



# ASUS P527 Service Manual (L1&L2)



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# **1 Equipment Need**

NO#	Equipment Description	ASUS Part#	Supplier	Quantity	Remarks
1	Computer	None	None	1	
2	SIM Card	None	None	1	CAS048D 22064D
3	P527	80A-S5G1003	ASUS	1	
4	Battery	07G016043459	ASUS	1	
5	USB download cable	14G000506200	ASUS	1	
6	Screwdriver (T5)	16-T00362002	ASUS	1	
7	Tweezers	16-000600014	ASUS	1	
8	Plastic Wrench	13GV0400PZZZ	ASUS	1	
9	Micro SD Card	04G352800500	ASUS	1	
10	ADAPTER	04G267013800	ASUS	1	B

# **2 Introduction**

# 2.1 About This Service Manual

Using this service manual and the suggestions contained in it assures proper installation, operation, and maintenance of the PDA P527. This manual aids service personnel in testing and repairing P527. Service personnel should be familiar with electronic assembly, testing, and troubleshooting methods.

## 2.2 Overview

ASUS PDA P527 is a friendly use product for young business man, heavy traveler and the people who enjoy sharing their travel experience and memory to others.

As a product which is built-in GPS with full Travelog and

Location Courier applications, users can share travel route with friends. Elegant and slim (15.4mm) ID design with numeric keypad and 8 hot keys make one touch come true. Also, P527 supports FM radio. Users can enjoy latest news and music.

RSS Reader can help to receive up-to-date news or message without active access. ASUS ZIP makes users not to worry if the download file is compressed or not, just one click to open it. Memory auto clean let it always keeps enough memory space for the operation. Power saving is extra benefit. BCR digitizes contact information with high recognition rate.



# 2.3 Product Specification

Networking	EDGE/GPRS/GSM 850/900/1800/1900		
system	EGPRS Class B, Multi-slot Class 10		
Operating System	Microsoft Windows Mobile 6 Professional		
CPU	TI OMAP 850 (200MHz)		
Dimensions	113 x 58 x 15.4 mm, 125g		
Battery	1300 mAh Lithium-Ion		
Talk time	4-5 hour		
Standby time	150-200 hours		
Form Factor	Bar type with numeric keypad		
Color	Dark Gray		
Display	2.6", 65K, TFT , 240 x 320		
Connectivity	WLAN 802.11 b+g / Bluetooth 2.0+EDR / FM / USB v1.1		

Browsing	HTTP and WAP 1.2.1/2.0
Messaging	SMS/MMS/Email/MSN
Memory	128 MB Flash + 64 MB SDRAM
Expansion Slot	Micro-SD (SDHC supports)
GPS	GPS (SiRF III Solution with internal antenna)
JAVA	J2ME
Camera	2 Mega-Pixel (Auto focus)
Audio	MP3, WMA, and AAC
Video	MPEG4 / H.263 Playback and Recording
Ringtone	MIDI and MP3
PIM/Utilities	Word (editor), Excel (editor), and Power Point (viewer)
Advanced	Travelog, FM radio, Bluetooth Presenter, Location courier Business Card Recognition, RSS reader, Meeting planner, Memory auto clean, GPS catcher, TMC(optional)

# **3 Disassembly / Assembly Procedure**

# 3.1 Introduction

This section describes how to disassemble PDA P527. Many of the integrated devices used in this phone are vulnerable to damage. Ensure adequate static protection is in place when handling, shipping, and servicing any internal components.

### 3.1.1 Recommended Tools

Anti-Static Mat (Ground Cord included) Anti-Static Wrist Strap Torque Screw Driver (T5 type, torque is set to 1.2kg-cm) Tweezers Plastic blade



### 3.1.2 Disassembly Procedure

The following set of diagrams will demonstrate the correct sequence and action to disassemble P527.

#### ■ Step 1

Take the stylus away from the PDA.



Step 2Remove the battery case and take the battery away.





■ Step 3 Take off the antenna cover by plastic blade.





Unscrew and remove 4 screws on PDA by screw driver.

