

# RTC-600A

## Rugged Tablet Computer

### P5 Test Report

Summary	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail <input type="checkbox"/> Pass with Deviation (Comment: _____)
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Issue date	Approval	Test Engineer
2015/12/10	KJ Wang	Anderson Lin

## Platform Information

Item	Device Information	Test Item
System Model / Ver.	RTC-600A (A1.1)	1,2
CPU Type	Cortex™A9 Dual Core (OMAP4470 )1.5 GHz	1,2
Memory Type	Built-in 1GB	1,2
Storage	eMMC Flash 16GB	1,2
LCD Monitor	5.7" color TFT LCD module with LED backlight	1,2
Android Version	4.2.2	1,2
Build Number	RTC-600A userdebug 4.2.2 JDQ39 eng.jimmychung.20151109.152841 test-keys	1,2
AC / DC Adapter	LTE24E-S2-2 output : 12V, 2A	1,2
Battery	Lithium-Polymer high capacity battery swappable, 6hrs 1.) Master BAT/Hard pack: 7.4V 1530mAH 2.) Slave BAT/Soft pack:7.4V 1530mAH	1,2

# 1. Basic Function Test

## 1.1. Display Function Test

Test Case	Judgment			Test Result
	Pass	Fail	N/A	
Display quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No color deviation / No saw-tooth / No flicker / No light leak /No abnormal Uniformity
Playback 1080p video	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No lag / No ghost / No flicker / No color deviation while playing video.
Brightness control	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Brightness can be adjusted by control bar
Auto Brightness control	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Brightness is changeable according to different ambient environment.
LCD Leakage check	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No obvious leakage appeared
Mini HDMI	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Check HDMI display quality. Sound can be played from HDMI audio

## 1.2. Audio Function Test

Test Case	Judgment			Test Result
	Pass	Fail	N/A	
Internal Speaker	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No noise, no distortion, no background noise .the sound is clean, volume can be changed as we set with internal speaker.
Internal Microphone	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No noise and distortion while recording voice.
Line-Out	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No noise, no distortion, the sound is clean, volume can be changed as we set with line-out. Internal speaker will be turned off automatically when we plug in earphone. Sound can be played from left channel or right channel as we set.
Headphone Microphone	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No noise and distortion while recording voice.

## 1.3. Wi-Fi Function Test

Test Case	Judgment			Test Result
	Pass	Fail	N/A	
Enable / Disable	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Wi-Fi function can work normally after switch Wi-Fi on /off. No hang up
Connect to internet	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	connect to internet by web browser via Wi-Fi connection. Website shows correctly without any error or crash.
Download files from internet	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Download files from internet via Wi-Fi connection. The file is complete and not broken.
Performance Test	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Download speed:28.38 Mbps Upload speed13.96Mbps
Check the strength indicator of Wi-Fi signal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	It is variable according to the strength of Wi-Fi signal
Switch on /off between 3G , Wi-Fi , and Airplane mode	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Network function is workable while switching between 3G, Wi-Fi, and Airplane mode.
Wake up from sleep mode, check Wi-Fi function	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Wi-Fi function still can work correctly after waking up from sleep mode.
Reboot system, check Wi-Fi function	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	W-Fi function still can work correctly after reboot.

### 1.4. 3G Function Test

Test Case	Judgment			Test Result
	Pass	Fail	N/A	
Enable / disable	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3G function can work normally after switch 3G on /off.The signal strength of 3G is displayed on system bar.
Connect to internet	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	We can connect to internet by web browser via 3G connection
Download files from internet	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Download files from internet via 3G connection. The file is complete and not broken.
Performance Test	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Download speed:2.9 Mbps Upload speed:0.12 Mbps
Check the strength indicator of 3G signal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	It is variable according to the strength of 3G signal
Wake up from sleep mode, check 3G function	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3G function still can work correctly after waking up from sleep mode.
Reboot system, check 3G function	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3G function still can work correctly after reboot.

### 1.5. Bluetooth Function Test

Bluetooth Function	Judgment			Test Result
	Pass	Fail	N/A	
Enable / disable	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Bluetooth function can work normally after switch Bluetooth on /off. The Bluetooth icon is displayed on system bar.
Search BT Devices	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	We can see other surrounding Bluetooth enabled device in the screen of BT setting.
Data transmission via Bluetooth	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Send / Receive files
Wake up from sleep mode, check Bluetooth function	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Bluetooth function still can work correctly after waking up from sleep mode.
Reboot system, check Bluetooth function	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Bluetooth function still can work correctly after reboot.

