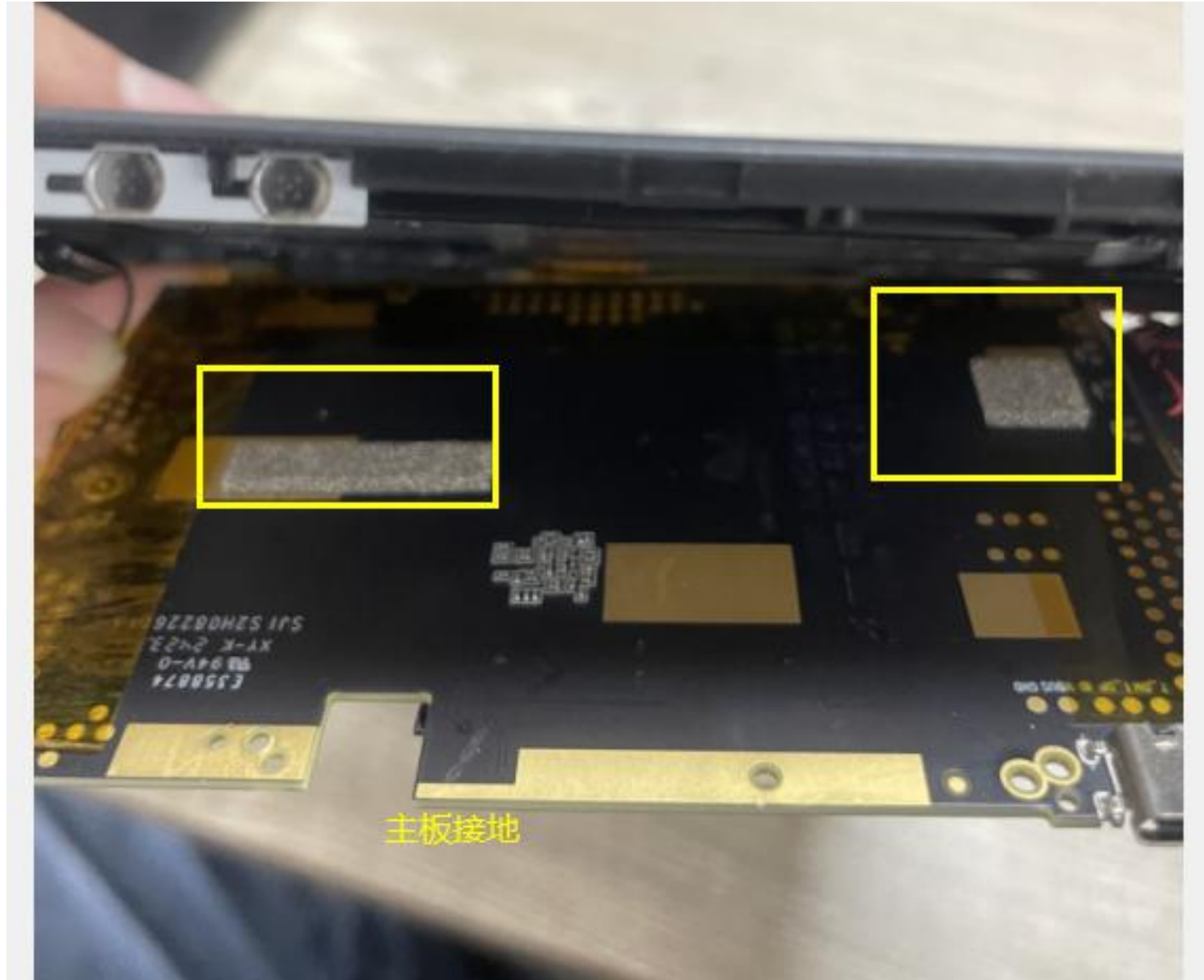
2G Antenna gain	2G:GSM850: 0.2dBi GSM900: 0.3dBi DCS1800: 0.7dBi PCS1900:0.6dBi
3G Antenna gain	B1: 0.7dBi B2:0.6dBi B4:0.7dBi B5: 0.2dBi B8: 0.3dBi
4G Antenna gain	B1: 0.7dBi B2:0.6dBi B3:0.7dBi B4:0.7dBi B5: 0.2dBi B7: 0.5dBi B8: 0.3dBi B20: 0.2dBi B12:-0.1dBi B17:-0.1dBi B28AB:-0.1dBi B38:0.5dBi B40:0.6dBi B41:0.5dBi B66:0.7dBi
GPS Antenna gain	0.7dBi
WIFI Antenna gain	2.4G: 0.8dBi 5G:0.6dBi
BT Antenna gain	0.8 dBi