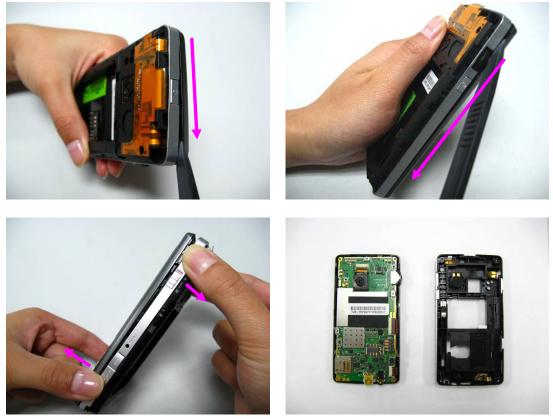


#### ■ Step 5

Please switch the "Hold" key as the arrowhead shows. Then separate the middle cover from front cover by plastic blade.







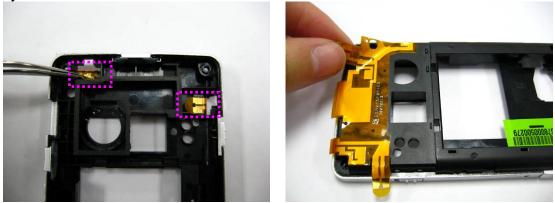
Step 6 Remove the speaker by a pair of tweezers.



Step 7 Remove the vibrator by a pair of tweezers.



Release the antenna FPC by a pair of tweezers. Then tear off the antenna FPC from middle cover by hand.



■ Step 9

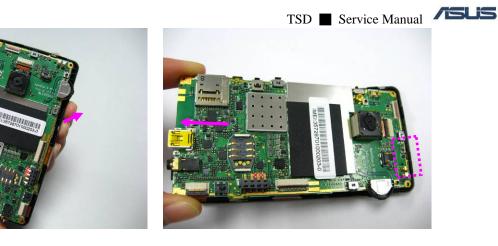
Open the LCM connector by plastic blade and release the LCM FPC by a pair of tweezers.



#### ■ Step 10

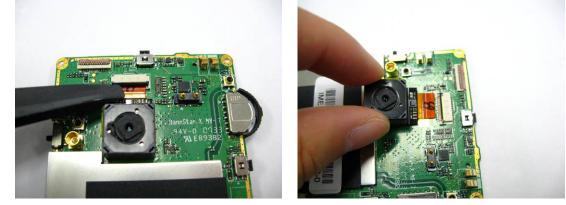
Separate the main board from front cover. Pay attention to the hook at the bottom of the front cover. Main board should be released from it first.





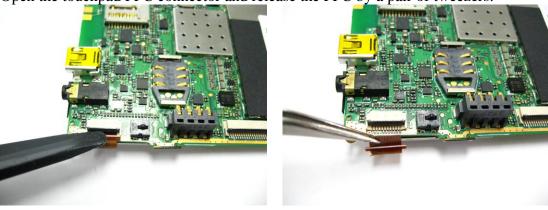


Open the camera connector by plastic blade and remove it from main board by hand.

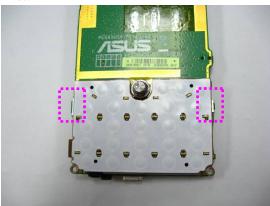


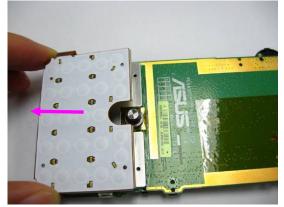
#### ■ Step12

Open the touchpad FPC connector and release the FPC by a pair of tweezers.



Take the touchpad FPC away. Pay attention to the hooks. The FPC should be released from them first.

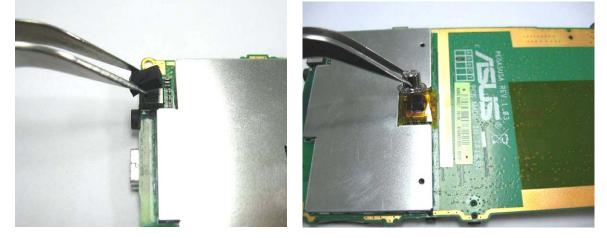






#### ■ Step14

Take off the MIC rubber and joy stick key by a pair of tweezers.





#### ■ Step15 Take off the keypad by hand.



#### ■ Step16

Remove the two top bezel rubbers by a pair of tweezers and then take the LCD module away.