### 1.6. GPS Function Test

GPS Function	Judgment			Test Result
	Pass	Fail	N/A	
Detect satellite	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1.GPS can detect satellite and positioning 2.TTFF:34 sec.
GPS performance	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Detection of satellites numbers:9

### 1.7. NFC Function Test

NFC Function	Judgment			Test Result
	Pass	Fail	N/A	
Detect NFC tag	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SONY NFC tag
Detect NFC Card	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Easy Card

### 1.8. USB Function Test

Mini USB Function		Judgment			Test Result
		Pass	Fail	N/A	
Micro USB Port	USB Flash(Mode: SONY 64 GB )	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Read / write test
	USB Keyboard(Model: Microsoft Wire keyboard 600 )	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	type words
	USB Mouse(Model: Microsoft 1133 )	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	icon can be selected by USB mouse
	ADB function	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Connect to PC via ADB
Type A USB	USB Flash(Mode: SONY 64 GB )	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Read / write test
	USB Keyboard(Model: Microsoft Wire keyboard 600 )	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	type words
	USB Mouse(Model: Microsoft 1133 )	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	icon can be selected by USB mouse

### 1.9. Touch Screen Function Test

Touch Screen Function	Judgment			Test Result
	Pass	Fail	N/A	
2-fingers pinch	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	zoom in /out picture
Swipe Test	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Page move while swiped
Press and hold	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Icon can be choosen and hold.
Drag and move	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Icon can be Dragged and moved.
Draw 1 Line test	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No dash lines found
Multi-Touch(10 points)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Antutu hw monitor

### 1.10. Camera Function Test

OSD Control Function	Judgment			Test Result
	Pass	Fail	N/A	
5 MP auto-focus rear camera	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Zoom in /out,AF function
take picture	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Picture is clear
Flashlight	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Auto / On / Off

### 1.11. Barcode Scanner Function Test

OSD Control Function	Judgment			Test Result
	Pass	Fail	N/A	
1D barcode scanning	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	UPC-A / UPC-E / EAN-13
2D barcode scanning	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	PDF417 / Datamatrix / QR Code

### 1.12. Micro SD Function Test

MicroSD Function	Judgment			Test Result
	Pass	Fail	N/A	
Read / write test	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Sandisk 32GB / Transcend 64 GB

### 1.13. Sensor Function Test

Sensor Function		Judgment			Test Result
		Pass	Fail	N/A	
G-sensor(Accelerometer)	Lock rotation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	AndroSensor V1.9.4.4a
	Angle of rotation:90°	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Angle of rotation: -90°	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Light- sensor		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
E-Compass		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Vibrator		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

### 1.14. Quick Launch Test

UI Function	Judgment			Test Result
	Pass	Fail	N/A	
Airplane mode(Turn on /off)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3G / Wi-Fi / BT will be turned off automatically If turn on Airplane mode
Wi-Fi(Turn on /off)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3G(Turn on /off)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bluetooth(Turn on /off)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Auto-brightness(Turn on /off)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Barcode scanner(Turn on /off)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Battery status	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1 <sup>st</sup> snd 2 <sup>nd</sup> battery status check
Settings	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Link to system settings

### 1.15. Power Button Function Test

Function Key test	Judgment			Test Result
	Pass	Fail	N/A	
Sleep	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Press power button for 1 second
Wake up system from sleep mode	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Press power button for 1 second
Shut down	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Press power button for 2 second
Shut down(force shutdown)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Press power button for 7 second
Power on	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Press power button for 2 second

### 1.16. Side Key and Function Key Test

Function Key test		Judgment			Test Result
		Pass	Fail	N/A	
2* Scanner trigger buttons		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2* volume setup buttons		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Increase /decrease volume
Function key	Return to Button	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Return to the previous operation step or the previous operation interface.
	Home Button	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	This key can help you return to main function page from any page or application.
	Recent App Button	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	If you press this key, opens a list of thumbnail images of apps you've worked With recently; touch an app to open it.

### 1.17. Power LED Function Test

Function Key test	Judgment			Test Result
	Pass	Fail	N/A	
Power LED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	System shows Green light while booting
Message LED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Execute "Test Notification Led"

### 1.18. Battery Charge and Discharge Function Test

Function Key test	Judgment			Test Result
	Pass	Fail	N/A	
Battery charge function	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	OS icon shows charging
Battery charge 100%	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Battery can be charged to 100%
Battery charge(under sleep mode)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Battery charge(under power off mode)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Battery discharge	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	OS icon shows discharging
Battery charge LED	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not support
Battery discharge LED	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Not support

## 2. Run In Test

### 2.1. Run-In Test (over 12 hours)

Test Item	Judgment			Test Result
	Pass	Fail	N/A	
Stability Test(V2.7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No hang up, no system crash