3. 4 GPS/WIFI/BT Test report

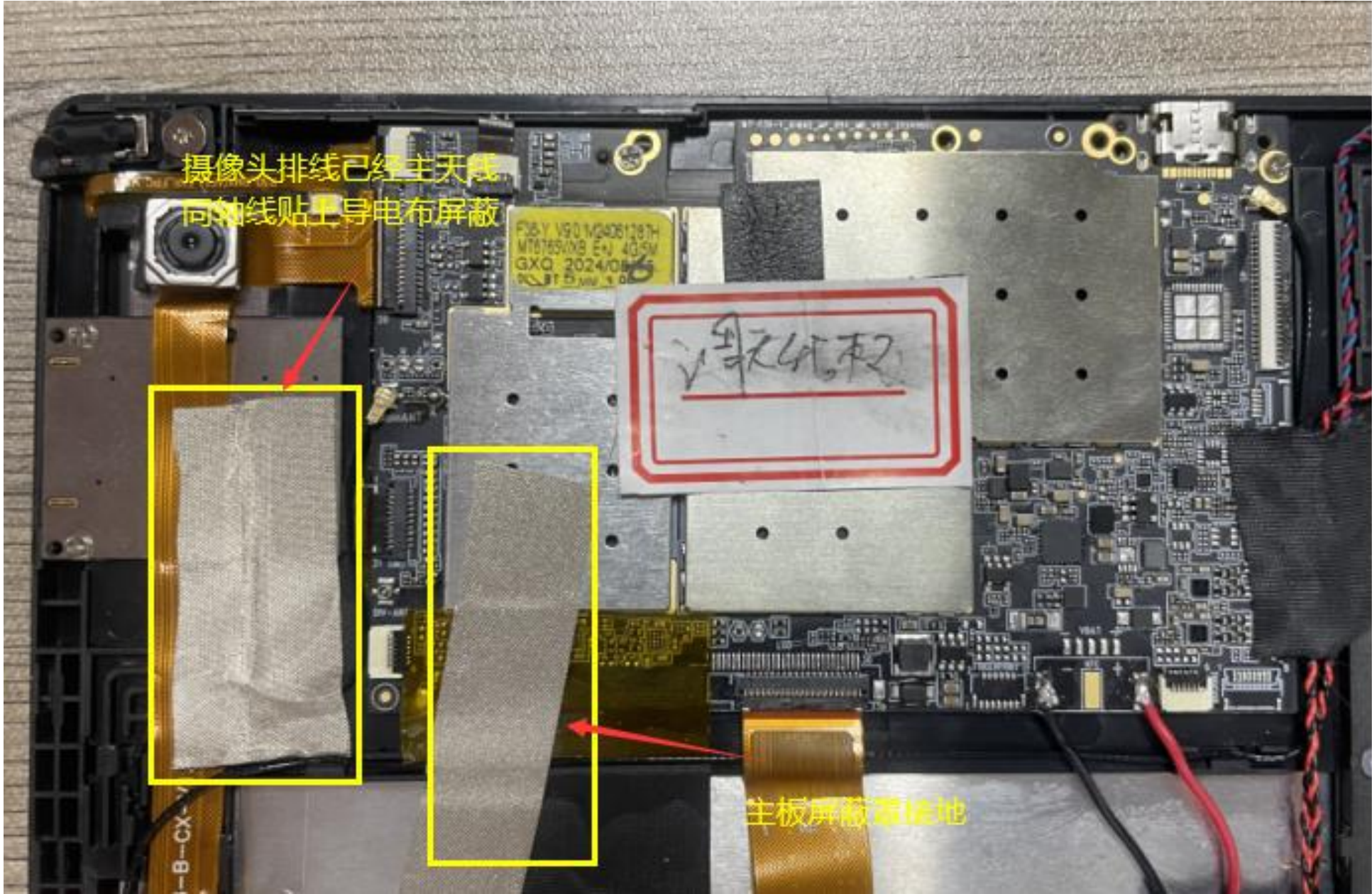
GPS	Maximum signal strength	quantity	Cold start positioning time	weather condition
	40	16	127S	a sunny day
WIFI	Distance from router WIFI signal to full grid		Accessible normal internet distance	
	5m		10m	
BT	Accessible communication distance		Accessible audio playback distance	
	8m		10m	