# Step17Remove the receiver by a pair of tweezers.



### 3.1.3 Assembly Procedure

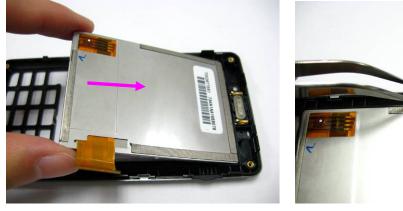
It is carried out in the exact reverse sequence as the disassembly.

#### Step 1

Install the receiver on the front cover by a pair of tweezers.



Step 2 Install the LCM on the front cover and place two top bezel rubbers to fix the LCM.



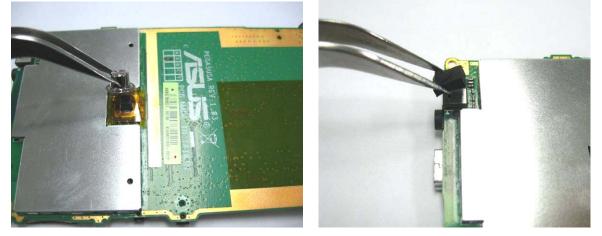


Install the keypad and arrange the keypad properly in the front cover.



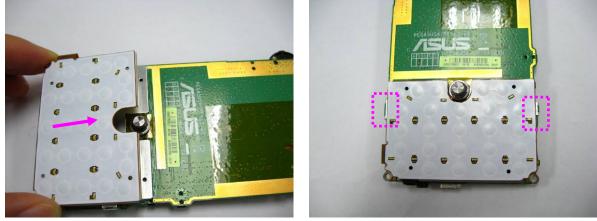
#### ■ Step 4

Install the joystick key and MIC rubber by a pair of tweezers.



#### ■ Step 5

Install the keypad FPC on main board and press gently to arrange it into the hooks.

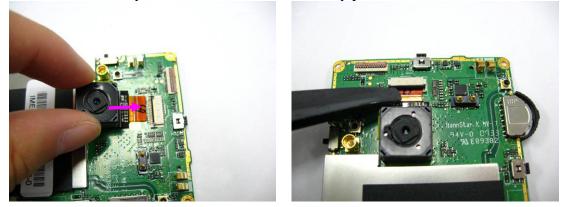


Connect the keypad FPC with main board by a pair of tweezers and close the connector by plastic blade.



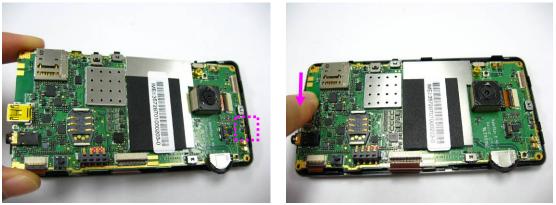
■ Step 7

Install the camera by hand and close its connector by plastic blade.



■ Step 8

Install the main board on front cover and press gently to fix it into the hook. Please notice the hook on top of front cover. The main board should be inserted first and then arranged into the hook at bottom of front cover.





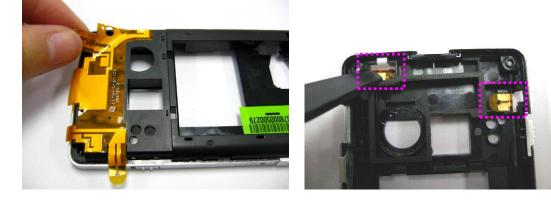


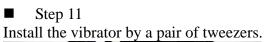
Connect the LCM FPC by a pair of tweezers and close its connector by plastic blade.



#### ■ Step 10

Install the antenna FPC on middle cover and then arrange it by plastic blade.





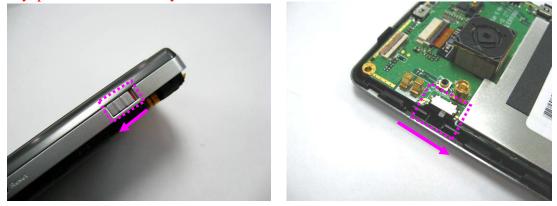


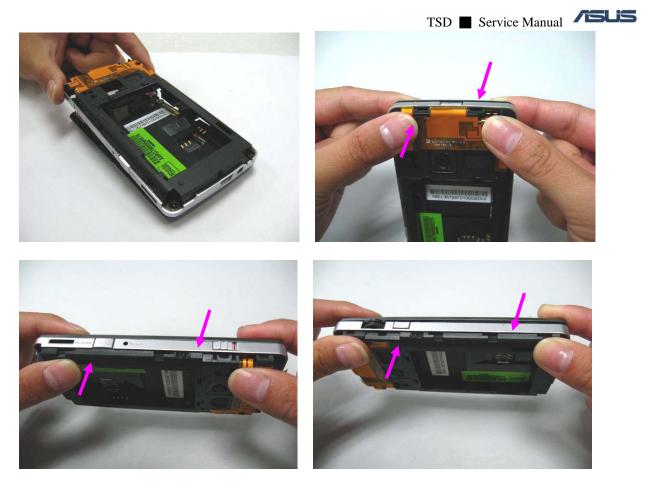
Then install the speaker by a pair of tweezers.



#### ■ Step 13

Install the middle cover and press four sides to lock it into the hooks. Pay attention to the "Hold" key, please switch it firstly as the arrowhead shows.





# Step 14 Secure 4 screws on middle cover by screw driver.



■ Step 15 Install the antenna cover and press to fix it.





■ Step 16 Place the battery back and install the battery cover.

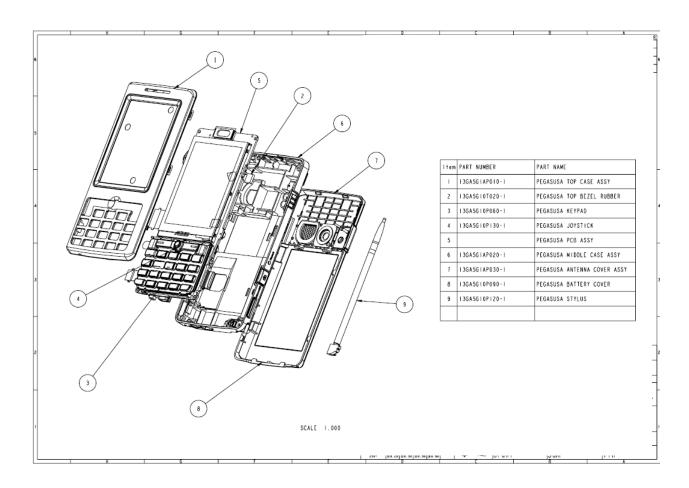




■ Step 17 Insert the stylus.



# 3.2 Exploded Diagram



# **4 MMI Testing**

1. Download & Copy files to micro SD card.



2. Insert micro SD card.



#### **3.** Please follow instructions as displayed.

### **3-1. Touch Panel Calibration Test**



# align screen /

Tap the target firmly and accurately at each location on the screen. The target will continue to move until the screen is aligned.

# align screen

Tap the target firmly and accurately at each location on the screen. The target will continue to move until the screen is aligned.