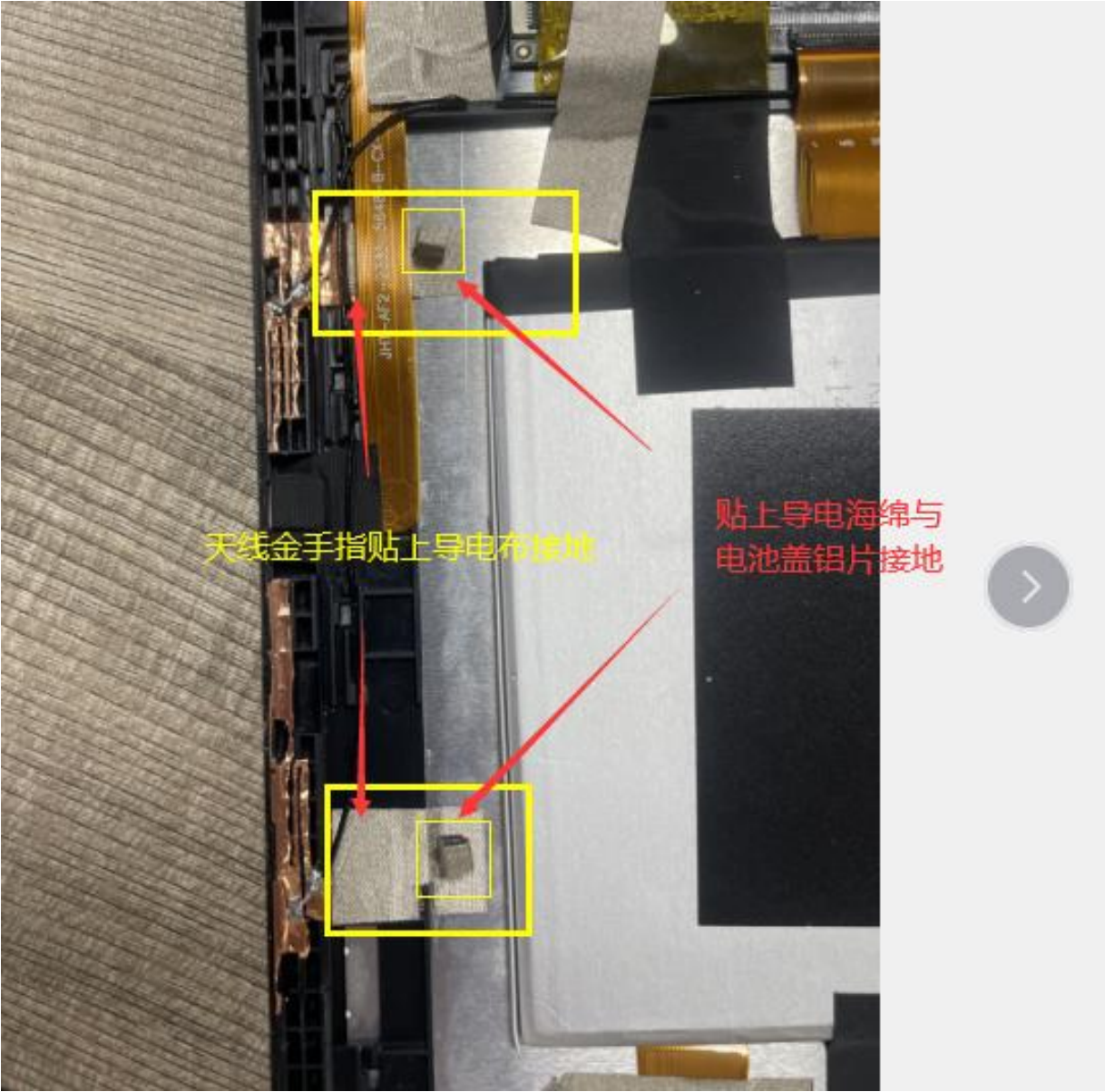
4. 1 Environmental treatment



4.2 Environmental treatment



4.3 Environmental treatment



4. 4 Environmental treatment