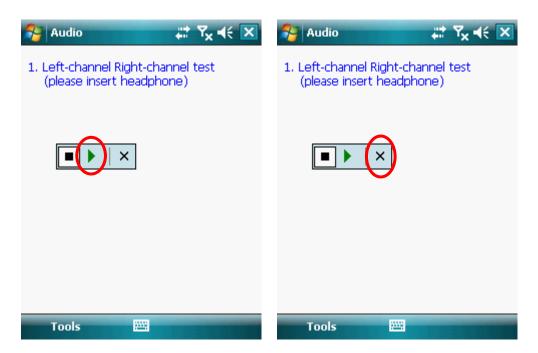


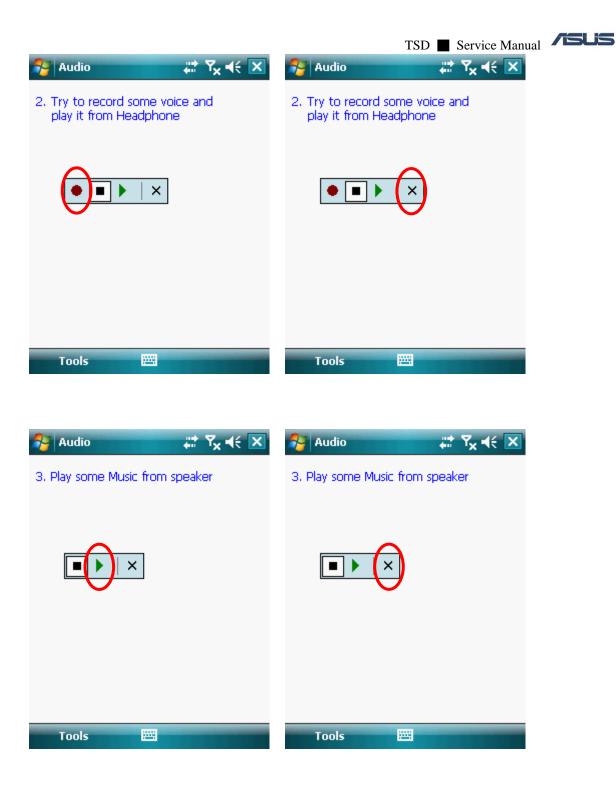


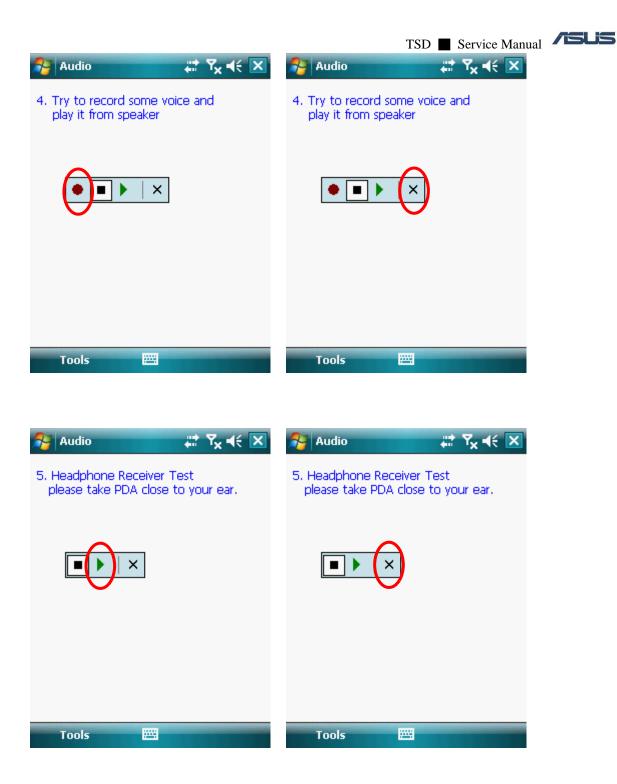
Tap the target firmly and accurately at each location on the screen. The target will continue to move until the screen is aligned.

### 3-2. Audio Test

In this test, item 1 & 2 need to be done with the headphone, otherwise, just bypass.



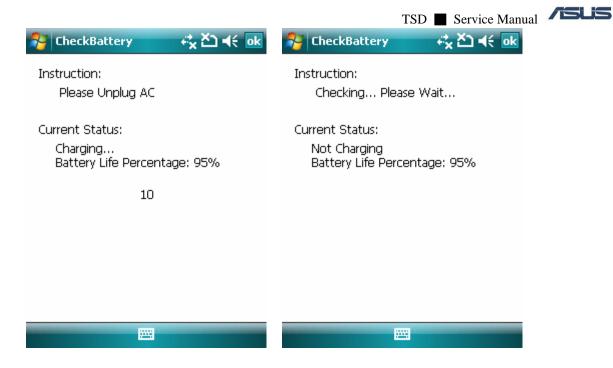




🦰 A	udio	#* <b>Y<sub>x</sub> 4</b> €	ok
[	PASS	FAIL	]
Тс	ools 🔛	9	

### **3-3.** Battery Test

👫 CheckBattery 💦 🦓 🕂 💀	😚 CheckBattery 📫 🐔 🗲 🔤
Instruction: Please Plug AC	Instruction: Checking Please Wait
Current Status: Not Charging Battery Life Percentage: 95%	Current Status: Charging Battery Life Percentage: 95%
10	



#### 3-4. FM Test

🌮 FM_Driver_Test 🛛 🗱 Y <sub>X</sub> ◀€ ok	😚 FM_Driver_Test 🛛 📰 🏹 📢 💽
Start Test	Start Test
Hear FM's voice?	FM Test Result => Pass!
Yes No	Yes No

### 3-5. Keypad Test

🚰 Start				Y <sub>×</sub> ∢€ ok	<b>1</b>	5tart	÷	‡ Y <sub>x</sub> ⊣€ ok
HOLD CAMERA FOUCS	POV SIDE	E-OK	S	ROLL-UP E-ACTION L-DOWN				
LEFT	ACT	ION	RIGHT					
	DO	MN						
Send Sof	t1 S	tart C	)K So	oft2 End				
GSMS	1	2	З	Back				
GPS	4	5	6	Msg				
FM	7	8	9	вт				
Mode	*	0	#	VR				
	_		_				1000	

### **3-6.** Bluetooth Test

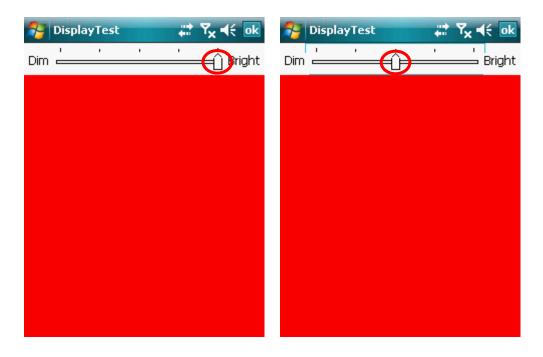
🌮 BTTestMode 🛛 🗮 🏹 ଐ€ 之	<	🎒 BTTest
GPIO 127 opened.	▲	Action Send
Clear Bit.	=	Action Send
Set bit.	_	Action Send
Com2: opened.		Action Send
Init ok.		Action Send
Send HCI RESET.		Action Send
Action Send Command code:1, size:6		Action Send
Action Send Command code:1, size:119		Action Send
Action Send Command code:1, size:119		Action Send
Action Send Command code:1, size:119		Action Send
Action Send Command code:1, size:119		Action Send
Action Send Command code:1, size:119		Action Send
Action Send Command code:1, size:119		Action Send
Action Send Command code:1, size:119		Action Send
Action Send Command code:1, size:119		Action Send
Action Send Command code:1, size:119		Action Send
Action Send Command code:1, size:119		Action Send
Action Send Command code:1, size:119		Action Send
Action Send Command code: 1. size: 119		Run script su
PASS 🚟 FAIL		PASS

😚 BTTestMode 🛛 🗱 🏹 📢 🕽	×
Action Send Command code:1, size:10	
Action Send Command code:1, size:8	
Action Send Command code:1, size:10	
Action Send Command code:1, size:10	
Action Send Command code:1, size:10	
Action Send Command code:1, size:209	
Action Send Command code:1, size:33	
Action Send Command code:1, size:10	
Action Send Command code:1, size:4	
Action Send Command code:1, size:18	
Action Send Command code:1, size:5	
Action Send Command code:1, size:4	
Action Send Command code:1, size:5	
Action Send Command code:1, size:7	
Run script successfully.	≡
PASS EAL	
PASS PAIL	

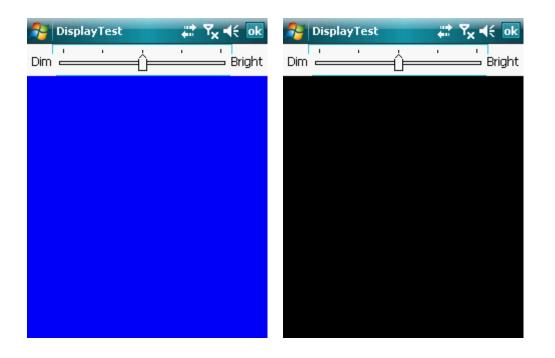
#### 3-7. Camera Test



### **3-8.** Display Test



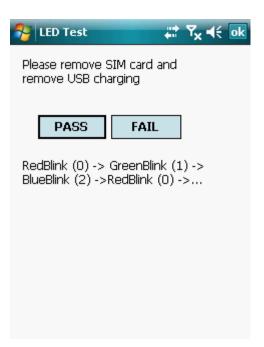




👫 DisplayTest	,#* Y <sub>X</sub> 4€ ok	🔗 DisplayTest	TSD ■ Service Man	
Dim	Bright	Dim(	Bright	

🔗 Dis	playTest		# Y	×⊀
Dim 📛	ı	-ú	•	– Bright
	Test Resu	ilt?		
	PASS	F/	AIL	

### 3-9. LED Test



#### **3-10. Vibrator Test**

😚 Vibrator Test 🛛 📰 🏹 📢 ok
PASS FAIL
Vibrator off->on->off->on->

### **3-11. Reset Button Test**

TestPowerAP	<mark>,</mark> ∰ T <sub>X</sub> € ok
Reset Button Test	
PASS	FAIL